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"The role of agriculture for overcoming the rural poverty in Romania"

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Abstract

Topical literature sees a major role for agriculture in poverty reduction by providing food and cash income whereas it can only for very poor countries be a driving force for economic development. Economic indicators confirm that Romania does not belong to the very poor countries although poverty has been an issue. During the last years, Romania progressed successfully in reducing poverty. On the one side, this can be attributed to the positive overall economic development. On the other side, agriculture served as a social safety net for many millions people. Now, the agricultural sector is dominated by subsistent and semi-subsistent farm households headed by persons in pension's age without formal agricultural training. Only 40% of utilised agricultural area (UAA) is operated from commercial private and corporate farms. Thus, incentives for economic growth are unlikely from them. While large-scale corporate farms are already integrated in agri-food chains the upcoming group of commercial private farmers will have to show whether it could compete on the agri-food market.

Although agriculture has been contributing to poverty reduction, there are good reasons to believe that future economic development will rather come from outside the agricultural sector while agriculture will continue to play the role of a social safety net.

Strengthening the Romanian agricultural sector calls for concerted policy actions that are finely targeted for different groups. Fostering the restitution of land to former owner families, developing a functioning land sales and rental market, and providing access to agricultural product markets could promote the resurgence of a highly productive group of commercial private farmers. Non-farm job creation in rural areas could provide income opportunities for abundant agricultural labour force. Both, new farmers and potential non-farm employees seem to need profession specific advice and training to become competitive in their transition environment. The large group of pensioners could be convinced to exit the agricultural sector if they could rely on an income from social provisions that covers their daily needs.

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LIST OF ABBREVIATIONS

AWU	Annual work units
ESU	European Size Units
EU	European Union
FAO	Food and Agriculture Organization
GDP	Gross domestic product
GVA	Gross value added
MDGs	Millennium Development Goals
n.s.	not specified
NRDP	National Rural Development Programme
NIS	National Institute of Statistics
OECD	Organisation for Economic Co-operation and Development
PPP	Purchasing power parity
PPS	Purchasing power standards
SCARLED	Structural change in agriculture and rural livelihoods
UAA	Utilised agricultural area
UNDP	United Nations Development Programme

1 INTRODUCTION

The role of agriculture for economic development and poverty reduction is still a major issue in economic literature. Although this issue has been controversially discussed for the last 60 years, topical literature agrees that economic development can only be fostered by agricultural growth in least developed countries while in all other countries, agriculture plays an important role in reducing poverty not only in rural areas but also for urban population.

The phenomenon of poverty is well researched for the less and least developed countries in Africa and Asia but it became a research topic for Central and Eastern European countries after transition first. While it is clear what the role of agriculture in poor and wealthy countries is, it remains questionable what its role in transition countries could be. Transition countries are different with respect to wealth, infrastructure, educational level, and industrial development. While they show some features of developing countries, i.e. income, they may be well developed in other characteristics, i.e. educational level. This asks for analysing the specific situation in each single country. This report focuses on Romania, a country in Central and Eastern Europe that progressed significantly in poverty reduction in the last years.

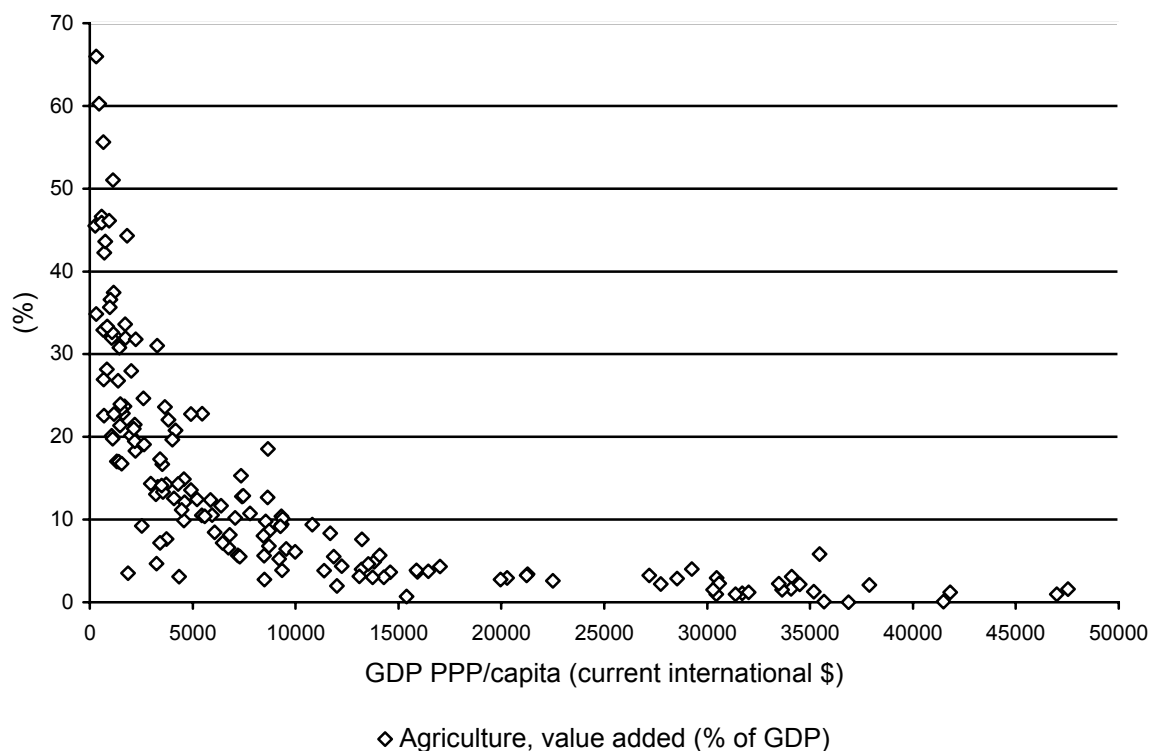
The core objective of this report is to determine the current and perspective contribution of agriculture to economic development in general and to rural poverty reduction in specific. For this, the report starts with a topical literature review in chapter 2. Chapter 3 analyses the poverty situation in Romania. Romanian economic development and the role of agriculture are described in chapter 4. Chapter 5 gives an overview of the Romanian agricultural sector before its role in fighting rural poverty is addressed in chapter 6. Chapter 7 concludes the report and gives policy recommendations.

Evidences in this report base in desk research of topical literature, international and national statistics, and experiences of the Romanian experts team.

2 ROLE OF AGRICULTURE FOR ECONOMIC DEVELOPMENT AND POVERTY REDUCTION: A TOPICAL LITERATURE REVIEW

The role of agriculture for economic development and poverty reduction is still a major issue in economic literature. Influential international organisations like FAO, The World Bank, and OECD discuss this topic (Anriquez and Stamoulis 2007, World Bank 2007, OECD 2006). They agree that the significance of the agricultural sector in GDP and employment is a good indicator for economic development and wealth in such a way that the poorest countries have a high share of agriculture in GDP and employment. Empirical data from The World Bank for 2005 provide a vivid impression for this strong relationship (Figure 2.1 and Figure 2.2).

