

# IS THE COMPLETION OF AGRICULTURAL REFORMS IN CENTRAL AND EASTERN EUROPEAN COUNTRIES CONDITIONAL ON A MOVE TO FAMILY FARMING?

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## INTRODUCTION

The aim of this paper is to give an insight into the evolution of the structural issues in the agricultural sector of the Slovak Republic since 1989, when, as the outcome of the “velvet revolution” the process of re-establishing a democratic society and introducing a market economy began. That year, Slovakia had been a constitutional part of the Czechoslovak federation, which was later peacefully dissolved in 1993, giving way to the rise of two independent states – The Czech and Slovak Republics. These republic’s common constitutional past is generating many similarities during the current events, but it also offers an opportunity to examine the divergences and to consider the reasons for them. However there is a broader geographical and political context to consider, when examining our current development. All of those Central Eastern European countries which are now striving for democracy, are emerging from half a century under the influence of the soviet system of political dictatorship and command economy. Some of these countries such as Hungary, the Czech Republic, Slovakia, a part of Poland, Slovenia, Croatia, and part of Romania had also experienced centuries under the common constitutional rule of the Austrian (later Austro-Hungarian) empire before World War II. This shared historical and political inheritance may has been the basis for some common specificities of the current social and economic development, and this could also be applied to farm restructuring in my own country.

## WHAT WE CAN LEARN FROM HISTORY

In the 19th century, farming was the main economic sector in Slovakia. In the nineties, 70 per cent of the population were peasants or agricultural labourers. The agricultural population declined gradually over the first half of the twentieth century. Population censuses between 1900 and 1946 show the following development:

**Population of Slovakia between 1900 and 1946 by Classes of Professions (per cent)**

Year- Population total	Agricul- ture, forestry, fishing	Industry and crafts	Trade and banking, transporta- tion	Civil servants and freelancers	Domestic and personal services	Other profes- sions
1900 2,790,234	66.3	15.8	6.8	4.3	4.3	6.8
1910 2,918,084	62.0	18.5	8.2	4.5	4.5	6.8
1921 2,990,395	60.6	17.4	7.7	5.0	5.0	9.3
1930 3,320,901	56.8	19.1	10.2	6.3	6.3	7.6
1940 3,542,809	52.0	21.0	9.6	5.5	5.5	11.9
1946 3,327,803	48.1	22.7	10.0	5.8	5.8	13.4

Source: *Štatistická príručka Slovenska 1947* [*Statistical Handbook of Slovakia 1947*]. Bratislava.

Census data also sampled inactive household members; thus the number and the share of active persons was less than might be expected. Figures available for 1946 show, that only 27 per cent of individuals classified under agriculture were actually active, 34.2 per cent were assisting family members and all others were dependent household members.

During the collectivisation, which began after the communist take-over in 1948 the number of people involved in agriculture declined at an even faster rate. In 1961, the number of

people attributed to agriculture accounted for only 1,008,138, i.e. 24.2 per cent of the total population. In terms of the number of active people, the decline in agricultural employment reached 393,032 between December 1948 and February 1961 (when collectivisation was believed to be completed), in relative terms represented a reduction of 43.6 per cent (Vojáček 1994).

This agrarian exodus was an expected outcome of collectivisation. The extensive industrialisation program launched by the government in the fifties required a massive supply of labour and at the same time a fair supply of food for the increasing number of factory workers. The Slovak historian Barnovsky (Barnovsky 1985) justified collectivisation as follows: “The industrial output in Slovakia in 1948 was twice as high as it was in 1937, but agricultural output did not reach its pre-war level.” “As a result of the liquidation of the manor estates, the marketed farm output plummeted, because small and middle sized peasant holdings were predominantly subsistence farms. In 1948, the market production of farms in Czech lands accounted for only 64.1 per cent of its pre-war level, in Slovakia this figure reached a value of 77.5 per cent.” Even if we accept that the “prevailing subsistence character of small and medium-sized farms” was a cause of the decline in agricultural output, it is likely that the negative incentives inherent in state control over the market had a much greater effect in limiting market output. Compulsory deliveries of farm goods and legislated low prices, all played a significant part, so that contemporary leaders may well have been justified in imposing the Kolkhoz pattern of total control over agriculture.

“Nor would the continuation of small-scale farming offer any solution for the other urgent problem – releasing the labour force for employment in the industrial sector. The labour-supply problems were exacerbated by the expulsion of Germans” – goes ahead the author (Ibid., p. 151).

In the cited author’s view, the organisation of farm production imposed on farmers in the former Czechoslovakia was an economic necessity and in economic terms only a short-term measure to speed up the transformation of the sector into a capital intensive, highly industrialised business.

Forty years on, the re-establishment of the market economy after 1989 resulted in a similar farm exodus. The economic reform imposed severe budgetary restrictions upon agriculture right from the start, by establishing free prices and trade and reducing public transfers to agriculture. The strain on income forced farmers to shed labour very quickly. Making use of the statistics derived from monitoring the employment practices of large farms, we can see that labour was reduced by 80% from 1989-2000. However these figures reflect two parallel issues. The devolution of non-agricultural activities from large scale farms in the early nineties (diverse industrial-type businesses, which used to provide a significant number of jobs in the cooperatives under the former command economy system), and the process of structural change which was channelling land, capital and labour into smaller farm units (note that the statistics cited only show data from businesses with over 25 or 20 employees respectively).

**Evolution of Farm Employment between 1989 and 2000**  
(only farms over 25 until 1996, over 20 later on)

	Number of workers (labour performance adjusted)					
	1989	1990	1991	1992	1993	1994
Workers	360,699	326,660	262,602	211,597	178,809	155,699
Annual change in %	x	-9.4	-19.6	-19.4	-15.5	-12.9
	1995	1996	1997	1998	1999	2000
Workers	143,878	132,901	116,902	105,993	91,545	78,607
Annual change in %	-7.6	-8.2	-11.5	-9.3	-13.6	-14.1

Source: *Statistical Yearbook 1991, 1992, 1993; Statistics on Workers and Wages in Agriculture for 1993-1995; Employees and Wages 1997-2000; Selected Indicators and Employees in Agriculture of SR, 1998-1999*. Statistical Office of SR.

