## AGRICULTURE IN TRANSFORMATION – THE RESTRUCTURING OF FARM ENTER IN CENTRAL AND EASTERN EUROPEAN COUNTRIES DURING THE TRANSITION PROCESS

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### **ABSTRACT**

Ten years of transition processes in the former communist countries of Central and Eastern Europe (CEEC) have changed the ownership structure as well as the structures and legal forms of enterprises in agriculture considerably.

The farm structures in Eastern Europe developed under the influence of various collectivisation models. These influenced the course of the transformation process and therefore the development of new entrepreneurial and farm structures to a great extend. In addition also the effects of other political, social and economic factors with different weights can be noticed in the individual countries.

Considering labour organisation and relation to markets, four different types of farm enterprises have evolved in the Central European and East European states during the transformation process:

- (a) Family farms for a mere self-sufficiency (Subsistence farms)
- (b) Family farms with a predominant orientation towards the market
- (c) Market-oriented joined family farms
- (d) Market-oriented farms with hired labour

In the future farms and agricultural enterprises of all different types can have good prospects and therefore also the different sizes connected with them. For this reason the same should be valid for all types of farms and in the long term competition should decide, which types are going to compete. The preference or discrimination of a certain type by the agrarian policy needs to be avoided. The state also needs to develop the infrastructure in rural areas, to improve the prospects of farms that are deprived in this respect.

### **INTRODUCTION**

A guiding principle in an evolving socialist society was the increase of labour productivity, which was thought to be achieved on the basis of common property of means of production (national or collective property), especially through a high concentration of production and advantages of size related to this.

For agricultural systems with mainly small and medium-sized farms, collectivisation and transformation of the existing agricultural enterprises into common property prevailed. Landed property rights of the original owners were limited to a large extent or even abolished. Moreover very large firms were expropriated and later collectivised, after their distribution to very small-sized farms and land-less farmers, or turned directly into state-owned property.

The collapse of the communist system triggered discussions about future social systems in the particular countries. In the end, all European transition countries decided to develop a market economy.

Irrespective of this largely identical objective, a substantial differentiation can be observed, with regard to the farm structures aimed at in agriculture and the ways to achieve them. This paper provides an overview of farm structures created in the transition process so far and tries to give reasons for different developments and to evaluate chances of different forms of enterprises in the future.

## FARM STRUCTURES IN CENTRAL AND EASTERN EUROPEAN COUNTRIES

### Farm Structures in the Transition Process so far

Ten years of transition processes in the former communist countries of Central and Eastern Europe (CEEC) have changed the ownership structure as well as the structures and legal forms of enterprises agriculture considerably. Although these countries still had a very similar structure in 1989/90, except for Poland and Yugoslavia, comprising large co-operatives and state properties as well as numerous household economies, a differentiation has developed to an extent that was hardly expected before.

Table 1 provides an overview of the developed farm structures, represented according to the shares of different legal forms in the total number of farms, and Table 2 characterises the structure of land use according to types of operations and the average farm sizes (ha of landed property).

Table 1: Proportions of household economies, family and large-scale farms of the total number of agricultural enterprises (in per cent) in Central and Eastern Europe

Country	Year	Household economies/ private farms <sup>1</sup>	Family farms	Large-scale farms		
		No. (%)	No. (%)	No. (%)		
Albania	1997	100.0	0	0		
Belarus	1998	99.8	0.1	0.1		
Bulgaria <sup>2</sup>	1999	99.6	0	0.4		
Czechia <sup>3</sup>	1999		89.4	10.6		
Estonia	1998	65.6	33.1	1.3		
Hungary	2000	99.5	0	0.5		
Latvia	1997	62.9	35.3	1.8		
Lithuania	2000	63.4	36.3	0.3		
Moldova	1998	82.3	17.6	0.1		
Poland	1999	99.9	0	0.1		
Romania	1997	99.6	0.3	0.1		
Russia	1998	98.2	1.6	0.2		
Slovakia	1999	93.8	5.7	0.5		
Slovenia	1997	99.9	0	0.1		
Ukraine	1998	99.5	0.4	0.1		

<sup>&</sup>lt;sup>1</sup> Household economies include family farms, in case of missing dis-aggregation of the statistical data.