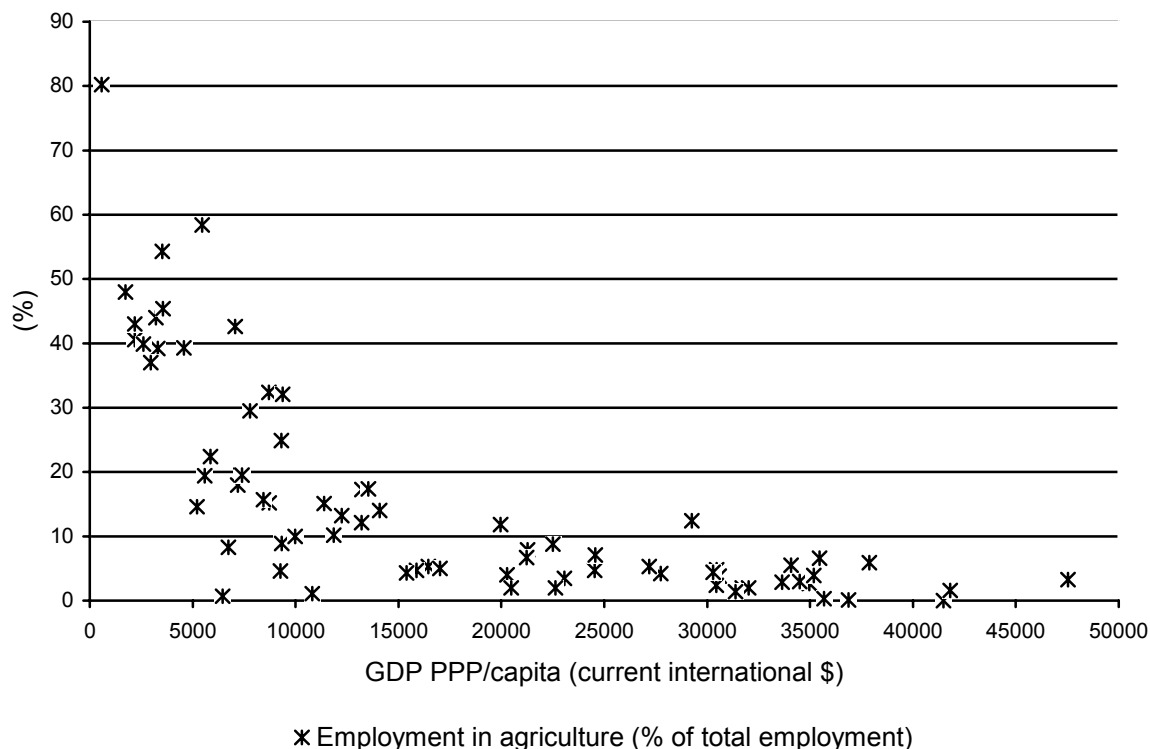
Figure 2.1: Relation between income and importance of agriculture in the economy (figures from 160 countries in 2005)



Source: WDI (2008)

Figure 2.1 shows that the importance of agriculture for GDP drops fast below 10% when GDP PPP/capita increases to more than 10,000 current international \$. But the importance of agriculture for employment decreases more slowly. Only when the GDP PPP/capita reaches more than 15,000 current international \$, a share of agricultural employment in total employment below 10% could be expected (Figure 2.2).

Figure 2.2: Relation between income and significance of agriculture for employment (figures from 76 countries in 2005)



Source: WDI (2008)

But does this mean that agriculture is an impediment to economic development? Anriquez and Stamoulis (2007) reviewed the topical literature and came to the conclusion that this issue has been controversially discussed for the last 60 years. Lewis (1954) and Johnston and Mellor (1961) are among those who are convinced that a dynamic agricultural growth is a precondition for economic development. Prebisch (1951), Singer (1950), Rosenstein-Rodan (1943), and also Hirschman (1958) contradicted this positive view and saw the driving forces for economic development outside agriculture. However, recent research from Parry (1999), Ocampo and Parra (2003), and Faruqui *et al.* (2003) shows that their prerequisites cannot be generalised or cannot be confirmed by time series data. Anriquez and Stamoulis (2007) come in their research to the conclusion that "a productivity-induced agricultural expansion can 'pull' other sectors with it" (p. 25). Winters *et al.* (1998) showed by means of a computable general equilibrium model the important role of productivity growth in agriculture for economic development. Also The World Bank stresses in its annual World Development Report 2008 the unique role of agriculture for sustainable development. But it depends on the current development status that one country has which role agriculture could play. For agriculture-based countries, agriculture is essential for economic development but first an increase in productivity of agricultural smallholders has to take place (World Bank 2007). The more developed a country is the less important becomes agriculture for further development. In developed countries, agriculture is strongly interconnected with up- and downstream sectors but it is no longer "the backbone of the rural economy" (OECD 2006, p. 39).

But it is not only the positive role that the agricultural sector has in promoting economic development on the national level what one should have in mind when discussing poverty reduction. It is unquestionable that technological progress in agriculture also has a positive impact on poverty reduction for the poorest of the poor (Anriquez and Stamoulis 2007, de Janvry and Sadoulet 2002). On the one side, especially poorer rural households depend more on income from their farms (Davis *et al.* 2007). On the other side, agriculture serves as "farm-financed social welfare" (World Bank 2007, p. 3) in times of economic crisis for urban people. In urbanised countries, agriculture could reduce rural poverty when smallholders get the chance to participate in modern food markets. While for countries that are neither agricultural-based nor urbanised shifting to high-value agriculture accompanied by measures that enable people to exit the agricultural sector and measures of employment creation in rural areas could address the problem of rural poverty (World Bank 2007).

While most work in the field of poverty reduction centres on less and least developed countries in Africa and Asia, two recent studies (Alam *et al.* 2005, Macours and Swinnen 2008) focus on the specifics in transition economies. They stress the important role that agricultural development still have for poverty reduction in rural areas of transition countries since it is a major source of income and employment.

Despite the overall positive assessment of agricultural growth on poverty reduction in literature, it is economic growth outside agriculture that enhances wealth in most countries. But a highly skewed income distribution may hamper that poor people profit from economic or even agricultural growth (von Braun 2005). For Romania, World Bank (2003) found out that poorer people gained less than the wealthier ones from economic growth from 2000 to 2002.

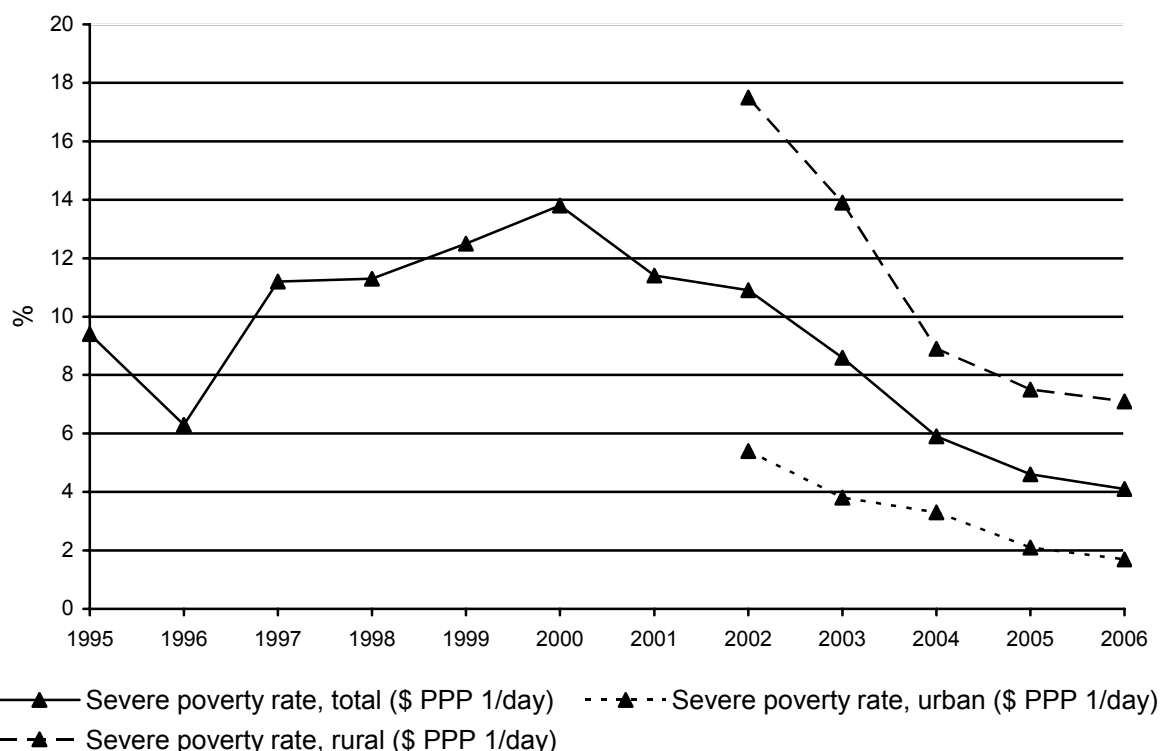
It will be one objective of this report to specify what Romania's current development level is and which role agriculture can play in poverty reduction and economic development.