Some doubts could arise over whether this picture of a steep decline in employment is really only a statistical phenomenon, for the reasons indicated above which do allow certain types of employment to disappear from statistical reporting. But if we compare the figures displayed in the table with data from other sources, we may find a discrepancy in the amount of labour

employed, but not in the trends. The alternative source is the Sample survey on labour, based on international methodology, which has been conducted by the statistical office for the last few years.

### **Farm Employment According to Sample Survey on Labour**

Labour category	1999	2000	Annual change
Employees	127,900	111,600	-12.7
Entrepreneurs (farmers)	5,200	3,500	-33.0
Family members	n. a.	100	x
Total	133,100	115,300	-13.4
Labour per 100 hectare land area	5.4	4.7	x

Source: *Sample Survey on Labour 2000, 2001*. Statistical Office.

We can get a much more detailed picture of the evolution of the socio-economic nature of agricultural labour from the data displayed in Annex Table 5.

During the past century, the size and socio-economic nature of farm holdings has been governed by the prevailing reforms. Even forty years after the abolition of serfdom in the Austrian empire (1848), the distribution of land at the end of the century was still very uneven: in 1885, estates of more than 100 hectare in size accounted for only 1 per cent of holdings, but operated 50 per cent of the total land area. Unfortunately, historical statistics have not used the same size categories, which makes comparison difficult. Nevertheless, it is possible to assess the main strands of the historical evolution. The picture of land distribution from 1885 shows a very marked dualism. The situation changed during the years between the two wars, statistical data from 1921 (the first Czechoslovak act on land reform was adopted in 1919) shows a decline in the largest holdings and an increase in middle sized holdings. Matters continued to evolve in this way, as figures from 1930 show, the percentage of the total land held in every size category increased except the largest group, which accounted for less land.

The continuation of the reform during the post war period until 1949 resulted in a further increase, especially of the small-

est holdings, which was in line with the political goals of that time. This was the result of the revision of the first land reform and the adoption of an act in 1948, which provisioned a new land reform. While the first one set the maximum limit of farmland owned at 150 hectares (250 hectares of land of any sort), the second land reform permitted a household only 50 hectares. This ceiling was applicable only for those who worked their land by themselves. The land of absentee owners and of farmers who hired labour could be confiscated. The majority of those who should have been beneficiaries of the reform, did not become real owners, because they had to join a production cooperative.

In the years between 1949-1960 the collectivisation pushed farm structure decisively towards the dual pattern. This pattern has remained typical for Slovakia until today and is still relatively unaltered despite the post 1989 developments. During the period between 1949 and 1970 the number of holdings with 0.5 hectare or less soared from 74,824 to 201,720 (Vojáček 1994, p. 22). During the 1960's and 1970's, 81 per cent of the total land was occupied by large scale cooperative and state farms, and about 17 per cent by individual farmers (387.3 thousand hectares in 1970). Most farmers cultivated less than 0.5 hectares (63 per cent) accounting for 13.4 per cent of privately farmed land. The largest percentage of the privately farmed area (387 thousand hectares) was owned and operated in holdings from 2 to 5 and 5 to 10 hectares (about 30 per cent each).

During the era of collectivisation, individual private farms had generally been "pluriactive" farms. The main source of income for the household was a wage from a dependent activity in industry and services. The share of farm output marketed, varied according to the size of the holding, the size of the household and their income. The majority of holdings were purely subsistence farms. The amount and commodity structure of marketed produce varied over time and between regions. In the Southern part of the country intensive vegetable production was typical, while in the North they tended to rear mainly beef cattle.

As a conclusion to this section, we may say that collectivisation interrupted the process in which land could have become concentrated in privately owned more viable and competitive holdings, as occurred in western democracies after WW II. Democratic land reforms contributed to this process in a small way, but their results were negated by collectivisation. The so-called revision of the first land reform (during 1947 and 1948) and the so-called second land reform (adopted in 1948) were conducted under the guidance of the communist party. Their goals were both political and populist, targeted at the landless. In this way the post-war reform re-enforced the dualistic pattern of farming.

### FARM STRUCTURE IN SLOVAKIA BETWEEN 1989 AND 2000

The changes in the system which occurred after 1989 offered an opportunity for agricultural property rights to be restored, and for free trade to be encouraged in all sectors including farming, consequently a series of new laws were adopted. The legal framework for this process (acts on the restitution, privatisation, and the transformation of cooperatives) has been discussed elsewhere (Blaas, Wolz 1998; Blaas 2001). Upstream farm services were fully privatised during the early transformation period, but state farms were passed on to private owners much later, mostly between 1997-1999. Cooperatives were transformed and their property divided into equity shares, which were distributed among coop members and absentee land owners and among the heirs of those, who originally contributed to the coop property items when they became members. As for the cooperatives, the transformation act (Act No. 42/1992 Coll.) was passed by the parliament as a compromise between those political forces who wanted an end to the cooperatives and the distribution of the land and property to individuals, and those who thought this solution unrealistic and insisted on a legal settlement which would make a continuation of the cooperative economy possible within a new legal framework (the amended Business Code). The political battle in 1991 and early 1992 resulted

in an act, which neither dissolved the cooperatives nor offered any real opportunity to individual farmer-members or absentee owners to establish their own holdings. Holders of equity shares were permitted to claim the withdrawal of their attributed share (in kind, i.e. in the form of equipment, animals, stocks, etc.). Very few individuals have made use of this opportunity. According to survey data, conducted by the Research Institute of Agricultural and Food Economics (RIAFE) and the Union of Farming Cooperatives (Gubova 2001), only 1.4 per cent of those eligible (the registered number of eligible people numbered 680,000) requested the withdrawal of their shares, and the mean value of those withdrawals reached 108,000 Koruna. The total value of withdrawals accounted for 2.36 billion Koruna at the end of 1998. This sum represented approx. 5 percent of the aggregated value of cooperative property assigned for allocation in the form of property shares.

