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INSTITUTE OF AGRICULTURAL
AND FOOD ECONOMICS
NATIONAL RESEARCH INSTITUTE

The Structural Changes in the Rural Areas and Agriculture in the Selected European Countries

no 128.1
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MULTI-ANNUAL PROGRAMME
2005-2009

THE ECONOMIC AND SOCIAL CONDITIONS OF THE DEVELOPMENT OF THE POLISH FOOD ECONOMY FOLLOWING POLAND`S ACCESSION TO THE EUROPEAN UNION

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The study was part of the fallowing research projects:

Impact of EU Structural Funds upon the development of rural regions in the initial years of EU membership. A general concept of development support for the period 2007-2013, using Structural and Cohesion Fund resources
in the task: *Analysis of implementation progress and impact of the Rural Development Programme (PROW) and Sector-Specific Operating Programme (SOP)*

The position of Polish agriculture on the global food market
in the task: *The impact of globalisation processes upon agricultural and rural development in Poland*

Regional differentiation of agricultural development and its impact upon economic and social problems of rural areas
in the tasks:
Factors behind marginalisation and competitiveness in the social and economic structure of Polish rural areas after EU accession;
The scope and consequences of differentiation of farm functions in regional perspective;
The role of non-farming activities in shaping new structures in rural areas,
Institutional factors of social and economic development of rural areas;
Highly commercialised farms in peasant farming;
"Arable land market" analysis

The aim of the publication is the presentation of papers concerning spatial difference in the level of socio-economic development of the rural areas and dissimilarities of the agricultural structures in selected European countries. In the analyses the regional of CAP support program utilisation as well as the achievements of agrarian and social policy for rural areas and agriculture were included..

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Common Agricultural Policy and the regional diversification of Polish farming

Introduction

The integration with the European Union and the inclusion of the Polish farming into the Common Agricultural Policy were the next phase of change in rural areas and in Polish farming, which started with the transformation process of socioeconomic system and the adjustment to requirements of the European and global market. The economic transformation in Central and Eastern European countries, including Poland, was characterised by its dynamic pace and wide scale of actions.

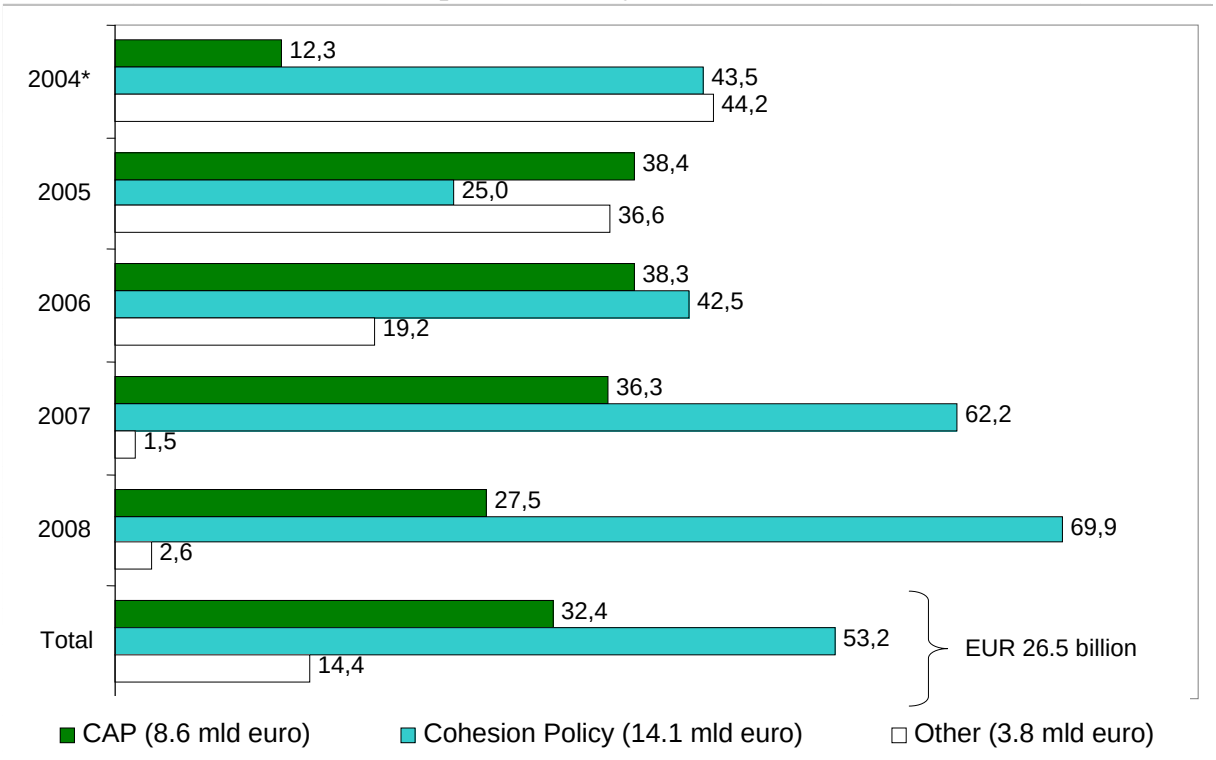
The first years of Poland's membership in the European Union coincided with the period of a boom in world economy which caused the economic growth rate of Poland to accelerate. It was caused mainly by an increased national demand whose increase resulted mostly from a rapid growth of outlays for fixed assets and the investment growth rate which stayed at a desirable level from the perspective of development requirements of the Polish economy. High dynamics of economic development was also the result of consumption (especially individual) which reflected optimistic expectations for creating prosperous economy in the future both among consumers and a group of entrepreneurs. However, the basic factors making rapid growth of national demand possible were: the situation on the labour market which had been getting better for a long time and increasing earnings, as well as the inflow of funds from the European Union[1].