3 POVERTY SITUATION IN ROMANIA

Literature discusses several indicators for measuring poverty. Absolute measures use a threshold of daily disposable money and allow comparing figures for different countries for longer time periods. Relative measures refer to countries' average incomes and show poverty in relation to country specific standard of living. Inequality indices like Gini coefficients show the dispersion of income among the population. Each indicator has its pros and cons (Petrovici and Gorton 2005), therefore representatives from all three groups are used to describe the phenomenon of poverty in Romania.

In September 2000 world's leaders agreed upon eight Millennium Development Goals (MDGs) to be achieved up to 2015. The first goal is to "eradicate extreme poverty and hunger". In 2003 the first Romanian MDGs Report substantiated this first goal for Romania to halve the severe poverty rate¹ by 2009 (Government of Romania 2003). Already in 2008, the United Nations Development Programme (UNDP) in Romania could indicate a reduction of the severe poverty in Romania for the last five years, from 10.5% in 2002 to 4.1% in 2006 (Figure 3.1).

Figure 3.1: Severe poverty rate in Romania



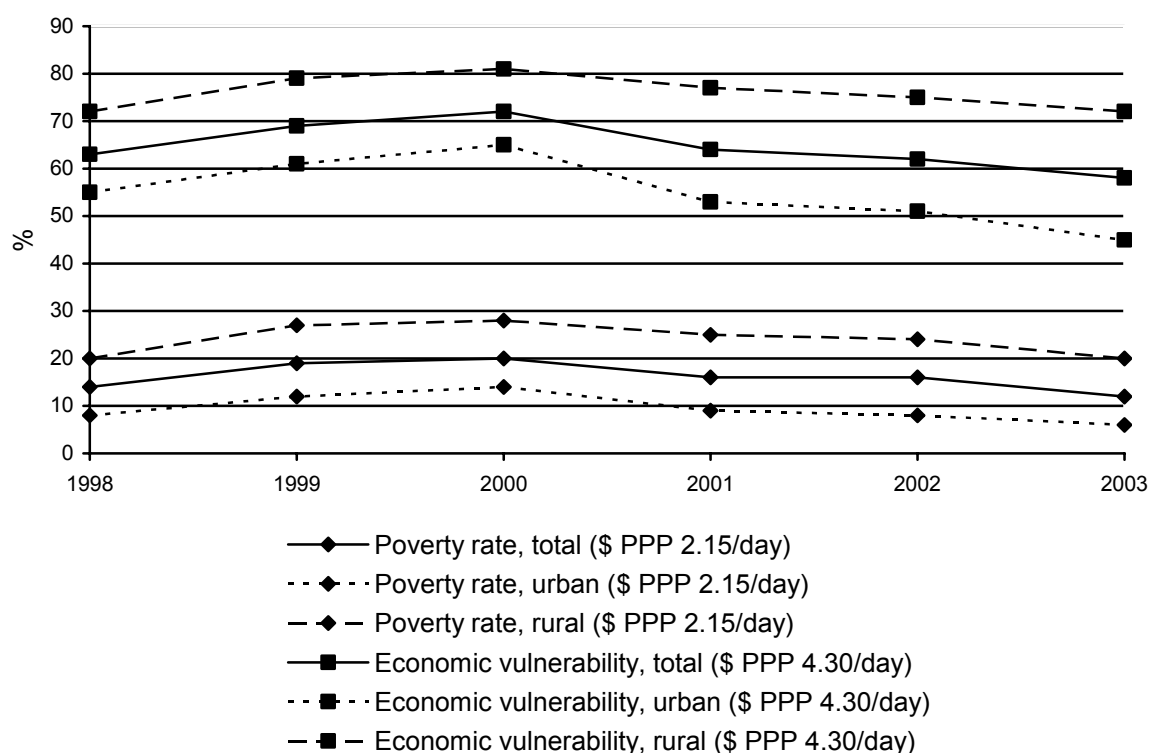
Source: UNDP Romania (2008)

¹ Severe poverty rate: proportion of population living from less than \$ PPP 1/day (UNDP 2008).

Although in the same period, the severe poverty also decreased in rural areas from 17.5% to 7.1% (Figure 3.1) the discrepancy between rural and urban regions still persists.

Alam *et al.* (2005) propose using an absolute poverty line of \$ PPP 2.15 per capita and day because this would better approximate basic needs in regions where climate requires expenditures for heating and warm clothing. In addition, a second line is drawn at \$ PPP 4.30 per capita and day to signify "economic vulnerability"². Both indicators show, that Romania made big progresses in poverty reduction during the last years (Figure 3.2) but the share of economic vulnerable people remains unsatisfactorily high and requires further action.

Figure 3.2: Poverty rate and economic vulnerability in Romania



Source: Alam *et al.* (2005)

The Gini coefficient is still low in Romania and increased only slightly from 0.27 in 1998 to 0.29 in 2003 (Alam *et al.* 2005). These low coefficients show that although there are only small income differences in Romania the gap between rich and poor becomes wider. This is

² According to Alam *et al.* (2005), people who are not absolutely poor but could become poor in cases of economic crises are "economic vulnerable".

also underpinned by the inequality of income distribution index³ that stood at 4.5 in 2000 and increased to 5.3 in 2006 (Eurostat 2008a).

The at-risk-of-poverty-rate⁴ has increased by 3% before social transfers (from 21% to 24%) and by 1% after social transfers (from 17% to 18%) as presented in Table 3.1. The situation is only marginally better for males than for females. When comparing the Romanian figures to that for the Euro area or to the EU-25 the Romanian situation appears rather comparable showing that relatively to the median disposable income of the basis region, i.e. EU-25, Euro area, and Romania, poverty situation is no worse in Romania than in EU-25 or the Euro area.

Table 3.1: At-risk-of-poverty rate (%)

	Before social transfers						After social transfers					
	Total		Male		Female		Total		Male		Female	
	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005	2000	2005
EU-25	23	26	22	25	24	27	16	16	15	15	17	17
Euro area	n.s.	24	n.s.	23	n.s.	26	n.s.	15	n.s.	14	n.s.	17
Romania	21	24	21	23	22	24	17	18	17	18	18	18

Source: Eurostat (2008b, p. 224)

These figures may be misleading because they neglect completely that Romanian conditions of living are still below EU standard. Therefore, total consumption expenditures are considered to scale these figures. Data from Table 3.2 confirms that the Romanian situation appears to be far from the European standard at the end of 2005.