From this we may conclude, that the legal procedures which were designed in the initial stages of the transformation process to assist the emergence of individual farms, were at least a partial failure. In 1991 and 1992 specific policies aimed to support newly established farms were in force (investment grants and tax holidays), but they did not have a significant effect. Investment grants amounting to one billion Korunas were disbursed in 1992 to newly established farmers (Analysis 1999).

In reality, the market transformation of Slovak agriculture pursued another path.

From data shown it can be concluded, that:

- During the ten year period of transformation, state owned farms disappeared, due to privatisation which resulted in private companies run by new owners.
- Cooperatives declined in number and in their share of the total farm land area
- The “Winners” of the transformation process were business companies, the number and share of which were continually rising.
- Family farms began to increase their number and land-share at the beginning of the transformation process. The situation later stabilised and only minor progress could be observed during the most recent period.



**Corporate Farms between 1970 and 1998**

Year	Number of farms	Average size (land area in hectares)	Share on total land area (%)
<b>Production co-operatives</b>			
1970	1,902	767	55.4
1980	638	2,596	66.9
1989	631	2,667	68.6
1990	681	2,484	69.1
1991	884	1,923	69.4
1992	925	1,862	70.4
1993	983	1,773	71.3
1994	977	1,669	66.7
1995	976	1,535	61.3
1996	977	1,509	60.3
1997	893	1,532	56.0
1998	831	1,583	53.8
<b>Business companies</b>			
1992	11	545	0.2
1993	44	877	1.6
1994	128	789	4.1
1995	185	1,105	8.4
1996	394	1,173	18.9
1997	434	1,210	21.5
1998	611	1,154	25.0
<b>State farms</b>			
1970	85	4,315	13.9
1980	64	5,630	14.5
1989	70	5,186	14.8
1990	73	5,083	15.2
1991	101	3,898	16.1
1992	108	3,564	15.7
1993	106	3,586	15.5
1994	108	3,564	15.7
1995	94	2,936	11.3
1996	72	3,056	9.0
1997	60	1,148	2.8
1998	4	3,546	0.6

Source: *Analysis of the Development of Agriculture and Food Sector between 1990 and 1998*. Bratislava: RIAFE, 1999. Various statistical sources and survey data (1998).

**Individual Farms between 1970 and 1998**

Year	Number of farms	Mean size (land area in hectares)	Share in total land area (%)
Family farms			
1970	118,674 (only farms over 0.5 hectares)	2.8	4.5
1990	2,347	2.6	0.2
1994	7,581	15.2	4.7
1997	16,909	11.4	7.9
Household plots (Data for the years 1970, 1980, 1989, 1991 include also family farms)			
1970	324,099	1.2	14.7
1970 (only plots less than 0.5 hectares)	203,444	0.3	2.1
1980	283,171	0.4	5.1
1990	301,389	0.3	3.4
1991	295,746	0.3	4.0
1992	294,730	0.3	4.0
1993	306,796	0.3	4.2
1994	299,105	0.3	3.2
1995	271,095	0.2	2.7
1996	283,901	0.2	2.4
1997	280,949	0.2	2.4

Source: *Analysis of the Development of Agriculture and Food Sector between 1990 and 1998*. Bratislava: RIAFE, 1999; *Statistical Yearbook of SR*; *Yearbook on Land Statistics*.

**Farm Structure of Slovakia by Legal Types of Holdings in 2000 (only farms with land)**

Type of farm	Number of farms	Land in hectares	Mean size in hectares	Share in total land area
State owned	1	924	924	0.04
Co-operatives	738	1,165,241	1,579	47.7
Companies	647	720,039	1,113	29.5
of those:				
- Partnerships	3	676	225	0.03
- LLC	559	552,634	989	22.6
- PLC	85	166,729	1,962	6.8
Corporate farms total	1,386	11,886,204	1,361	77.3
Individual private farmers	20,355	216,771	10.6	8.9
of those:				
- with over 100 ha	465	118,618	255	4.9
Non classified land	x	337,692	x	13.8
Land area total	x	2,440,667	x	100.0

Source: *Report on State of Agriculture and Food Sector in SR 2001*. Bratislava: MoA. Survey data by 31. December 2000.

- Household plots or subsistence farms increased, in line with expectations. Field observation provides some evidence about this phenomenon, but no exact data is available, since the data collection provided by statistics does not distinguish between “farms” and “household plots,” with the necessary precision.

Why did the path of development take this track? In accordance with already published suggestions (Blaas 1996, pp. 27-28) we may identify several issues, which have effected the farm transformation:

- The termination or significant reduction of state intervention in the agricultural sector.
- Price and trade liberalisation.
- The decline in demand for domestic food and the loss of foreign markets.
- Income deficiency in the farm sector caused by a price-cost squeeze which was a result of the factors mentioned above.
- A lack of adequate infrastructure on the input side and insufficient marketing channels. The lack of a financial infrastructure adapted to the needs of small and middle-sized entrepreneurs, a lack of loan schemes designed to meet the needs of farmers.
- The lack of appropriate finance has been partly connected with a more general problem, – the insufficient progress in the identification of land titles and land consolidation. The registration of titles has not yet been completed. In the year 2000, approx. 500,000 hectares of land is still lacking a legal owner (Report 2001).
- The fragmentation of land ownership, as a result of the restoration of historical property rights and a very high proportion of absentee owners. This generates high transaction costs for any newcomer who wishes to rent and operate farmland on a reasonable scale. The amount of land owned by individuals and households and the scattered location of particular plots generally do not meet the requirements for farming on a reasonable scale.

- A deficit in the skills necessary in individual farming among those who might start a farm business as well as a lack of starting capital.

Many of those factors were actually acting against the introduction of family farming,<sup>1</sup> than working in favour of it. People, earning their living through farm work realised the real obstacles already at the beginning of transformation.