Although general improvement of macroeconomic conditions and the rate of economic growth did not become clearly noticeable until 2006, you could see distinct symptoms of upsurge in the period preceding the EU accession. They concerned mostly investment processes, but were also manifested in individual socioeconomic structures whose adjustment to the requirements of growing competition was getting better and better. The symptoms of economic upsurge

[1] On the basis of quarterly macroeconomic forecasts of the Gdansk Institute for Market Economics available at www.ibngr.pl.

was noted already in 2003 when the growth of domestic product amounted to almost 4% and then doubled in the first month of 2004. The slowdown of growth in the second half of 2004 which was caused by an inflation impulse resulted in the reduction of real wage, pension and personal income increases, and later of the demand for domestic consumption and retail. Following the slowdown period, since 2006 there has been another serious acceleration of economic growth whose scale can be illustrated by the GDP growth of 6% a year, and the growth of personal income by about 5% a year. The scale of transformation in the Polish economy in the first years following the accession is reflected in the fact that a five-year period 2003-2008 marked the growth of GDP by 35%, investment demand by 76%, and individual consumption by 26%, including real wages by 25%[2].

Fig. 1. The structure of transfers from the EU budget to Poland in the period 1 May 2004-31 December 2008



** after 1 May 2004*

Source: based on the Office of the Committee for European Integration, 5 lat Polski w Unii Europejskiej (Poland's 5 years of in the EU), Warszawa 2009, p. 215.

As it was mentioned before, transfers from the EU budget provided an important incentive for Poland's economic growth after 1 May 2004. The analy-

[2] *Stan polskiej gospodarki żywnościowej po przystąpieniu do Unii Europejskiej Raport 5 (The condition of the Polish food economy after the EU accession. Report 5),* R Urban (ed.), Raport PW No 109, IAFE-NRI, Warsaw 2008, p. 9-11.

sis of the value of transfers between the Community and Poland makes it relatively easy to show general effects of the EU accession. The EU transfers from the accession to the end of 2008 amounted to EUR 26.5 billion, whereas Poland paid EUR 12.5 billion to the EU budget. The balance of transfers with the EU after 5-year membership is positive and amounts to EUR 14 billion[3]. The transfers under the CAP amounted to EUR 8.5 billion[4] which was 32% of the total amount. Moreover, EUR 0.5 billion was earmarked for the development of farming after 2004 under the SAPARD programme (Fig. 1 includes this amount in category 'Other'). The funds from the CAP have the second greatest share, after those from the Cohesion Fund, in the category of inflows from the EU budget to Poland in the period 2004-2008.