Table 3.2: Total consumption expenditure of households

	As a proportion of GDP (%)			Per capita (PPS)		
	1995	2000	2005	1995	2000	2005
EU-27	56.8	57.6	57.0	8,300	10,900	12,700
Euro area	56.5	57.0	56.6	9,600	12,300	14,000
Romania	n.s.	69.1	68.5	n.s.	3,400	5,300

Source: Eurostat (2008b)

Moreover, the share of expenditures for food and non-alcoholic beverages in Romania in 2005 was with 44.2% very high and exceeded the average for the EU-27 (16.9%) remarkably (Eurostat 2008a).

Romania progressed significantly in poverty reduction in the last years. Questionable is whether this success could be attributed to agriculture. Unquestionable is that poverty is

³ "Inequality of income distribution: The ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile). Income is based on equivalised disposable income." (Eurostat 2008b, p. 534)

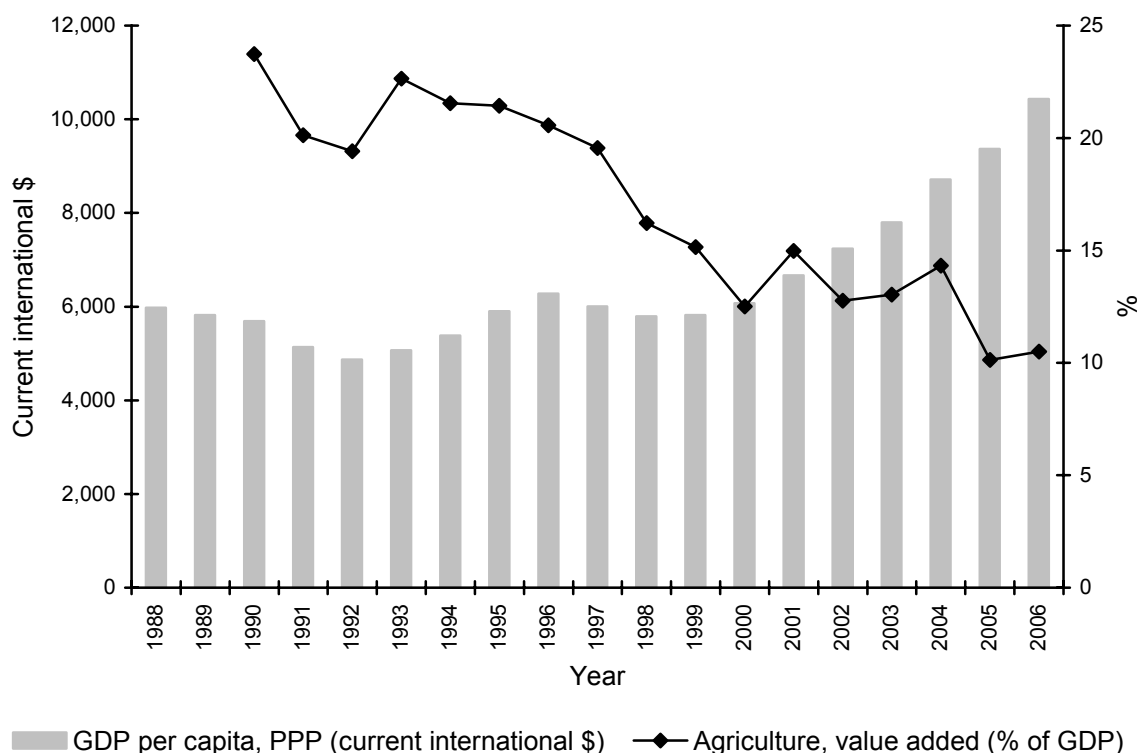
⁴ "The at-risk-of-poverty rate is defined as the share of persons with an equivalised income that is below the at-risk-of-poverty threshold, set at 60% of the national median disposable income. This rate may be expressed before or after social transfers, with the difference measuring the hypothetical impact of national social transfers in reducing poverty risk. Retirement and survivor's pensions are counted as income before transfers and not as social transfers." (Eurostat 2008b, p. 220)

still an issue for the Romanian society. Which role agriculture could play in reducing it further will be discussed in chapter 6.

4 ECONOMIC DEVELOPMENT IN ROMANIA AND THE ROLE OF THE AGRICULTURAL SECTOR

Romanian economy started its transition process from a quite low level of economic development (Figure 4.1). This may be a reason why it did not face such a sharp slump in economic activities like other transition countries. Nevertheless, the secondary sector and especially those industries that were oriented towards east European markets were severely affected by losing their input or product markets. Thus, significant labour force was released. During the first ten years of transition and more accentuated in the second third of this time, most governmental programmes concentrated on easing the social hardships of the restructuring. Released labour force was supported in professional re-orientation and development of entrepreneurial skills. Important resources were absorbed and consumed with no significant results since most of the unemployed faced long-term unemployment. Most of these people went back to their native home places, which were in most cases in rural areas. The already very low developed tertiary sector got very little public incentives and very low public support. During the first six years of economic transition, it was almost impractical to get credit given the high interest rates combined with the thin capitalisation of the economic activities.

Figure 4.1: Share of agriculture in GDP (%) and GDP/capita (PPP) in Romania



Source: WDI (2008)

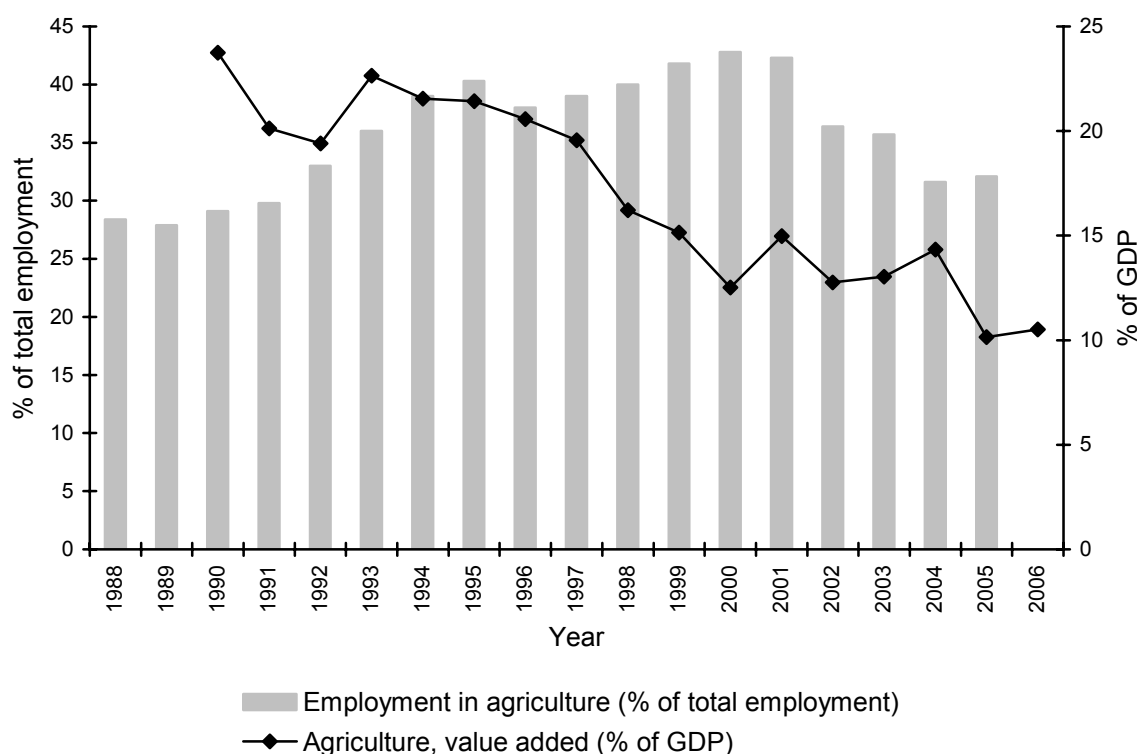
Agriculture followed the development of the overall economy with a breakdown in the beginning of the 90s, a recovering period in the mid of 90s, and a second slowdown in the end of the 90s. Existing agricultural cooperatives were smashed and important