A survey conducted by RIAFE in the autumn of 1990 (Blaas 1995, p. 139) outlined some general reservations about the anticipated changes in farming patterns. Within a sample, covering all the regions of Slovakia, only 7.8 per cent of cooperative workers showed an interest in starting an individual farm business within the next few years. The large majority of cooperative landowners (96 per cent) preferred to offer their land to the cooperative on an extended lease. The percentage of absentee owners, who wished to extend the lease to the current user was lower (60 per cent), but still high. About one quarter of respondents stated that they would prefer to withdraw from their cooperative only a small plot, in order to produce food for their families. The most frequently mentioned reasons for not starting a farm business were “lack of capital” and “fear of failure”. In fact it wasn’t only starting capital that was lacking, but also available land, if we consider as available any land owned or possibly inherited by the current rural population. The chances of obtaining land of a workable size through the restoration of a historical property right were low.

The aforementioned survey gives a good indication of whether the land owned or possibly inherited by respondents met the general criteria that would make it viable as the basis for a reasonably sized farm. The distribution pattern of the size of the land owned by respondents bears a striking resemblance to the historical pre-war pattern of farm sizes in Slovakia. (Annex Table 2)

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1 It is not correct to say re-introduction, because even during the pre-collectivisation, subsistence farming prevailed over commercial farming in Slovakia if we omit estate holdings, which were badly affected by the pre- and post-WW II land reforms.

**Area of Land Owned or Possibly Inherited**

Size category (hectares)	Share in %
< 2	22.5
2 – 4.9	34.4
5 – 9.9	25.5
10 – 14.9	10.9
15 – 19.9	3.7
20 – 29.9	1.4
30 <	1.3

Source: *Survey on Privatisation and Future of Co-operatives*.  
Bratislava: RIAFE, 1990.

As a matter of fact, corporate business with concentrated capital remained the predominant farming pattern in Slovakia even in the ten years following the start of transformation. Within their new statutory framework, cooperatives survived, but their numbers and their share of the land-use have been decreasing steadily. Evolution has favoured companies at the cost of cooperatives. Family farming has survived within the scope and range it achieved in the early stages of transformation.

In the next sections of this paper we hope to focus our discussion upon those issues closely related to companies and individual private farms, since they have been the “emerging” business entities during the transformation.

### BUSINESS COMPANIES – THE “WINNERS” OF TRANSFORMATION

Among post transformation businesses, limited liability companies and shareholder companies have become more and more significant throughout the last decade.

The dynamic evolution of business companies has been the most typical feature of the restructuring process in agriculture. In 1993, at the beginning of the process, nine limited liability companies and twelve joint stock companies were established as a result of the legal transformation of cooperatives. Since then, the number of business companies has been steadily increasing. In the year 2000, the companies share of the total farmland in Slovakia reached 30 per cent. Their participation in

overall output was higher, since many of them specialise in animal production, which, in the case of pork and poultry enterprises does not require a cropping area.

With few exceptions, limited liability companies operate, exclusively on rented land (97 per cent of farmland and 98 per cent of arable land operated).

By the end of 2000, business companies already worked more than 720,000 hectares of agricultural land (30 per cent of the total) with an average area of 1,113 hectares and employed more than 22 thousand persons (cooperatives employ 56 thousand) (Report 2001).

Companies have been set up either as follow-up ventures of state farms, after their privatisation, or founded on the assets of cooperatives. This transposition of cooperative assets has occurred in various ways. One was the legal conversion of cooperatives into companies, another the leasing out of cooperative assets to newly established companies.<sup>2</sup> In other cases cooperatives staked their physical assets on the new companies as material equity contribution (aport).

Most company operations have been successful. In comparison with cooperatives they were not burdened with old debts and social liabilities such as guaranteed employment security, as the cooperatives were. Since they have operated their chosen (mostly efficient) assets, they operate with less fixed costs. Another competitive advantage is that thanks to their slimmed down administration and management, the companies have lower overhead costs. Free from old debts they have easier access to credit. In this way, companies find it easier to meet the requirements for modernisation and technology innovation.

Various case studies provide evidence on the main motivation of the principal players in the “compensation” process. Indeed the majority are cooperative managers.

In a few cases cooperatives were converted into joint stock companies already before the inception of the economic reform. The initiative came from innovative, successful, partially authoritarian, but productive management, who had a strong moti-

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<sup>2</sup> Which were established by the managers of the same “mother” cooperative.

vation to preserve large-scale corporate farming. They managed to overcome the particular interests of larger owners who gained power through transformation – if any occurred – or enjoyed the benefits of people who were inactive on their farms due to extremely fragmented ownership of land and property.

The remarkable rise in the “compensation” of cooperatives was also a result of the level of debt experienced by many cooperative farms. Overdue debts and an inability to pay over a longer period of time would have brought farm operations to a standstill. In this situation, conversion has been perceived as a rescue operation allowing viable parts of cooperative property to survive and continue operations and maintain employment.

Nevertheless, the sustainability of these companies has been low and they often fail within a few years.

As already mentioned, companies operate a limited range of assets<sup>3</sup> and pursue profitable enterprises, including cropping. That is why their efficiency indicators are better than those of the cooperatives. The expansion of these companies is reflecting the general economic situation in the sector and the economy as a whole and can be seen as a specific response to the hardships of the current economy.

### Comparison of Selected Efficiency Indicators

Indicator	Unit	Companies					Cooperatives				
		1995	1996	1997	1998	1999	1995	1996	1997	1998	1999
Cost on revenue	Sk/ 100Sk	99.5	99.7	99.1	100.4	100.9	104.0	130.3	101.9	103.3	103.7
Returns on costs	%	0.1	0.0	0.6	-0.6	-1.0	-3.9	-3.0	-1.9	-3.2	-3.6
Returns on capital	%	0.1	0.0	0.5	-0.5	-0.9	-2.0	-1.7	-1.1	-1.9	-2.1

Source: *Farm Surveys of MoA, RIAFE, 1995-1999.*

As we can see from the table, since 1998 all of these companies have been loss-making, just like the cooperatives over the same period. Nevertheless, when we compare the efficiency indicators we can see that companies are far more efficient in their use of capital investment. We should be careful what con-

<sup>3</sup> Inefficient assets and overdue debts being left with the “mother” cooperatives.

clusions we draw from this observation. In our opinion, it can not be attributed to the legal company form *per se*. Rather, it is the result of the many inefficiencies which still exist within co-operatives as a legacy of the past, and of factors, we have mentioned above. If we made paired comparisons (i.e. successful co-operatives with successful companies) the outcome would be rather different.