Table 2: Land use and cultivated area per operation in Central and Eastern Europe

Country	Year	Family Household Co-operatives					rativas	State-owned Joint-stock			
Country	1 Cai	far	4	econo		Co-ope	ti atives	enter		compan	
		ļ								others	
		%	ha	%	ha	%	ha	%	ha	%	ha
		LF	LF	LF	LF	LF	LF	LF	LF	LF	LF
Albania	1997	97	1,2	1	ı	-		ı	1	3	
Belarus	1998	1	21	15	0,5	61	2520	23	2860	-	-
Bulgaria	1999	38	>1	14	<1	$42^{6}$	$637^{6}$	$6^{6}$	$735^{6}$	-	-
Czechia <sup>8</sup>	1999	24	25	-	-	32	1394	<1	-	43	530
Estonia	1998	39	9	12	0,7	-	-	$25^{2}$	-	$24^{3}$	472
Hungary	2000	41	9 <sup>9</sup>	4	< 1	-	833 <sup>6</sup>	-	7779 <sup>6</sup>	59 <sup>10</sup>	204 <sup>6</sup>
Latvia	1997	95	24	-	-	-	-	1	340	4	309
Lithuania	2000	50	5	22,5	2,2	$0,5^4$	-	$20^{5}$	-	7	206
Moldova	1998	18	1,5	-	-	60	921	4	585	18	1182
Poland	1999	84	8	-	-	2	$222^{6}$	6	$620^{6}$	8	333 <sup>6</sup>
Romania	1997	67	3	-	-	12	451	21	3657	-	-
Russia	1998	7	55 <sup>11</sup>	3	0,4	22	5200	17	6150	51	7000
Slovakia	1999	9	11	$14^{7}$	-	50	1537	0,3	3071	27	1125
Slovenia	1997	96	5	-	-	-	-	4	371	-	-
Ukraine	1998	3	29	14	0,5	76 <sup>12</sup>	2519	7	653	-	-

<sup>&</sup>lt;sup>1</sup> Family farms include household economies, in case of missing dis-aggregation of the statistical, <sup>2</sup> landed property under state administration, no agricultural use, <sup>3</sup> all large-scale farms, <sup>4</sup> state-owned enterprises and co-operatives, <sup>5</sup> other users of state-owned land, <sup>6</sup> 1996, <sup>7</sup> other agricultural area, <sup>8</sup> not including household economies, <sup>9</sup> operations >1 ha, <sup>10</sup> all operations not including family farms and household economies, <sup>11</sup> 2000, <sup>12</sup> converted in peasant farms (7 % of operations), private leasehold farms (21 %), legal persons (46 %), production co-operatives (25 %) and others until May 2000.

Sources: Country statistics.

<sup>&</sup>lt;sup>2</sup> The Bulgarian statistical reports allocate also private large-scale farms (farming companies) to private farms, they are grouped together with farms >10 ha. This group is marked by an average size of 508 ha. Since only few family farms have more than 10 ha, all farms >10 ha were classified in the group of "large-scale farms".

<sup>&</sup>lt;sup>3</sup> 17 % of the agricultural area in Czechia is managed by household economies. However, the number of farms has not been indicated in the statistical report.

In the Baltic countries, Poland, Slovenia, Romania and Albania the largest proportion of agricultural land is cultivated by family farms so far. In Bulgaria it is about half of the area. In Czechia, Slovakia, Hungary and the CIS states, large-scale farms prevail, i.e. co-operatives and joint-stock companies.

### Patterns of collectivisation

Before investigating in the causes of different developments in particular countries, typical features of the collectivisation process should be described for former socialist agricultural operations in the countries of Central and Eastern Europe, because they considerably influenced the behaviour of political actors during the restructuring process of these countries' social order.

The choice and drawing up of the respective strategies were determined by specific political, social, historical and economic factors. Their combined results influenced the course and the result of the restructuring processes.

SWAIN distinguishes between four different models of collectivisation in respect to the former communist European countries (not including the Soviet Union):

- An abandoned collectivisation (Poland, Yugoslavia),
- A Stalinist collectivisation (Soviet Union, Albania, Romania),
- A neo-Stalinist collectivisation (GDR, Czechoslovakia, Bulgaria) and
- A Hungarian type of collectivisation.