The reforms during transformation, stable monetary policy and economic policy with the use of the EU funds created stable foundation for the development of the Polish economy. It can be proven by analyses published cyclically in the report *European Growth and Jobs Monitor* in which the Polish economy was recognised as one of the most competitive economies of the EU Member States in 2008[5]. The analytics also stress that a relatively stable economic growth places Poland among the few Community members that can avoid a significant GDP drop in 2009 (resultant from the world crisis).

The generally observed beneficial changes in the Polish economy after the EU accession do not fall evenly between particular regions of the country. It concerns mostly rural areas and agriculture and results largely from past problems with diversifying socioeconomic structures.

The political transformation and related changes in economic system caused the consolidation of a historical spatial diversification in the development of rural areas and agriculture. Agricultural adaptation to market economy caused many economic problems and, as a consequence, the increase of adverse social phenomena (the spread of overt and covert unemployment, the restriction of market activity of farms). The EU integration process, especially the CAP programmes and the large financial inflows gave the opportunity to accelerate structural changes and develop rural areas more dynamically. The initiated transformation projects were supposed to adjust Polish

[3] The real balance of inflows in PLN may differ due to different conversion rates each year. Office of the Committee for European Integration, *5 lat Polski w Unii Europejskiej* (Poland's 5 years of in the EU), Warsaw 2009, p. 226.

[4] The funds under RDP 2004-2006 and 2007- 2013 constituted over a half of that amount.

[5] Poland was announced the most competitive economy of the European Union twice in a row, together with Finland. *The 2009 European Growth and Jobs Monitor: Indicators of Success in the Knowledge Economy*, Allianz Economic Research & Development, Frankfurt/Main 2009, p. 35.

farming to the European model specified in the European law[6]. Nevertheless, the modernisation of agricultural structures caused the deepening of polarisation effect of the agricultural structure and diversification of economic position of people involved in farms.

On one hand, the conditions for a systemic change and the adjustment period for the EU integration affected positively a number of farms and people involved in them. That situation most often applied to large specialised holdings run by farmers with professional knowledge. On the other hand, the marginalisation of small holdings, with low production scale, went on. The difficulties in adapting to new conditions resulted from long-term underfinancing of rural areas and farming, deep structural backwardness (rural overpopulation, inadequate infrastructural development), lack of investment and relatively low level of social capital in rural areas. Survival strategies prevailed in farms which caused their economic decline, the increase of unemployment and the intensification of social inclusion. The percentage of people living under subsistence level in 2004 was twice as high as in cities and amounted to 18%[7]. The EU integration facilitated non-agricultural job seeking for many rural inhabitants and was the impulse for growth of spatial mobility (economic migration).

The regional diversification of development level is a permanent characteristic of rural and agricultural structures in Poland. The currently observed spatial differences in the economic condition of rural areas and farming are based on geographic and natural factors, as well as socioeconomic, historical and cultural factors. These issues have been the subject of research carried out in the Department of Social and Regional Policy. The phenomena in rural areas are analysed on the basis of research on about 8,000 family agricultural holdings in 76 villages located in the entire country. The selection of villages for the research is intentional and proportional due to socioeconomic characteristics of rural inhabitants and agricultural holdings in the country and within the borders of macroregions. The similarity in the characteristics of private holding (farms) sector, which is prevalent in Polish agriculture, became the basic criterion for isolating particular voivodeship

[6] R. Grochowska, *Celowość zachowania płatności bezpośrednich w ramach Wspólnej Polityki Rolnej Unii Europejskiej (The usefulness of keeping direct payments under the CAP of the EU)*, S. Gburczyk [ed.], *Wpływ Wspólnej Polityki Rolnej na rynki rolno-spożywcze (The influence of the CAP on agri-food markets)*, Program Wieloletni, Report No 84, IAFE-NRI, Warsaw 2007, p. 74.