A relatively high proportion of the companies are ventures which have arisen from the privatisation of state owned farms. As Gubova reports (Gubova 2001, p. 36), the number of such farms was 145 (about 35 % of the total company population in 1999). About 50 per cent of those companies were analysed and the authors found (Ibid., p. 46), that companies resulting from privatisation pursued lower intensity production (a reduced per hectare output), with lower per unit costs and higher specific (per hectare) value added than other company farms. Their specific equity was 30 per cent less than was the case in the compared group.<sup>4</sup> They employed more labour so the labour productivity indicators were not as high as in those companies derived from privatisation.

### **Companies Emerged from Privatisation versus Other Companies** *Basic accountancy and financial indicators (1999)*

Indicator	Other companies	Companies from privatisation
Output (SK/ha)	19,847	18,184
Revenue total (SK/ha)	29,011	27,923
Cost total (SK/ha)	29,258	27,624
Value added (SK/ha)	5,023	5,411
Return on capital (%)	-0.88	0.84
Returns on equity (%)	-2.09	2.59
Returns on cost (%)	-0.99	1.05

Source: Gubova, M. et al.: *Transformation of Property Relations in Agriculture after 1990*. Bratislava: RIAFE, 2001; *Farm Survey of MoA, 1999*.

4 Due to privatisation liabilities.

5 Privatisation agency for agriculture, which executes surveillance over privatised farms until their liabilities against the state have been settled.



We can also observe some significant variation in the profitability and viability particularly of those company farms which have emerged from privatisation. For the entire group a certain mobility is characteristic. Bankruptcies are not rare. E.g. in 1999, nine privatised farms filed for bankruptcy and four were liquidated by the Slovak Land Fund<sup>5</sup> (Gubova 2001, p. 37).

#### INDIVIDUAL PRIVATE FARMS – A MODEST GROWTH

Individual private farms have been emerging from 4 sources:

- People who were already farmers, (mostly part time, retired person's households).
- Households which had owned and operated land before, although it was not officially reported as "farming".
- Those who made restitution claims and started farm operations.
- Those who had withdrawn their own land from collective farms.

Since private farmers had so many different options for legal status for their farms and due to the limited statistical coverage, it is extremely difficult to get an exact picture about the number, size and economics of private farmers. The legal status of private farmer can be attained by simply reporting to the municipal office. The sum of these entries is the source of data for the statistical registers. Currently, the only source of information about the number of individual farms is the farm register, which is operated by the Statistical Office. No further information is available on this type of farming, apart from surveys organised by the Ministry of Agriculture, RIAFE and universities. The farm register is not very reliable, i.e. entries of farms which cease operations are not promptly deleted. A certain source of distortion can also be seen in the fact, that the transformation and restitution legislation made eligibility for some claims dependent on proof of individual farming by the applicant i.e. on formal registration.

**Number of Individual Farms (farms of physical persons)**

Year	1992	1993	1994	1995
Number of farms	13,728	17,840	19,972	21,700

Source: *Statistical yearbook of Slovakia, 1992, 1993, 1994*. Company Register of the Statistical Office of SR.

During the first few years of the transformation process, the number of registered individual farmers increased.

Until the results of the recent agricultural census are published<sup>6</sup> any analyses of individual farming have only the 1995 census data or occasional sample surveys to rely on.

The 1995 Agricultural Census collected information as of 31 March 1995. The register of respondents incorporated two statistical registers: a) the farm register (including entities of primary agricultural production, b) the register of organisations (from which individual farmers had been singled out on a sectoral basis).

The Statistical Office included 21,402 farm records. Among them were found:

- 10,108 entities with operations (47.2%)
- 311 entities, which started operations only in 1995
- 837 entities, which were planning operations for the future
- 1,102 entities which had already ceased operation or were about to cease operation.

The census, which had been conducted in co-operation with the municipalities, used an operational definition of individual farmer. This suggested that households with market deliveries of farm products were to be considered as individual farms.

The statistical office managed to collect data on 7,581 individual farmers, who operated 5.3% of total farmland area of Slovakia. The average area operated by farmers recorded by the census accounted for 15.1 hectares of agricultural and 11.9 hectares of arable land. The share of owned land amounted 30% of total agricultural and 34% of the total arable area operated by farmers in the census population.

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<sup>6</sup> Has been conducted in November 2001

The few farmers who had commercial register entries, operated 66 hectares on average (65 arable) and reported a high rate of leased land – 85%.

The high level of land-leasing found in all the farmers sampled by the census (about 70 per cent) can be taken as evidence that a large portion of these ventures have been more than a simple re-constitution of former peasant holdings. On the other hand, among those registered, approximately 20 thousand farming households, a significant portion may actually represent subsistence farming, or, at the other end of the scale – landlords who registered only formally in order to attain eligibility for land restitution. If they are absentee owners, which is often the case, then they would usually rent out their land.

Several farms were very large, similar in scale to some companies. These were cases where cooperative farm units were leased by individuals. The review on the size distribution of individual private holdings presented in the next table would support this assumption.

### Size of Holdings in Hectares of Agricultural Land

Size categories (hectares)	0.0- 1.00	1.01- 2.0	2.01- 5.00	5.01- 10.00	10.01- 20.00	20.01- 50.00	50.01- 100.0	100.1- 500.0	500.1- 1000	1001 plus	
Number of holdings	7,581	1,674	1,101	1,888	1,116	861	578	193	145	18	7
Share of holdings in %	100	22.1	14.5	24.9	14.7	11.3	7.6	2.6	1.9	0.2	0.1
Share on land in %	100	0.6	1.5	5.5	7.0	10.4	15.8	11.8	23.4	11.3	12.7

Source: *Agricultural Census 1995*. Statistical Office of the SR. Data relates to 31 December 1994.

The size distribution of farms shows a heterogeneous picture. Approximately two thirds of farms operated 5 hectares of land or less. It is not easy to assess their socio-economic status, but they can be presumed to be part time or subsistence farms with exception of those, who specialise in vegetable production, wine or orchards. Nevertheless, they occupy a minority share of the total acreage.

