

STRUCTURAL CHANGES OF THE ROMANIAN AGRICULTURE IN THE PROCESS OF EUROPEAN INTEGRATION

Anca Dachin¹, Letiția Zahiu¹

Abstract

The Romanian agriculture has experienced different stages in the process of European integration, while quantitative and qualitative changes in land use structures, provision of inputs, financing sources and production structures have taken place, which needed suitable agricultural policies. The effects of these changes are reflected in the economic performance measured by structural and general indicators, which show a significant gap to the majority of the Member States of the European Union. The paper focuses on the specific problems of holding structures and labor in agriculture and on the necessity to improve the quality of employment in this field, in accordance to the requirements of the modernization process. The capacity of agriculture to use the EU structural funds depends highly on the improvement of human capital and on the development strategies of farmers.

Key words: agricultural structures, productivity, size classes of holdings, employment structures

Introduction

The European Community had nearly 23% of the labor force in agriculture in 1958, down from 30% in late 1940s. The exit from agriculture was specific to industrial development, accompanied by stronger urbanization and the development of modern agricultural production systems. A failure to absorb this labor into other sectors would cause agricultural income to fall steadily and destabilize the society and the whole rural area (Pelkman, 2006). Romania is following the same path, but the gap to the EU countries is significant. The

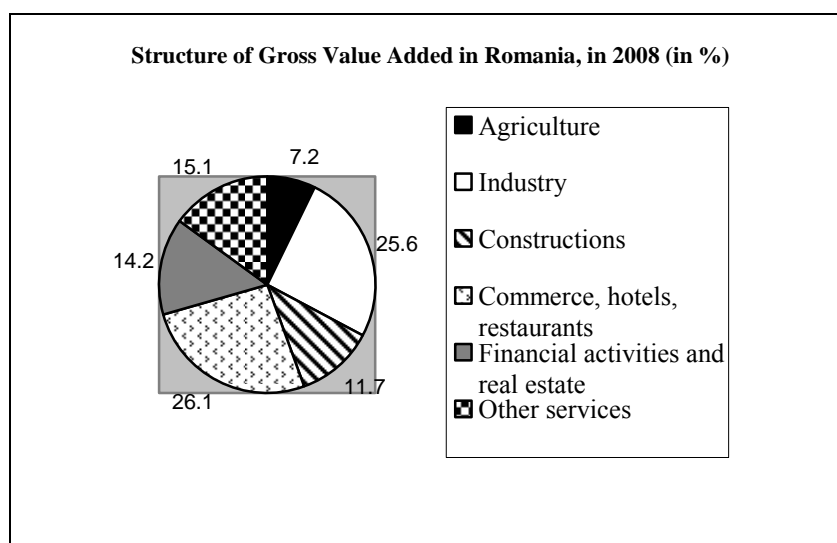
¹ Anca Dachin, Ph.D., Letiția Zahiu, Ph.D., Academy of Economic Studies in Bucharest, Romania, e-mail: ancadachin@yahoo.com

internationalization of agricultural markets leads to the convergence of the labor and production structures in different countries (Zahiu, 2003). The paper focuses on the structural changes in the Romanian agriculture, which were slow in the pre-accession, but should accelerate under the impact of the Common Agricultural Policy.

Contribution of agriculture to the GDP

During the decade of transition to the market economy in Romania (1990-2000), the share of agriculture in the total value added decreased from 23% in 1990 to 13% in 2000. This trend is due to unfavorable weather conditions, as well as to the recovering of industrial production and enhanced development of services.

In the period of sustained economic growth (2000-2008), the Romanian agriculture reaches a maximum of 14% in the total value added in 2004, which is considered an exceptionally good agricultural year, but in the next years the percent declines gradually, reaching 7.7% in 2008 (figure 1). Even if this share is still much higher than the EU average (about 4%), this trend is important because of diminishing the GDP fluctuations induced by agricultural supply shocks which occur under unstable climate conditions.