As a result of an *abandoned* collectivisation a dual structure emerged. It involved not very efficient large-scale farms and peasant farms, that largely remained at a level characteristic for the 40s of the past century. Farmers hardly received any state subsidies to develop their farms. Economic development focused on industries.

Stalinist collectivisation (forced collectivisation) resulted in heavy political and economic pressure on the farmers, to obtain their unification in a collective entity. Such forms of collectivisation as they used to be originally, are especially characteristic for economically less developed countries. A collectivised, strictly centralised agriculture was intended to provide the economic basis for establishing a heavy industry.

However, to understand the developments after 1990, the concept of Stalinist collectivisation has to be differentiated further:

- (a) Collectivisation under the conditions of existing village communities, where a periodic redistribution of landed property had been practised between the farmers' families over centuries, and collective bonds existed within a village community, (in Russia's core land and parts of the Ukraine, where refusals to enter the kolkhoz could have resulted in losing one's rights to use the land (KARUSCHEIT, SCHRÖDER, 1993).
- (b) Collectivisation of peasant farms which had been owners of landed property over generations and who had therefore made use of property rights in a private farm structure in the past (Baltic countries, Albania, Romania).

These various starting conditions had their repercussions on the course of privatisation and restructuring.

In *neo-Stalinist* patterns of collectivisation a reduced economic and political pressure was exerted after collectivisation.

The *Hungarian* model of collectivisation was similar to the one mentioned last. Moreover it developed a market-oriented environment under socialist conditions.

Altogether five patterns of collectivisation may be distinguished. They did not remain without any influence on privatisation and restructuring after 1990.

### Framework Conditions, Formal Institutions

All transition countries agreed that a large part of the state-owned agricultural sector was incompatible with a market-oriented agriculture. According to many western agricultural economists, politicians and consultants, this also applied to the cooperatives which had to be abolished and replaced by family farms. While state-owned operations were only kept to an extent which was indispensable to fulfil sovereign functions, co-operatives remained in existence in many countries or were re-established in the meantime.

The implementation of market-oriented economic systems resulted in:

- A privatisation of operations, landed property and the remaining agricultural assets
- Farms' market orientation
- Creating an institutional framework for a successful economic development of agriculture.

From the perspective of farm management, structural change in Central and Eastern European countries, which was closely linked with ownership transfer, followed the basic scenarios indicated below (CSAKI, LERMAN, 1996):

- 1. Preserving old structures under a new name, privatisation using vouchers without a physical allocation of specific goods;
- 2. The same as 1, but separation of very large enterprises into smaller ones, based on villages;
- 3. Collective enterprises being fully split into private family farms;
- 4. The same as 3, with a later co-operation, sometimes up to an integration, creation of agricultural producer organisations;
- 5. Internal restructuring of collective enterprises and creation of efficient profit centres, functioning largely autonomously under a holding; separation of ownership functions and employment in enterprises (staff reduction based on company-internal restructuring).

A clear assignment of individual scenarios to specific countries is not possible. It is rather typical that several scenarios exist in parallel within one country, focusing on different issues.

Preserving structures, and, partly, starting to downsize the enterprises existing so far (scenarios 1 and 2), is in particular characteristic for countries like Russia, the Ukraine and Belarus which are considered as rather stagnant in the area of reforms. As table 2 shows, large-scale farms (co-operatives, state-owned enterprises and joint-stock companies) still cultivate the largest part of the agricultural area. However, the average size of operations declined. Russia and the Ukraine transferred the soil to the large scale farms, whereas, in general, workers and further entitled village residents received landed property portions and assets (without having been able of making use of the rights connected with the ownership transfer so far). In Belarus in turn, the landed property has remained state property so far. Quite an important factor in keeping existing structures is the role of management in large-scale farms. It was able to resist tendencies of firm shutdowns, mostly for reasons of remaining in control and ideology. A strong tradition of collective structures in these countries must not be underestimated.