Farms operating land of between 2 and 5 hectares represented the most frequent (modal) size group. Farms over 50 hectares hold the dominant portion of land. This field of size distribution comprises family farms as larger estates either restituted or leased from cooperatives. Farms over 100 hectares generally rely on leasing, bearing in mind the high share of leased land in the entire sample.

For any outlook in the future it is important to note the subsistence of approximately 300 thousand smallholders (with holdings under 0.5 hectares) in Slovakia as a permanent long term phenomena and that the boundary between them and commercial farmers is quite flexible, especially in case of high value added produce like greenhouse vegetables, berries, and orchards, etc. This group represents an optional source for the extension of commercial farming. In fact many smallholders could extend their holdings (being heirs or potential owners of rented out land) if they wished or were forced to do so.

Individual farms' percentage of Slovakia's total agricultural output increased throughout the post 1990 period. Statistical office estimates provide evidence of the considerably high proportion of produce grown on individual holdings and of a marked dynamic in the annual increments during the early period of transformation. This is true first of all for vegetable, fruit and potato production. Nevertheless, the figures provided by these statistics also include the output of household plots and subsistence farms, so this data can hardly be considered as reflecting the real marketed output of commercial individual farms.

### Gross Agricultural Output by Types of Farming

Farm type	1989	1990	1991	1992	1993	1994	1995	1996	1997	97/89	97/90
Cooperative	63.8	63.7	61.7	57.7	55.5	49.8	48.3	46.4	43.6	68.4	68.4
State owned	21.1	21.5	19.0	18.7	17.6	14.4	11.0	6.7	1.6	7.4	7.3
Ltd., PLC	0	0	0	0	0	7.4	12.7	17.1	25.4		-407.8*
Individ. Private & household plots	15.1	14.8	19.3	23.5	26.9	28.4	28.0	29.9	29.5	194.8	199.4
GAO total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

\* 1997/1994

Source: Statistical Office (unofficial estimate).

**Share of Individual Private Farms in Total of Specific Commodities' Production (%)**

Commodity	1990	1991	1992	1993	1994
Cereals	3.0	3.9	6.6	10.6	13.1
Potatoes	18.6	25.6	42.7	54.7	66.6
Vegetables	44.9	46.7	72.0	78.1	75.0
Fruits	45.2	41.4	71.9	66.2	78.3
Milk	1.9	2.5	8.6	10.3	12.6
Eggs	24.5	25.0	43.1	48.7	54.9

Source: *Statistical Yearbook, 1991, 1992, 1993, 1994, and 1995.*

**Main Product Orientation of Individual Private Farms**

Enterprise	Number of farms	Share in %
Plant production	4628	100.0
Animal production	1972	26.0
Mixed	898	11.9
Other	74	1.0
Off those running a plant enterprise		
Combined crops	732	15.8
Cereals	2901	62.7
Vegetables and flowers	66	1.4
Vegetables	425	9.2
Mushrooms	9	0.2
Flowers	300	6.5
Fruits	151	3.3
Spices	44	1.0
Off those, running animal enterprise		
Combined	152	7.7
Cattle	798	40.3
Pigs	225	11.4
Sheep and goats	685	34.7
Poultry	33	1.7
Other	82	4.2

Source: *Agricultural Census 1994.* Statistical Office of SR, 1995.

Estimates from the statistical office show that the dynamics of non-corporate farming output during the observed period has been remarkable. From the table above we can also see, that the growth of individual farms and households' contribution to total agricultural output, occurred at a relatively high pace in the initial stages of transformation, but later stabilised.

The size distribution of individual farms suggests that they encompass a wide variety of farming patterns, which must also be reflected in their production structure. The data indicates a high degree of specialisation among individual farms. This could be considered to have proved the commercial character of those farms captured by census. The majority of them specialise in cropping, particularly cereals. Among those who specialise on animal production, cattle breeding, sheep, and goat rearing are most common. Mixed farms are not common: Only about 12 per cent of farms operate both cropping and animal farming.

Findings about the production structure provide more detailed information about the farms surveyed. However, the farms covered by the statistical census are commercial farms and the data reported and the date on which the type of produce was reported presumably relates to marketed items. Following this logic, the small farms shown in the table in which farms were broken down according to size, must not inevitably be subsistence farms, but could be farms specialising in vegetable and fruit or other non-land based produce.

An overall conclusion on the specialisation of commercial individual private farms may be as follows: the majority of farms concentrate on cropping, especially on cereals. Among those who specialise on livestock production two enterprises are of importance: cattle breeding and sheep and goat rearing. This means that cereals and sheep are the typical products of individual private farms in Slovakia.

Obviously, the produce generated by commercial private farms (covered by the census) is not the same as the overall volume of agricultural production raised by the individual private sector. The difference is being grown and reared on household plots and by various smallholders. By volume, this "unofficial" produce is far beyond the scale of the commercial private

farms' deliveries. The following example adds weight to this conclusion:

We have compared statistical data on head of livestock, which were said to be reared by private farmers in 1994 (including households and smallholders), with the census data on private farmers. On this occasion the census data is taken as reporting on commercial farms. The following table shows a comparison of total private animal stock with commercial private animal stock in 1994.

### **Animal Stock in 1994 (thousand heads)**

	Farm sector total	Individual private farming (incl. Smallholders)	Commercial individual private farming	Share in percentage (private/farm sector total)	Share in percentage (commercial private/farm sector total)
All cattle	916	106	25	11.2	3.0
Cows	359	46	25	12.8	3.0
All pigs	2,037	400	63	19.6	3.7
Sows	157	23	8	14.6	5.3
All sheep	397	187	46	47.1	17.4
Ewes	279	100	40	35.8	18.0
All poultry	14,246	4,640	672	32.6	6.5
Lying hens	7,578	3,867	67	51.0	1.8

Source: *Statistical Yearbook 1995*. Agricultural Census 1994

The data shown above leads us to conclude that private commercial farming's output represented only a minor share of the farm production that was produced by private households, non-commercial farming and private commercial farms together. For this reason, the overall move towards increased proportions of agricultural production generated by these sector segments should not be seen as an indicator of a successful transformation. In fact it identifies two issues: in part, the emergence and growth of individual private (family) farming, but also the shift towards subsistence production which has been accompanying the depletion of "official" farm economy. During the first phase of transformation, the soaring share of farm production, generated from organised commercial farming could be seen rather as a

result of the general deterioration of the rural population's welfare due to the high cost of living and high unemployment.