Source: data from the National Institute of Statistics (NIS)

The contrast between the contribution of agriculture to GDP and the rather low level of investment in this sector is expressed by labor productivity. In 2004

the general level of GDP per labor force unit in Romania was 36.4% of the EU25 average, while the productivity in agriculture was only 17.2%, even if the agricultural output in 2004 had a record of the latest years.

The delay in implementing a real reform of the production system in agriculture keeps a high level of labor force, of which only about 5.2% are employees in 2007. This is the reason why the labor productivity is at the lowest level compared to all other economic activities of the economy. Moreover, in all other activities the productivity has increased, while in agriculture it is keeping the same level.

Changes of agricultural structures in Romania in the period 2002-2007

The Romanian agriculture has radically changed the property structures. The private property became dominant and created the conditions for market competition. But the agricultural structures which can give an impulse to economic expansion by an efficient use of human, natural and financial resources still do not allow the normal functioning of the market. Because of incoherent agricultural policies and lack of coordination of actions meant to reform all agricultural structures, there occurred large gaps between the property and the production system, between the agricultural production and marketing of the products. This was accompanied by waste of resources, destruction of production and unsatisfactory economic results.

The preparation of Romania's integration to the European Union has been done with difficulties, the unbalances of the agricultural markets became larger and the agro-food self-sufficiency decreased gradually. The food safety of population in the urban areas is highly sustained by imports of food products from the common market and by own consumption in the rural areas. The commerce with agro-food products on local markets is limited and creates disadvantages for farmers compared to food processing units and trade units. Therefore the farmers' income level remains low.

The Romanian agriculture has not homogenous holding structures, since there is an excessive number of small and very small individual holdings, as well a low number of large and very large production units (table 1). This dual character of the holding structures is more visible than in most EU Member States. Even if there is some progress, the individual holdings are still keeping dominant. The very large holdings are difficult to be restructured in order to become compatible with the requirements of the common market and to benefit from the financial support, considering that the application of the CAP mechanism means a reduction of support for large farms. *The sector of medium-sized holdings is missing.*

The types of medium sized family holdings and associative forms of holdings are specific to the “European agricultural model”, which evolved in the long run under the impact of the Common Agricultural Policy, respectively of the structural policy measures and of the Community and the national financial support.

Table 1 Changes in the structure of agricultural holdings in Romania, by size and legal status in the period 2002-2007

(in %)

Size classes (ha)	Total number of holdings	Of which		Total area	Of which:	
		Individual agricultural holdings	Legal units		Individual agricultural holdings	Legal units
2002						
< 1	50.46	50.64	14.75	5.45	9.83	0.02
1-2	20.88	20.96	5.84	9.14	16.49	0.03
2-5	22.15	22.2	13.04	20.87	37.6	0.15
5-10	5.09	5.04	14.36	10.34	18.44	0.32
10-50	1.09	1.04	10.89	5.4	9.14	0.77
50-100	0.09	0.06	4.95	1.85	2.35	1.24
Over 100	0.24	0.06	36.17	46.95	6.15	97.47
Total	100.00	100.00	100.00	100.00	100.00	100.00
2005						
< 1	44.93	45.08	11.61	4.99	7.62	0.02
1-2	21.11	21.18	5.38	8.97	13.69	0.03
2-5	24.61	24.66	12.81	22.73	34.64	0.16
5-10	7.03	6.99	14.5	13.85	20.98	0.34
10-50	1.99	1.94	12.57	9.49	14.01	0.93
50-100	0.12	0.1	5.72	2.42	2.88	1.55
Over 100	0.21	0.05	37.41	37.55	6.18	96.97
Total	100.00	100.00	100.00	100.00	100.00	100.00
2007						
< 1	43.76	43.92	8.18	4.72	7.24	0.01
1-2	20.77	20.84	5.31	8.42	12.9	0.03
2-5	25.07	25.13	12.32	21.97	33.62	0.15
5-10	7.79	7.76	13.56	14.67	22.33	0.31

Structural Changes of the Romanian Agriculture in ...