infrastructure, like buildings and irrigation facilities went rack and ruin. Parallel the former state agricultural companies lacking investments went bankrupt and the privatisation process started far too late to save large former operations. The agricultural research facilities suffered from the land restitution with no protection as public investment and most of them were liquidated. The national input market for fertilisers, seeds and planting materials, and breeding animals decreased and imports did not compensate for this. The entire situation increased the pressure on agriculture causing a negative trade balance for agricultural products. The agricultural sector has been receiving labour force from the secondary sector on a background of very fragmented land property. This positive migration flow caused even further fragmentation as for many families farming, regardless the size and technology employed, was the only available economic activity. Thus, a dominant subsistence and semi-subsistence sector emerged. The slow land restitution process, the legislative environment, the low access to credit, and the only punctual political support basically in terms of input subsidies and production premiums did not only block a farm consolidation process but favoured the persistence of small and non-market oriented farm holdings. In 2000 Romanian agriculture had its worst year with US\$ 4,103 million value added.

Foreign direct investments were rare and unimportant during the first ten years of transition. Beginning with the year 2000, when most economic activities and most land were privatised, a more relaxed policy towards foreign direct investments, a relative stabilisation of the national currency, and subsequently a more attractive financial market yielded the expected results and economic growth was more than a statistical figure. Since then, Romanian economy has progressed fast but nevertheless it reached in 2006 only 38% of EU-27 GDP/capita (own calculation with data from WDI 2008). Romanian agriculture followed this positive development trend and produced US\$ 10,917 million value added in 2006 (WDI 2008).

The importance of the agricultural sector declined the more the overall economy grew (Figure 4.1). According to Figure 2.1 this is concordant with expected development patterns. But comparing the importance of agriculture for employment (Figure 4.2) with expectations from Figure 2.2 it becomes obvious that Romanian agriculture employs significantly more labour than its economic development suggests. Even when keeping in mind that the share of agriculture in employment decreases slower than the share of agriculture in GDP when an economy starts to grow (Anriquez and Stamoulis 2007), the ratio between the shares of agriculture in total employment and in GDP was with 3.2 in 2005 still very high. This high percentage of labour force that resists in agriculture indicates that agriculture served and still serves as a social buffer.

Figure 4.2: Share of agriculture in total employment and GDP (%) in Romania



Source: WDI (2008)

Data show that economic development and poverty reduction are strongly correlated in Romania. However, agriculture and overall economy show the same development pattern and it seems difficult to attribute the success in poverty reduction to one of the both. Here, a deeper insight into Romanian agricultural sector may help answering the question whether it could be a driving force for poverty reduction and development.

5 STRUCTURE OF ROMANIAN AGRICULTURE AND ITS POSITION IN RURAL ECONOMY

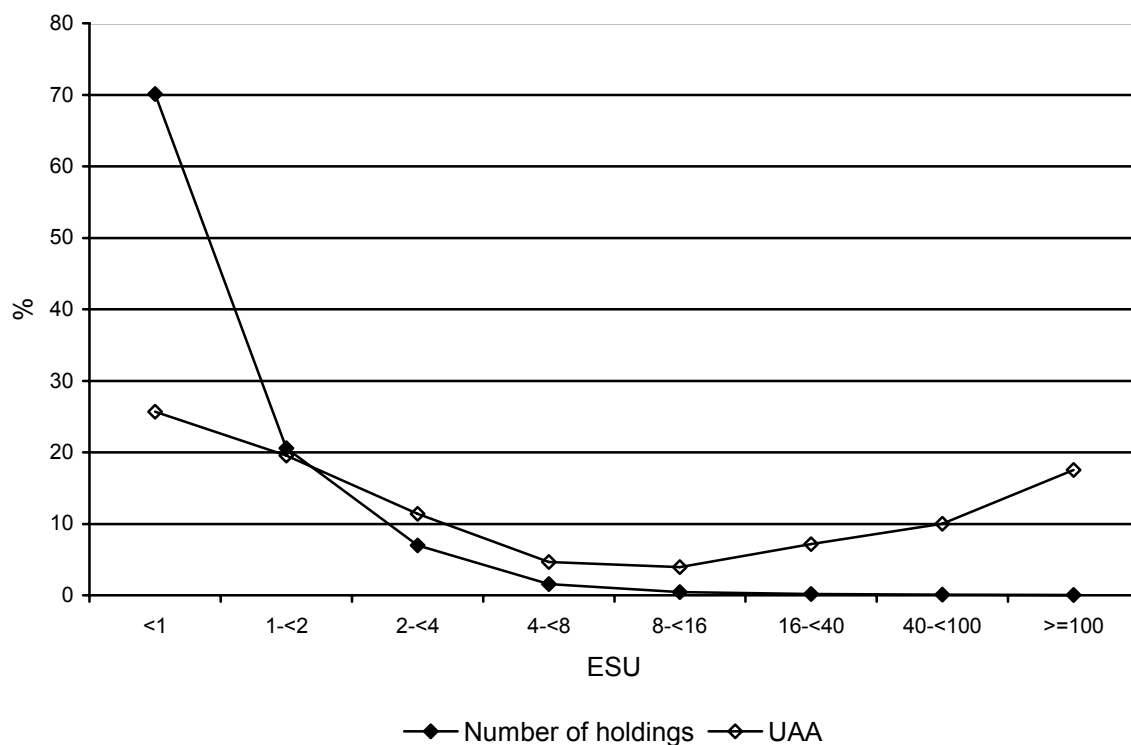
At the beginning of transition, Romanian agriculture was dominated by large-scale corporate farms. The land reform that was carried out after World War II restricted the amount of privately used land to 5 ha per family (DG Agri 2002)⁵ whereby destroying the social group of private farmers. After the breakdown of the socialist regime, land restitution took place but was characterised by a number of political shortcomings. The legislative framework of land restitution over a fifteen years period comprises a number of laws. The first, Law 18/1991, stipulated that each former owner can reclaim its land property up to the limit of 10 ha. It was the first step of fragmentation especially for former properties which were hardly consolidated over the first half of the 20th century. Land restitution took place on an archaic model, splitting the property between the legally entitled successors. The same law defined that the co-owners, the neighbours, and the state have to be consulted prior to any sale of land property. A State Domain Agency should administrate the processes but it was founded years later thus delaying the emergence of a liberalised functioning land market. The Law 169/1997 completed and amended the land restitution process and the Law 1/2000 lifted the upper limit allowing restitutions up to 50 ha. This caused further problems in the restitution process as the local administration in charge faced severe legal, technical, and administrative difficulties. In fact, the new law practically restarted the land restitution process. Only the Law 247/2005 re-established full owner rights over the land property, including agricultural land and forestry properties.