Large-scale farms were mainly shut down (scenario 3) in countries where

- the effects of Soviet occupation were to be eliminated (Baltic countries) for national reasons,
- political parties were trying to reverse any developments from communist times, regarding them as a complete failure, i. e. for ideological reasons, such as in Albania, Bulgaria, Hungary and Romania,
- few mechanised large-scale farms (with low specific investment as a characteristic feature) did not offer any advantages as compared to individual operations, i. e. for reasons of business (mainly in Albania, but partly also in Romania and Bulgaria).

Table 2 shows that land use by peasant farms and part time farms extended its proportion largely over very few years (Albania 97 %, Latvia 95 %, Lithuania 72.5 %, Romania 67.0 %, Estonia 41.0 %). Setting up an efficient agricultural structure which should be different from 1939 in the 1990s, due to biological, mechanical and technical innovation, was not considered as a solution. Politics have not dealt with this problem, yet.

In some countries the radical elimination of large-scale farms, without considering the exact conditions, resulted in enormous capital losses. If large-scale farms are shut down without sufficiently securing high specific investment in real and human capital, such as in Bulgaria (this applies mainly to the high investments in irrigation facilities) and Hungary, economic losses have to be expected.

Only later a more objective evaluation of advantages and disadvantages of large-scale and small farms prevailed, due to structural developments in the new German Federal States and statements by EU bodies about neutrally handling different types and sizes of farms.

More or less under the influence of this discussion, collective forms of farms are accepted again by a broad range of people (scenario 4) in several countries, e. g. in Bulgaria.

A conversion into market-oriented large-scale farms (scenario 5) is mainly to be found where the economic advantages of mechanisation (connected with high specific investment), but also other advantages of size, were obvious, e.g. when receiving operating resources or selling products, i. e. for business reasons (new German Federal States, Czechia, Slovakia, partly Hungary). Therefore the number of operations created

by restitution remained relatively low in countries with a neo-Stalinist type of collectivisation, e.g. in Czechia and Slovakia.

It can be deduced from the analysis presented that, apart from the historical element, above all the political concepts in form of institutional framework (transfer of ownership rights, creation of the required legal framework, such as bankruptcy and tax legislation, development of land purchase and rental markets, implementation of instruments for controlling the market-economy etc.) implied the related concrete arrangement of the transformation process in the agriculture.

### Informal institutions, mentality

As to the assessment of the previous development of the transformation process in Central and Eastern Europe by the political establishment in Western Europe, they often complain about the insufficient willingness of major parts of the population to accelerate the process of reform. This misunderstanding must be due to the far-reaching neglect of the impact of informal institutions – customs, traditional behaviour patterns, and furthermore religious ideas. The influence of the informal institutions can be illustrated very well by the long-lasting discussion about the privatisation of the land in Russia.

The transfer of the land to the enterprises in connection with the distribution of land shares (BROOKS, LERMAN, 1994; BROOKS et al., 1996), i.e. not directly to the former kolkhoz farmers and farm workers, can be understood as tie-in on the Russian tradition of the village community, which owned the land as a joint property, and which redistributed the land depending on the farmer family size at intervals of 12 to 18 years. It should also be noted that the STOLYPIN Reforms of 1917 failed by the majority of the farmers (HILDERMEIER, 1989).

There is also a fear that after the privatisation of the land and upon granting the right of free and uncontrolled sale, about 15 % of the Russian land would be concentrated in the hands of big landowners within a short period, for retired landowners and other people not working in agricultural farms who are entitled to acquire land according to the law, would sell their share (DEMJANENKO, DEMJANENKO, 1997).

### PREVIEW: FUTURE TENDENCIES OF DEVELOPMENT

# Classification of the Farm Enterprises under the Aspects of Work Constitution and Market Relationships

Considering labour organisation and relation to markets, four different types of farm enterprises have evolved in the Central European and East European states during the transformation process, the one or the other type predominating depending on the political, economical and historical conditions:

- (e) Family farms for a mere self-sufficiency (Subsistence farms)
- (f) Family farms with a predominant orientation towards the market
- (g) Market-oriented joined family farms
- (h) Market-oriented farms with hired labour

Apart from these "pure" types, there are also mixed types. In addition, in the European CIS states, due to close co-operative relations combinations of different farm types can be observed, i.e. combinations of joined family farms and/or farms with hired labour and part-time farms, which comprise subsistence farms and farm enterprises predominantly oriented towards the market as well.