Size classes (ha)	Total number of holdings	Of which		Total area	Of which:	
		Individual agricultural holdings	Legal units		Individual agricultural holdings	Legal units
10-50	2.24	2.19	12.62	10.22	15.15	0.99
50-100	0.12	0.09	6.93	2.42	2.72	1.86
Over 100	0.25	0.07	41.08	37.58	6.04	96.65
Total	100.00	100.00	100.00	100.00	100.00	100.00

Source: calculated on base of 2002 General Agricultural Census, Vol 1/2004; 2005 Farm Structure Survey; 2007 Farm Structure Survey; National Institute of Statistics, Romania

The old CAP measures are not suitable any more today. New solutions had to be identified, which are adapted to the new realities of the European agriculture. The structural and efficiency gaps between the Romanian agriculture and the old Member States (UE15), as well as the lagging behind the New Member States (UE10) are difficult to reduce. In 2007 the share of holdings up to 5 hectares represent 89.6% of the total number and 35.1% of the total utilized agricultural area, compared to 93.5% and respectively 35.5% in 2002.

In five years the number of holdings under 5 hectares decreased by 568.4 thousand, but this reduction is not sufficient and it occurred mainly because of the decrease of the land owners and not due to the concentration of areas by the creation of associative organization forms. Part of the agricultural area of these holdings was taken on lease or bought by agricultural commercial companies or it was used in the real estate business.

Changes also took place within the size class 5-10 hectares (an increase by 81.12 thou holdings) and 10-50 hectares (an increase by 39.35 thou holdings). The share of these holdings in the total utilized agricultural area (UAA) also increased from 15.74% to 24.89%. Within the size class 50-100 hectares, the number of holdings increased only by 941. In 2007 the size class over 100 hectares included 9608 holdings covering 37.57% of the UAA. The number of holding decreased by 595 in the period 2002-2007. This size category is also including very large holdings (over 5000 hectares).

The average size of the individual holdings is 2.34 hectares and of the legal units 275.37 hectares. In the group of legal units is included a low number of private commercial companies using agricultural areas of thousands of hectares, which were taken on lease from state agricultural companies or from small farmers who became land owners as a result of the application of the land property law.

The number of legal units decreased especially as a result of the liquidation of some agricultural companies created as association based on the old agricultural cooperatives. There were 1630 such companies in 2005 and 1475 in 2007. On the other hand, the number of private companies increased from 4574 to 5019, as a result of leasing, concession or buying land (their average area is about 400 hectares but there are production units holding over 20000 hectares). The number of cooperative units decreased. The association forms of the small farmers for the execution of agricultural operations in common were not encouraged and they developed only by chance in some areas.

The total number of agricultural holdings at the end of the year 2007 was 3.93 million, compared to 4.26 million in 2005 and 4.48 million in 2002. In 1941 Romania had 1.25 million holdings and in 1949 about 2 million holdings. After the reform in 1991 combined with the lack of an efficient structural policy, the process of excessive division of land into lots extended the subsistence agriculture in Romania beyond the economically acceptable limits. This type of agriculture means small production units with no connection to the market and increase of own consumption in the rural area.