This half-hearted and still incomplete process caused that in 2005 the agricultural sector was characterised by a dual structure with numerous smallest-scaled farms that own only a small share of land on the one side and few large-scale farms that have nearly one fifth of the utilised agricultural area (UAA⁶) available (Figure 5.1) on the other side.

⁵ In fact, only 0.15 ha were left for private use.

⁶ Utilised agricultural area (UAA): Utilised agricultural area (UAA) is the area utilised for farming, i.e. categories: arable land, permanent pasture, permanent crops and kitchen gardens (Eurostat 2008b, p. 524).

Figure 5.1: Percentages of number of agricultural holdings and utilised agricultural area (UAA) in farm size categories (ESU7) in Romania in 2005



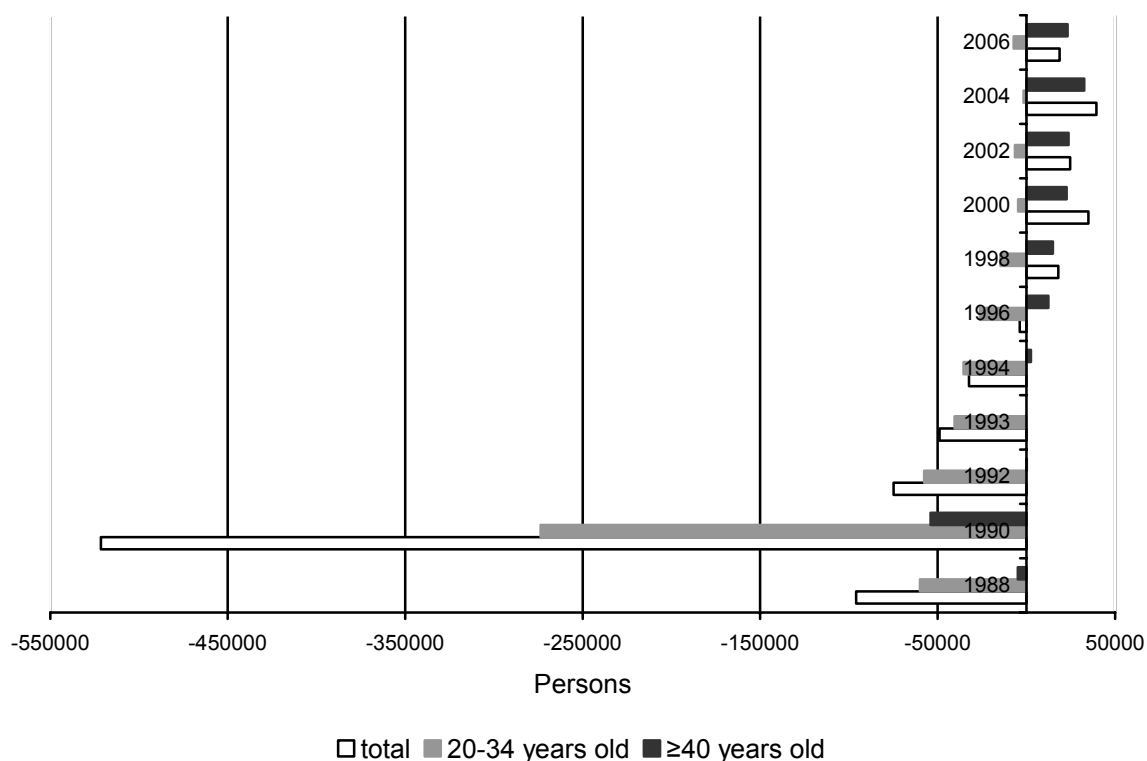
Source: Own calculation with data from Eurostat (2008c)

In absolute figures, 3 millions farms are smaller than 1 ha and 1,940 farms are larger than 100 ha (Eurostat 2008c).⁸ These figures give a vivid picture of an agriculture that is dominated by subsistence and semi-subsistence farm households. These households are not considered to be drivers in economic development but to be safety nets in times of economic crises and in pensions age. This is also underpinned from migration statistics that show that younger people leave rural areas whereas older people go back.

⁷ European size unit (ESU): ESU is a measure for economic size of farms in the EU. One ESU equals 1,200 Euro standard gross margins (FADN 2008, p. 5).

⁸ Statistically, any person owing land is considered a farmer in Romania. Thus, over 4 million people are counted as farmers while it can be estimated that less than half were doing agricultural work and the others possessing the land only, being too old or living too far away to cultivate it.

Figure 5.2: Net migration to rural areas in Romania 1988-2006



Note: Net migration=number of persons migrating to rural areas - number of persons leaving rural areas

Sources: NIS (1994), NIS (1997), NIS (2001), NIS (2007)

Total net migration to rural areas was negative up to 1996; since then it has been positive. For people older than 40 years old a positive net migration to rural areas started already in 1992 and still goes on while younger people from 20 to 34 years old continue to leave rural areas (Figure 5.2). This unusual migration scheme is explained by the collapse of industry that ignited the migration flow from urban to rural areas. The immigrants can be split in the two major categories: active population and pensioners. Pensioners receive only small pensions. Thus, when they have relatives or properties in rural areas, they are attracted by the lower living costs and the opportunity to produce own food to return to rural areas. In the case of the active population, urban unemployment and the incapacity to pay for rent and public services in urban areas fosters immigration to rural areas. Although economic options in rural areas are limited, they may still provide sufficiently for their families. The young and well educated people prefer to emigrate due to poor infrastructure and services and limited career opportunities in rural areas.

Notwithstanding the decreasing importance of agriculture in the national economy (chapter 4), it nevertheless remains a major economic activity in many rural regions with increasing importance the less economically diversified a region is. Representative for the different development situations in Romania, three regions were selected within the SCARLED project. Dolj County is less developed and had in 2005 only 76% of Romanian per capita GDP. Bihor County stands for an average development level having 102% of national

GDP/capita while Timis County represents the developed regions with 138% of national GDP/capita (Eurostat 2008d). In Dolj County agriculture contributed in 2005 with 13% to gross value added (GVA) but accounted for 49% of employment. In Timis County, the share of agriculture in GVA was 9% and in employment 21%. Bihor Country ranges between these two extremes having a share of agriculture of 11% in GVA and 30% in employment (own calculation with data from Eurostat 2008e).

Most of the agricultural work is done by family labour (Figure 5.3). In 2005, only 9% of the labour force measured in AWU⁹ was non-family labour. The small-scale farms up to 5 ha accounted in the same year for four fifths of total agricultural labour force and three quarters of family labour force. Considering the number of employed people, the picture becomes even more pronounced. From 8.5 millions people employed in Romanian agriculture in 2005, 7.6 millions worked in farms smaller than 5 ha from which only 16,000 people were non-family labour force. The high ratio of employed people in relation to AWU of 3.3 for the whole Romanian agriculture and of 3.6 for farms smaller than 5 ha indicates that agriculture employs many people for social and not for economic reasons thus absorbing labour force that became abundant in the industrial and service sectors during transition. Nevertheless, time series show that labour input has been declining since 2000. In total, 3.6 millions AWU were employed in agriculture in 2000 of which 3.4 millions were non-salaried. Within seven years, these figures were reduced to 2.2 millions AWU in total of which 2 millions were non-salaried (NIS 2009). When this is more than a statistical effect, it would show that with economic growth people leaves the agricultural sector. Whether this indicates a consolidation of the agricultural sector remains questionable.

For landless or underemployed people seeking an additional income, the large-scale holdings are important. Nearly 49,000 persons of non-family labour force were employed in farms larger than 100 ha in 2005. The ratio of employed persons in relation to AWU was 0.9 indicating that large scale farms do not employ labour for social reasons (own calculations with data from Eurostat 2008f).