### Family farms

Family farms are characterised by the fact that there is a close relationship between the family household and the farm. Distinction is to be made between farms that mainly serve the purpose of self-sufficiency, and those farms that mainly produce for the market.

Family farms for a mere self-sufficiency are not or almost not affected by changing market conditions. That's why they are very resistant upon a steep rise of the factor prices and a continued drop of the product prices. Subsistence farms are of special importance for the people, if there are no other employment opportunities, and the state provides only limited social allowances or no allowances at all. As soon as there is a positive development of the economy, the number of such farms in Eastern and Central Europe will gradually diminish.

In the development of market-oriented family farms three paths can be distinguished: development by renting in or purchase of land from the preceding group; marketorientated family farms have been set up or newly been founded during the process of transformation by separation from the existing large-scale farm enterprises; or market-orientated family farms arises from joined family or farms with hired labour through investments made by individual persons and on simultaneously paying out the capital shares to the other previous owners as well as through rental and purchase of land. Like other market-oriented enterprises they are subject to the risks of the markets. The formation of large family farms requires a high amount of capital, which is not available at present to the extent as required in the Central European and Eastern European states. The optimum development path can consequently be associated with scale extension for one part of the farms, and with scale reduction for the other.

### **Joined Family Farms**

Amongst the joined family farms with orientation towards the market, private corporations and limited partnerships are generally profitable. The former are able, just like the large family farms, to use the biological and technical progress as well as cost degression, however provided at any time that the partners of the private corporations get along with each other. Otherwise transaction cost can become so high that a dissolution seems to be expedient. In limited partnerships, the responsibility for the success of the business is clearly stipulated by the partnership with unlimited liability. For a moderate number of partner families, transaction cost for the management should be limited, however it can be made use of degressions in size. That's why, the development path should be directed amongst others to using the inherent saving effects.

Transaction cost for co-operatives with a large number of partners is estimated to be particularly high. On the one hand, this is due to direct co-ordination of the work processes, on the other hand, it is duet to the harmonisation of the interests amongst the partners themselves, who often are both the owner and the farmer at the same time, as well as between the management and the partners (avoiding negative effects of the principal agent problem). Nevertheless, according to what experience gathered in Eastern Germany shows well-managed co-operatives availing of sufficient capital have good development perspectives.

### **Enterprises with Hired Labour**

Enterprises with hired labour that are sufficiently endowed with capital and well managed and which are therefore able to survive bad economic situations, have good

development opportunities, since they are able to rapidly integrate in their company the biological and technical progress, and to make use of the cost degression. An important precondition is to have highly-qualified and highly motivated human capital to tackle demanding tasks, whereas simple work can be carried out by seasonal workers. In this way, it is also possible to reduce the transaction cost for the organisation of the work and the supervision. The main problem in Central and Eastern Europe though is the insufficient amount of capital available to the businesses, so that sustainable viability is not provided.

#### Combination of businesses

We have already made reference to the phenomenon of personal part-time farms, which allow for self-sufficiency of the rural family with products and services from large-scale farm enterprises and, at the same to provide products for the market. The regulation of the relationships between large-scale farm enterprise and part-time farm shows a lot of multifaceted structure, the part-time farm mostly being given the preferential treatment (pricing, taxation, supply of services that are free of charge). In the future, the economical relations should however be configured in such a way that there is no distortion of competition, and all partner will be given the opportunity of making profits. Under such circumstances, it will turn out whether the type of co-operation relationships as described above are still economically viable, i.e. whether the owners joinedly produce less labour-intensive products in the large-scale farm enterprises and labour-intensive products in the their family farms (part-time farms), or whether it will turn out to be useful to dissolve the former ones and to create market-oriented joined family or family farms. However, an infrastructure that is mostly insufficiently developed will often act as an impediment to this.

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### **Biographical Sketch**

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1937	born in Reichenbach/Vogtland, Germany
1955-1961	Study of Agricultural Sciences at the Agricultural Faculty Leipzig
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## Key Qualifications:

Farm economics in transition countries

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