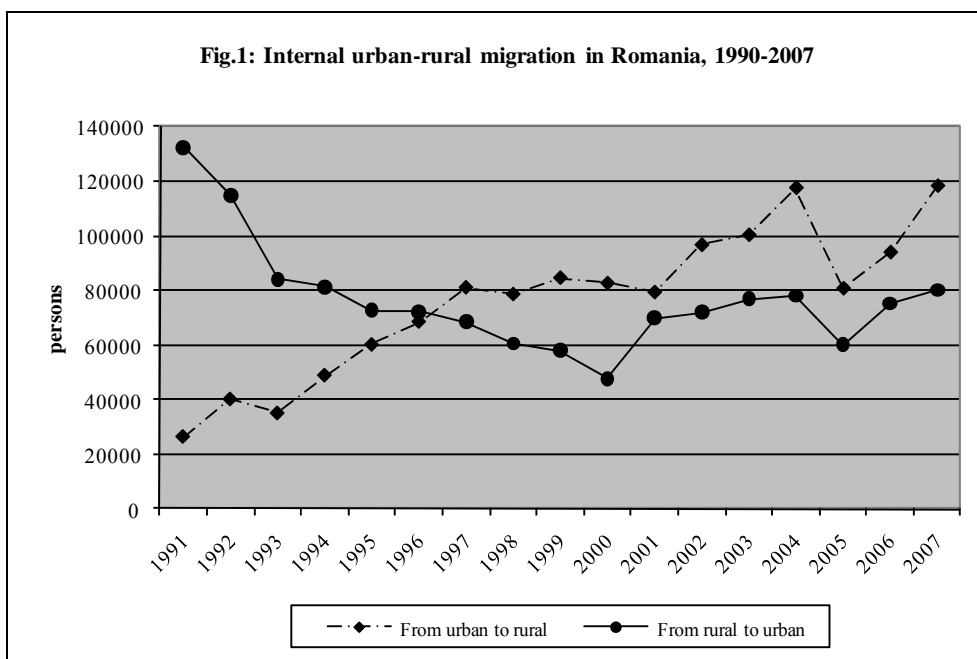
In Romania the sector of small family subsistence production units in agriculture is very resistant and it survived after 1990, on base of the structure of the old rural households. The structural changes should lead to a multifunctional development of these households, to their association for the marketing of products, to provisioning with industrial inputs, common investments, agricultural activities, storage of agricultural products, processing of raw materials, environment protection etc. As a consequence, the number of subsistence units should decrease in favour of the development of a viable commercial sector.

Changes in labour force structures

After 1990, during the transition to market economy, the restructuring of employment was accompanied by poverty increase and also by a certain inverse trend, migration of urban population to the rural area (fig.2). The economic decline of many small and medium-sized urban centers generated negative social effects. Many people who lost their jobs used the alternative to move to the informal sector of the economy. The main survival strategy of people moving to villages was to produce food on their own land. The urban-rural population net flows in the last decade have not significantly changed the share of rural population, because migration is in both directions, but elderly domestic migrants replace progressively the younger population. There is also a migration flow of people from the rural areas to foreign countries, especially EU countries.

The high number of workers released from industry after 1990 and the net migration to the rural area resulted in the increase of labour force employed in agriculture, hunting and fishery, which reached the peak of 42.7% of the total employment in 2000 in Romania. This process extended the subsistence economy. After 2000, the sustained economic growth created favourable conditions for the development of non-agricultural activities and determined the reduction of employment in agriculture to 30.5% in 2006 and 29.5% in 2007. But this share is still much higher than the average of 6.4% in EU27, while the highest values in some Member States do not exceed 20% (in 2006, Bulgaria 20.6%, Poland 19.2%, Lithuania 12.4% and in 2005, Greece 14.4%) (European Commission, 2007).

In the period 2002-2008 there was a significant reduction of employment in the rural area, while in the urban area the trend shows the opposite situation (table 2). This demonstrates the unsustainable economic development in the rural area.



Source: Romanian Statistical Yearbooks 1992- 2008, National Institute for Statistics

Table 2 Employment by area of residence, 2002-2008, (Thousand persons)

Year	Romania	Urban	Rural
2002	9234	4607	4627
2003	9223	4662	4561
2004	9158	4906	4252
2005	9147	4889	4258
2006	9313	5115	4198
2007	9353	5072	4281

Source: *Romanian Statistical Yearbooks Time Series 1990-2007 and 2008*, National Institute for Statistics

Agriculture has gradually lost its status of employment buffer specific to the period 1990-2000 (Toma, 2009). However it is expected that a prolonged period of the economic crisis that started in 2009 could result into higher net migration flows from urban to rural areas. Ageing of the labour force is another phenomenon in the rural area, due to the age of people working in agriculture, which is the dominant economic activity. In 2003 about 17.7% of the farmers and skilled workers in agriculture, forestry and fishery were of age 65 and over, compared to total employment in Romania, where this age group had only a share of 6%. In the period 2003-2007 the number of farmers and skilled workers in agriculture decreased by 661 thou persons (by 22%), while the share of old employed people increased to 18.6%. This change shows that most people who found an alternative employment in the rural area or migrated from the rural area belong to the younger age groups.