⁹ Annual work unit (AWU): "One annual work unit corresponds to the work performed by one person who is occupied on an agricultural holding on a full-time basis. Full-time means the minimum hours required by the national provisions governing contracts of employment. If these do not indicate the number of hours, then 1,800 hours are taken to be the minimum (225 working days of eight hours each)." (Eurostat 2008b, p. 524) In Romania 1 AWU equals 1,960 hours (245 working days of eight hours each, NIS 2009).

Figure 5.3: Annual work units (AWU) by size of farms (UAA) in Romania in 2005



Source: Own calculation with data from Eurostat (2008f)

The age structure of Romanian agriculture points on two issues. First, it shows that most of UAA (54.6%) is operated by farm holders older than 54 years and 31% by persons older than 65 years old while only 17.2% of UAA is managed by persons up to 44 years old (Eurostat 2008f). Thus, innovation in promising technologies and farm enlargements are hardly to be expected and a change of generations seems overdue. Second, it also indicates that elderly people, after getting retired or losing their employment start agricultural work. Since it can be assumed that they do not embark in such a hard work like agriculture without necessity, it can be concluded that there are social reasons for this phenomenon. Most pensioners have small pensions or even no pensions at all but they have a small agricultural property which could provide significantly for their subsistence needs. The property over that land seems to work as insurance for them. The employment structure supports this conclusion. While for non-agricultural occupations the share of employed persons decreases sharply for people older than 54 years, it remains high for agricultural activities (Table 5.1). Again, an impact of regional wealth can be observed. In wealthier regions like the West region including the comparable rich Timis County, the share of employment in agriculture decreases more for elderly people. Whereas, in the South-West Oltenia region including the poor Dolj County, the share of employment in agriculture increases for people older than 54 years. The average wealthy North-West region with Bihor County remains between these two extremes.

Table 5.1: Employment structure (% of employed persons) by selected occupation and age group in 2006

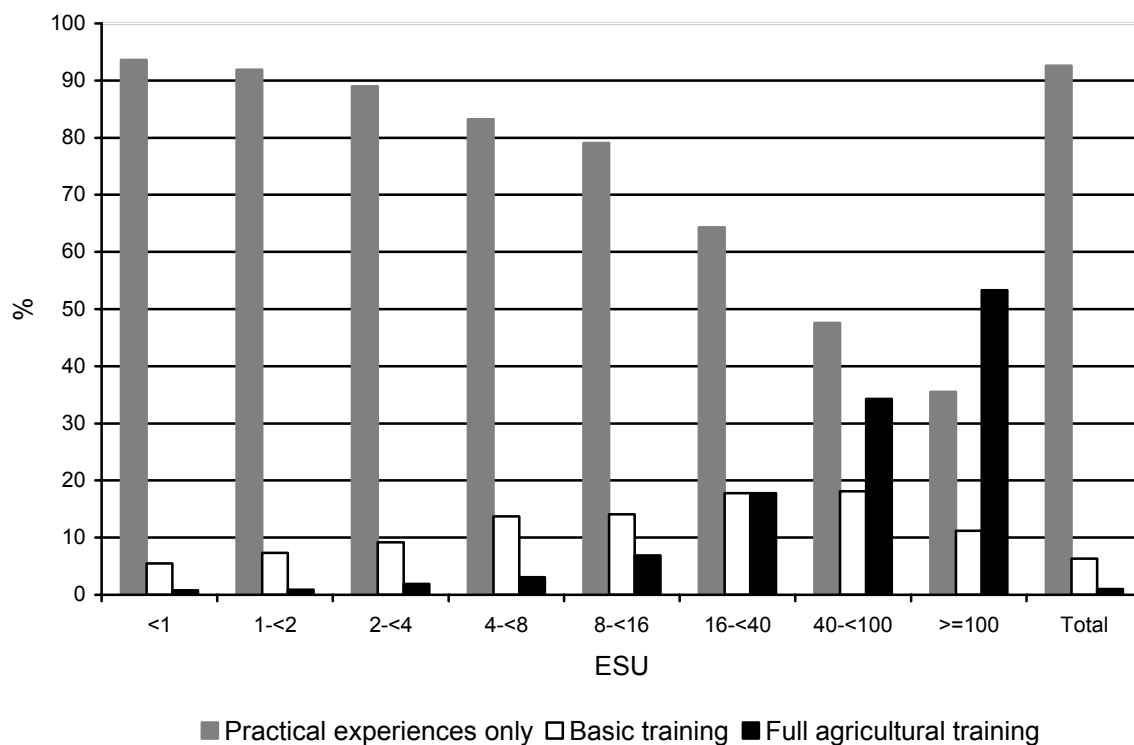
	15-24 years	25-34 years	35-44 years	45-54 years	55-64 years	Older than 64 years
Romania						
Total	8.6	27.3	26.0	23.1	10.2	4.9
of which:						
Agriculture, hunting, and forestry	3.1	6.1	5.5	5.6	5.6	4.7
Industry	2.0	6.6	7.9	6.8	1.2	0.0
Other	3.6	14.6	12.6	10.7	3.3	0.2
South-West Oltenia including Dolj County						
Total	7.0	24.5	24.6	22.2	13.0	8.7
of which:						
Agriculture, hunting, and forestry	4.4	8.8	7.5	7.8	9.3	8.5
Industry	0.7	4.8	7.2	6.1	1.3	0.0
Other	1.9	10.9	10.0	8.4	2.4	0.2
North-West including Bihor County						
Total	8.7	27.6	26.5	23.1	9.7	4.4
of which:						
Agriculture, hunting, and forestry	2.7	5.5	5.1	6.0	5.8	4.3
Industry	2.5	7.6	8.9	6.9	1.3	0.0
Other	3.5	14.5	12.5	10.3	2.6	0.1
West including Timis County						
Total	8.4	27.8	27.9	25.0	9.0	1.9
of which:						
Agriculture, hunting, and forestry	1.8	3.3	3.5	4.5	3.9	1.8
Industry	3.2	10.2	10.8	8.7	0.3	0.0
Other	3.4	14.4	13.6	11.9	4.8	0.1

Source: NIS (2007, p. 188-195)

More than 90% of farms are managed by people without any formal agricultural training (Figure 5.4). Even relatively large farms, i.e. farms of size 8 to 16 ESU (9,600 to 19,200 Euro standard gross margin) are headed to 80% from managers with only practical experiences in farming but no formal agricultural training. Only one percent of farm managers, i.e. 44,500 persons, attended full agricultural training¹⁰.

¹⁰ Full agricultural training is any training course continuing for the equivalent of at least two years full-time training. A completed agricultural apprenticeship is regarded as basic training (Council Regulation (EC) 1444/2002).

Figure 5.4: Agricultural training of farm managers (% of holdings) in farm size categories (ESU) in Romania in 2005



Source: Own calculation with data from Eurostat (2009)

6 AGRICULTURE'S ROLE IN FIGHTING RURAL POVERTY AND IN DRIVING ECONOMIC DEVELOPMENT

Agriculture was and still is important for poverty reduction not only for rural but also for urban population. The poorer a household is the more important the income from agriculture becomes. Since the majority of farms are subsistent or semi-subsistent, it is not primarily the money income that contributes most to household income but the in-kind income from agriculture, i.e. the opportunity to cover family's food demand from own production. Thus, more than half of the household income for the poorest families is in-kind income from agriculture while it is less than 5% for the richest households (Table 6.1).