During the years after 1995, further development did not pursue a significant extension of subsistence farming. Commercial farming managed to survive, but the prevailing type of farm business has still been the company form.

### SOME NOTES ON THE SOCIAL SOURCES OF INDIVIDUAL FARMING

In this field, surveys and case studies have been the only source of information. Nevertheless, despite the shortage of relevant quantitative data a qualitative analysis can be done, based mostly on the expertise of those involved in the process themselves. A good example of this can be found in the paper by Danglova & Namerova (1999) published in *Sociologia*. They constructed a form of typology on the other sources behalf. They distinguish two large groups: "Entrepreneurs" and "Nostalgia farmers".

The majority of "nostalgia farmers" are elderly people or the heirs of the former owners of large estate holdings (or of peasant farms), who re-gained their family land and assets in the restitution process. The genuine "nostalgia farmers" were retired people, who tried to start again and usually only managed to run a small farm, much smaller than their predecessors had been used to. This type concentrates on peripheral regions, where the tradition of individual farming was better preserved than elsewhere.<sup>7</sup> "Nostalgic" estate owners did not manage to farm their own holdings as a rule, but rented them out, offering an opportunity to "entrepreneurs" to run profit seeking ventures. But there have been some cases where the estate owners themselves have been successful in entering the farm business (they were often university graduates and skilled former farm manag-

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<sup>7</sup> Collectivisation had been omitted in the mountain regions for a long period of time. In the seventies, land had been farmed there by farming factory workers as part-time ventures. Only in the mid-seventies was a political decision born, to complete collectivisation in those regions as well.



ers). The scale of a genuine nostalgic farm is either small (up to 10 hectares), such as the holdings for factory workers (or retired or unemployed factory workers) in peripheral areas of Slovakia, who try to supplement their income either in kind or in the monetary form.

Similar to this type are those who withdrew a small portion of land from a large-scale farm which they exploit unsentimentally to produce the necessary food for the family (the most common pattern). They represent in our view the third, and by far the most numerous, category.

“Entrepreneurs” display a productionist orientation; they operate several hundred hectares of (rented) land, provide investments and seek a profitable product specialisation. In the large majority of cases they used to be managers of socialist large-scale farms, and they are in possession of the necessary professional and social skills. Possibly the best combination is to be an heir of a restituted estate in a productive region, graduated from agricultural (not an unavoidable condition it may be any) university, and having several decades of history as a successful cooperative manager.

A survey, conducted by the author of this paper in three regions of Slovakia some years ago offered some evidence, which confirms the socio-economic determination of the mode of farming in Slovakian circumstances.

We found that there was a positive correlation between education and former employment in agriculture (in a managerial position), and several indicators of a commercial farming: the size of the farm, the machinery equipment, choice of marketing path, employment of non-family labour, and investment behaviour.<sup>8</sup>

Significant regional deviations were revealed in the presence of different social types of farming.

Commercial farms and perhaps entrepreneurs were found to occur most frequently in the core region which is more economically developed and productive in terms of agriculture. Part-time farms, predominantly operated by retired persons or blue-

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<sup>8</sup> Profit is used for investments, not for consumption.

collar workers could be found mainly in the industrial periphery region,<sup>9</sup> which is both mountainous and unfavourable for farming.

An interesting series of findings could be drawn from interviews with people from the rural periphery region. Since industrial jobs were rare here, agriculture has been an important factor in overall employment resulting in a high percentage of performing commercial farms, and most of them specialising in labour intensive enterprises. Unemployment more than elsewhere has been the impetus to launch a farm business of one's own.

## DISCUSSION AND CONCLUSION

Large-scale corporate farming has shown a remarkable sustainability during the first decade of transformation. Some authors would blame the agricultural policy of a particular government for that (Danglova, Namerova 1999, p. 328), but there are probably deeper underlying reasons. One of which, may be that in Slovakia the large peasant farm had never been dominant in the rural structure. A factor that should not be neglected is that getting the right cadaster records and title deeds is still problematic and no land market has developed yet. Nevertheless, a farming structure with favourable parameters in respect of its scale of farming and capital endowment is about to rise.

In the former GDR today "neue Bundesländer", the successor farms of production cooperatives show remarkable competitiveness and viability and nobody would think to accuse the governmental policies of prioritising those farm ventures. Corporate farms still operate 60 % of the farm area. Successor organisations have been able to stabilise economically, without large surpluses. The share of farms of 500 to 800 hectares has been increasing (Isermeyer, Forstner 1998). In Mecklenburg, where traditionally, estate holdings were dominant in the farm structure, Gollnick (Gollnick 2000) reported holdings of over 1000 hectares occupied 36 per cent of total farmland in 1927,

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<sup>9</sup> Industrialised region, suffering from depression during transition.

successor corporations of a similar size can be found nowadays. Successor farms sized between 1200 and 1800 hectares account for 50 per cent of farm area in Mecklenburg. An increasing importance in the agricultural associations of various legal forms and a decline in the number of individual farms have been observed in France (Hoffmann, Schmitt 2001).

Hungary and the Czech Republic might also be cited here as examples of the feasibility of corporate farming under market conditions.

It may be useful to investigate whether the sustainability of corporate farms has been a transitional phenomenon specific to the countries mentioned, or whether it is an outcome, which has to do with the assertion of the general rules of economy.