Table 3 Employment structures, by age group in Romania in 2003 and 2007

	Year	Total (000 persons)	of which, at age (in %):	
			15-64 years	65 years and over
Total employment, of which:	2003	9223	94.0	6.0
	2007	9353	94.5	5.5
Farmers and skilled workers in agriculture, forestry and fishery	2003	3004	82.3	17.7
	2007	2343	81.4	18.6

Source: *Romanian Statistical Yearbook 2008*, National Institute for Statistics

Taking into consideration that in 2007 the total employment in agriculture, hunting, forestry and fishery was 2757 thou persons, it is obvious that beside the farmers and skilled workers in this field (2343 thou persons, see table 3), there still

are about 400 thou persons who are unskilled workers employed in this activity, which are not expected to change the occupation. Even if the overall reduction of employment in agriculture is a good sign because it improves the employment level in agriculture compared to the EU countries, this kind of change alone does not make agriculture more competitive.

The young generations in the rural area go through a complex transition after they exit the educational system (Pârciog, 2008). They are not attracted to agriculture because of the low income and negative expectations in the short run. They prefer non-agricultural activities paid with salary or the temporary work in western EU countries. The present structure of employment in agriculture, respectively the structure by age group and by education and qualification level and the ageing trend of the last years are not positive premises for the efficient and rapid restructuring process in agriculture. The application of the Common Agricultural Policy depends highly on the capacity of farmers to understand and use the new mechanisms of the CAP.

The expected impact of the new CAP

In the period 2002-2007 the average area per holding increased only slightly, from 3.37 hectares to 3.57 hectares. In order to reach the average level of 10 hectares per holding, the subsistence holdings should decrease by 2.4 million until 2013. After this time limit the new reform of the CAP will bring disadvantages for the Member States having subsistence agricultural structures. Under these circumstances, the application of economic and social mechanisms in Romania should lead to the extension and consolidation of the commercial holdings, family holdings and associations.

In Romania the number of family holdings will be high also in the future, due to the historical traditions and to the consequences of the land property law. The consolidation of these holdings is important in the context of the worldwide economic crisis and the climate changes, since they ensure the food for the rural families and are able to produce diversified products for the market. The risk for bankruptcy is lower than in the case of large agricultural companies.

The basic option for Romania is the formation of diversified agricultural production structures linked by various forms of cooperation and agro-industrial integration, which are competitive on the single market. The restructuring of the large agricultural companies must be done because of economic reasons. They have difficulties in adapting to the market requirements. However some of these large holdings could reach high performance and they play an important role on the internal market and for the development of exports.

The present SAPS mechanism which distributes the direct payments per hectare in the new Member States does not stimulate the merging of land and the increase of the holding size in Romania. However the the process of merging lots must be highly accelerated since, according to the new CAP after 2013, the funds allocated will be reduced or eliminated, even if they are a very important source for the financing of agricultural activities. On the other hand, starting with 2009, the large companies will receive decreasing direct payments per hectare, according to the CAP principle of „modulation”. There will be a percentage reduction of payments for holdings over 50 hectares, considering they manage to function with lower support (the reduction is up to 35% from the total sum per hectare for holdings having over 300 hectares).

Conclusions

In Romania the share of agriculture in the total value added decreased from 23% in 1990 to 13% in 2000 and 7.7% in 2008. The delay in implementing a real reform of the production system in agriculture and modest alternative job opportunities in the rural area still keep a high level of employment in agriculture. The sector of medium-sized holdings is missing. The present structure of employment in agriculture, respectively the structure by age group and by education and qualification level and the ageing trend of the last years are not positive premises for the efficient and rapid restructuring process in agriculture. The structural changes depend highly on the capacity of farmers to understand and use the new mechanisms of the CAP. In order to reach the average level of 10 hectares per holding, the subsistence holdings should decrease by 2.4 million until 2013. After this time limit the new reform of the CAP will bring disadvantages for the Member States with subsistence agricultural structures.

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