Table 6.1: Composition of household income (%) by deciles in Romania in 2006

	Decile 1	Decile 2	...	Decile 9	Decile 10
Money income	44.5	58.9	...	88.8	92.1
of which:					
Salaries	3.8	14.3	...	67.1	71.1
Agricultural income	9.2	7.9	...	1.6	3.2
Income from social provisions	25.0	27.6	...	14.0	6.9
Equivalent value of consumption of agricultural products from own resources	54.3	39.6	...	7.1	4.1

Source: NIS (2007, p. 238-239)

Interregional migration is still positive for rural areas. Mainly elderly and unemployed people go back to rural regions and start agricultural work. Table 6.2 shows that in-kind agricultural income is important for pensioners and unemployed people and that the importance of agricultural income increases when the region is less developed. However, trends show that the importance of agricultural income is declining for non-farmers households (NIS 2007, p. 236-237).

Table 6.2: Composition of household income (%) by main household categories in Romania and selected regions in 2006

	Employees	Farmers	Unemployed	Pensioners
Romania				
Money income	88.0	56.0	79.3	74.5
of which:				
Gross salaries and other salary rights	78.4	7.2	28.8	20.6
Agricultural income	0.6	27.3	2.6	3.4
Equivalent value of consumption of agricultural products from own resources	8.3	42.8	17.4	21.9
South-West Oltenia including Dolj County				
Money income	89.5	54.6	73.7	69.7
of which:				
Gross salaries and other salary rights	81.0	4.4	22.8	18.8
Agricultural income	0.3	28.0	4.3	5.6
Equivalent value of consumption of agricultural products from own resources	8.7	44.2	23.8	28.7
North-West including Bihor County				
Money income	85.8	58.0	69.7	74.0
of which:				
Gross salaries and other salary rights	76.5	7.1	33.5	23.3
Agricultural income	0.6	27.9	5.9	3.3
Equivalent value of consumption of agricultural products from own resources	10.3	41.1	26.4	23.0
West including Timis County				
Money income	85.4	63.1	75.3	75.8
of which:				
Gross salaries and other salary rights	75.8	8.1	32.1	22.3
Agricultural income	0.9	39.1	0.9	2.6
Equivalent value of consumption of agricultural products from own resources	8.8	35.8	19.5	21.2

Source: NIS (2007, p. 266-271)

Both tables show a vivid picture of the safety net function that Romanian agriculture plays for many millions people. This and experiences from chapter 5 supports the analysis done in the Romanian National Rural Development Programme (NRDP 2008) that "Many [...] rural communities make a small contribution to economic growth but preserve the social fabric and the traditional way of life." (p. 10).

Whereas agriculture is important for poverty reduction, no evidence could be found that agriculture was a driving force for Romania's economic development in the last years. This is not necessarily bad because according to World Bank (2007), Romania belongs to the

group of countries for which agriculture is no longer expected to be a driving force for economic development (p. 4) and "addressing income disparities ... requires a comprehensive approach that pursues multiple pathways out of poverty—shifting to highvalue agriculture, decentralizing nonfarm economic activity to rural areas, and providing assistance to help move people out of agriculture."(p. 2). In the current state, the unfavourable farm and age structure in Romanian agriculture prevents innovation and farm enlargements for most households. Few alternative income sources in rural areas and pensions that do not cover daily living expenditures prevent that people exit agriculture. Nevertheless, it is expected by NRDP (2008) that important structural changes will occur in rural economy given that "Major development opportunities can arise from restructuring the agriculture and from revitalizing the rural economy [...] The restructuring of agriculture will have a tremendous impact on the wider rural economy, as farming continues to be the most important activity in rural areas, and an essential source of income for rural households." (p. 10). Despite this optimistic statement it should be kept in mind that as long as the majority of farms are safety nets, they cannot be the drivers for this development and the question remains: Who could do it?

Commercial private farmers¹¹ and large-scale corporate farms are the two other groups of agricultural producers. Two thousand holdings are larger than 100 ESU and operate nearly one fifth of UAA (Eurostat 2008c, Figure 5.1). These holdings could play an important role in the agricultural sector as suppliers of high value inputs for a competitive agri-food industry. They are already integrated in internationalised food-chains and are able to undertake large-scale modernisations. Since they do not employ more labour force than necessary for running the business, they do not contribute remarkably to employment in rural areas but increase competition pressure for upcoming commercial private farmers in the same region. Like in most Central and Eastern European transition countries, this latter group is undersized with only 28,000 holdings operating one fifth of UAA (Eurostat 2008c, Figure 5.1). Nevertheless, it could be the backbone of rural economy given the opportunity to grow and modernise. They produce a wide range of varieties supplying local and regional markets as well as niche markets for specialities and fancy food. It can be expected that competition from the corporate farms will less affect them as a group due to the small number of corporate farms but competition within the group of upcoming private farmers will be hard for credit, land, and product markets. Whether under these conditions a prospering group of private farmers can be brought back to life remains open.

¹¹ The distinction of subsistent and semi-subsistent farms, commercial private farms, and corporate farms is arbitrary and country specific. In this report farms up to 8 ESU are considered to be subsistent and semi-subsistent following the definition in NRDP (2008). Holdings larger than 100 ESU are called corporate farms. Farm between 8 and 100 ESU are termed commercial private farms.

7 CONCLUSIONS

Topical literature sees a major role for agriculture in poverty reduction by providing food and cash income whereas it can only for very poor countries be a driving force for economic development. Economic indicators confirm that Romania does not belong to the very poor countries although poverty has been an issue. During the last years, Romania progressed successfully in reducing poverty. On the one side, this can be attributed to the positive overall economic development. On the other side, agriculture served as a social safety net for many millions people. Now, the agricultural sector is dominated by subsistent and semi-subsistent farm households headed by persons in pension's age without formal agricultural training. This calls for structural changes since no innovation or initiatives for farm enlargements can be expected from these farm households. Thus, it would foster necessary restructuring in the agricultural sector when small-scale farmers would abandon farming activities and offer their land to those farmers that are willing to modernise and to grow. Unfortunately, this is only a theoretically realistic option. The pensions' level is so low that agricultural activity on any scale is not an option but a must for most of them which keeps them trapped in the sector. This situation is not expected to change rapidly. Thus, small-scale farming is likely to persist as an instrument for poverty reduction in rural areas.

The few large-scale corporate farms are integrated in food-chains but do not contribute remarkably to employment in rural areas and will not be the backbone of rural economy due to their small number. The upcoming group of commercial private farmers is still undersized in Romania. They will face hard competition from their fellows for credit, land, and market access. Producing a wide range of varieties supplying local and regional markets as well as niche markets for specialities and fancy food they could support economic development in rural areas. But large-scale corporate farms and commercial private farmers comprise for only 40% of Romanian UAA, thus although agriculture has been contributing to poverty reduction, there are good reasons to believe that future economic development will rather come from outside the agricultural sector while agriculture will continue to play the role of a social safety net.

Strengthening the Romanian agricultural sector calls for concerted policy actions that are finely targeted for different groups. Fostering the restitution of land to former owner families, developing a functioning land sales and rental market, and providing access to agricultural product markets could promote the resurgence of a highly productive group of commercial private farmers. Non-farm job creation in rural areas could provide income opportunities for abundant agricultural labour force. Both, new farmers and potential non-farm employees seem to need profession specific advice and training to become competitive in their transition environment. The large group of pensioners could be convinced to exit the agricultural sector if they could rely on an income from social provisions that covers their daily needs.

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