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**Annex Table 1.****Land Use by Size of Holdings in 1895**

Size	Share of holdings (%)	Share of land (%)
2.8 ha and less	52.0	5.2
2.9 - 5.6 ha	21.0	9.4
5.7 - 115 ha	25.8	35.0
Over 115 ha	1.0	49.8

**Annex Table 2.****Land Use by Size of Holdings in 1921 and 1930**

(Effect of the land reform after WWI)

Size category	1921			1930		
	No. of holdings	Share %	Share in Total land %	No. of holdings	Share %	Share in Total land %
Less th. 2 ha	171,786	40.8	5.3	171,281	37.6	5.8
2 - 4.9 ha	113,500	26.9	13.2	125,647	27.6	15.1
5 - 9.9 ha	81,420	19.3	19.8	94,877	20.9	22.9
10 - 19.9 ha	38,734	9.2	17.3	45,068	9.9	18.4
20- 99.9 ha	12,407	2.9	13.4	13,713	3	14.3
100 ha and over	3,779	0.9	31	4,369	1	23.5

**Annex Table 3.****Land Use by Size of Holdings in 1949 (Effect of communist land reform)**

Size category	Number of holdings	Share in %	Land in hectares	Share in %
0.50 ha and less	74,824	13.9	20,000	0.7
0.51-2 ha	156,308	28.6	188,500	6.9
2.01-5.0 ha	156,073	28.5	536,500	19.5
5.01-10.0 ha	106,270	19.5	739,500	26.9
10.01-20.0 ha	40,056	7.3	487,500	17.8
over 20.0 ha	11,950	2.2	774,400	28.2

**Annex Table 4.****Holdings of Individual Farmers in 1970**

Size category	Land in hectares	Share on land	Number of holdings	Share in %
0.50 ha and less	55,400	14.3	203,444	63.1
0.51 ha and more	331,900	85.7	118,674	36.9
total	387,300	100.0	322,118	100.0

Total farmland of Slovakia: 2 628 000 hectares

**Annex Table 5.**  
**Socio-economic Characteristics of Farm Labour**

	Units	1980	1991	1995	1996	1997 <sup>e</sup>
<b>Farm employment</b>						
Total number	1000	331.3 <sup>1</sup>	294.4 <sup>1</sup>	172.0 <sup>2</sup>	161.3 <sup>2</sup>	143.0 <sup>3</sup>
Active population <sup>4</sup>	1000	2,357.6	2,568.5	2,543.1	2,568.4	2,601.1
Employed population <sup>5</sup>	1000	2,273.6	2,458.6	2,146.8	2,195.2	2,194.0
Share in active population (labour force)	%	14.0	11.5	6.8	6.3	5.5
Share in employed population	%	14.6	12.0	8.0	7.3	6.5
Men	%	56.9 <sup>6</sup>	63.8	63.6 <sup>7</sup>	68.0 <sup>8</sup>	66.0 <sup>9</sup>
Women	%	43.1	36.2	36.4	32.0	34.0
<b>Employment status<sup>10</sup></b>						
Paid workers (including seasonal)	%	97.4	99.1	85.0-90.0	85.0-90.0	85.0-90.0
On large scale farms	%	97.4	99.1	82.0-87.0	80.0-85.0	80.0-85.0
On family farms	%	0.0	0.0	3.0	5.0	5.0
Self-employed	%	2.6 <sup>11</sup>	0.9 <sup>11</sup>	10.0-15.0 <sup>12</sup>	10.0-15.0	10.0-15.0
Full-time <sup>13</sup>	%	n. a.	n. a.	n. a.	n. a.	n. a.
Part-time <sup>13</sup>	%	n. a.	n. a.	n. a.	n. a.	n. a.
<b>Age structure</b>						
Under 25	%	9.1 <sup>14</sup>	9.8 <sup>14</sup>	29 less 15.4 <sup>15</sup>	n. a.	n. a.
25-34	%	21.2	26.1	30-59 79.5	n. a.	n. a.
35-44	%	21.3	25.5	60 more 5.1	n. a.	n. a.
45-54	%	24.5	19.2		n. a.	n. a.
55-64	%	15.8	13.5		n. a.	n. a.
65 and over	%	8.1	5.3		n. a.	n. a.

Source: Various sources, see footnotes

Notes:

1 Source: *Statistical Yearbook of the SR*, p. 124. Bratislava: Statistical Office of the Slovak Republic, 1993.

Registered number of employees as end of year. Includes employees, members of farming cooperatives, permanently employed in cooperatives, other cooperative members and self-employed persons. Does not contain students on secondary vocational training (apprentices), helping members of families (mainly in agriculture), women on maternity leaves and housewives. Includes persons with main and secondary occupation. The sectoral classification is based on the Standard Classification of National Economy Branches valid till 1991. If the reporting organisation besides its main activity performs also other activities, for which it has established special production units, workers of those units are involved in relevant sectors according to their actual activity. That means,

that the source used here should have theoretically excluded from the agricultural employment individuals involved in non-agricultural activities. Nevertheless, since not all farms were running explicit organisation units for non-agricultural activities, this selection procedure might not had been very exact.

- 2 Source: *Statistical Yearbook 1997*, p. 182. The source displays only data for agriculture and forestry together. The figures shown here have been adjusted by deducting 29.1 thousand forestry employees in 1995 and 27.9 in 1996. (Source: *Report on Forestry in the Slovak republic 1997*, p. 17. Bratislava: MoA, November 1997.)
- 3 Comprises 118,000 workers of corporate farms with 20 and more employees and an estimate of 25 thousand persons in smaller farms including family farms.
- 4 Active population comprises employed population in main or single jobs, women on maternity leaves and registered unemployed.
- 5 Employed, as end of year, including persons in secondary jobs.
- 6 Source: Farm Labour Census 1980, 1989. Includes permanent workers, including those involved in non-agricultural activities.
- 7 Source: Farm Census 1994.
- 8 Only large-scale farms staffed 25 and more.
- 9 Only large-scale farms staffed 20 and more.
- 10 Mostly estimates due to absence of reliable information about paid work on individual private farms.
- 11 Source: Farm Labour Census 1980, 1989.
- 12 Including family members. Based on 1994 farm census figures.
- 13 No data available. Workers of corporate farms can be viewed in a very great extent as full-time workers. The share of part-time self-employed before 1990 was near to 100 per cent. During the recent period, the share of part-time self employed can be estimated as about 50 per cent.
- 14 Source: Farm Labour Census 1980, 1989. For the later, only state farms and cooperatives.
- 15 Source: Farm Census 1994.