[7] E. Tarkowska, *Ubóstwo i wykluczenie społeczne. Koncepcje i polskie problemy (Poverty and social exclusion. Concepts and Polish problems)*, in: J. Wasilewski (ed.) *Współczesne społeczeństwo polskie. Dynamika zmian (The contemporary Polish society. Dynamics of changes)*, Wydawnictwo Naukowe Scholar, Warsaw, p. 350.

groups. The subject of research is mostly area structure, but also other characteristics of agriculture, such as human resources or sources of income[8]. As a result, five macroregions were isolated for the needs for the analysis of spatial changes in socioeconomic position of farms: central-western, central-eastern, south-eastern, south-western and northern (Fig. 2).

Fig. 2. The position of villages covered in the research in regional division with regard to the size of individual farms

The fat line corresponds to boundaries of isolated macroregions which group the following voivodeships:

I	Central-western	– Kujawsko-Pomorskie and Wielkopolskie;
II	Central-eastern	– Łódzkie, Mazowieckie, Lubelskie and Podlaskie;
III	South-eastern	– Świętokrzyskie, Małopolskie, Podkarpackie and Śląskie;
IV	South-western	– Opolskie, Lubuskie and Dolnośląskie;
V	Northern	– Zachodniopomorskie, Pomorskie and Warmińsko-Mazurskie.

The permanent sample and cyclical nature of research make it possible to analyse data about changes occurring in these villages in comparison with the

[8] A. Sikorska, *Zmiany strukturalne na wsi i w rolnictwie w latach 1996-2000 a wielofunkcyjny rozwój obszarów wiejskich (Structural changes in rural areas and agriculture in 1996-2000 and the multifunctional development of rural areas)*, IAFE-NRI, Warsaw 2001, p. 9. and: A. Szemberg, *Społeczno-ekonomiczne regiony rolnictwa i obszarów wiejskich (Socioeconomic regions of agriculture and rural areas)*, Komunikaty, Raporty, Ekspertyzy, vol. 453, Warsaw 1999, p. 5.

results of previous surveys[9]; it makes it possible to evaluate the rate and direction of changes from the perspective of economic and social development of rural areas in different parts of the country.

1. The description of rural macroregions and farming in Poland

The isolated macroregions, which group voivodeships with a similar level of socioeconomic development, make it possible to grasp spatial differences resulting from historical conditions of forming the macrostructure of particular areas in the country. That division reflects very well the accumulated traditions, cultural and social scene, differences in infrastructural development, urbanisation intensity, as well as rural structure and other features of agriculture which lay foundations for benefits and problems of today's regions[10].

The characteristics of Poland's macroregions, considering agriculture-specific features in voivodeships of the isolated areas, was made on the basis of collected materials portraying economic condition of individual farms according to data of the Institute of Agricultural and Food Economics – National Research Institute (IAFE-NRI) and CSO.

Central-western macroregion (including voivodeships Kujawsko-Pomorskie and Wielkopolskie) is thought of as relatively well-developed in terms of agriculture. According to surveys of both IAFE-NRI and CSO economically powerful agricultural holdings prevail in its areas[11], and animal production predominates. A relatively large average acreage of agricultural land in farms located in that area was usually connected with their economic results. It is confirmed by the fact that Kujawsko-Pomorskie and Wielkopolskie voivodeships had the largest number of farms with high commercial production in the country (42%). The macroregion in question also had the smallest share of farms where no market-oriented products were manufactured. High value of agricultural production sold was also related to relatively high work output measured as a relation of production value sold to area unit (1 ha of agricultural land), and especially to employment unit – AWU (Table

[9] The first surveys were carried out in the 1940s; in the last decades surveys were conducted in 1988, 1992, 1996, 2000 and 2005.

[10] P. Chmieliński, *Regionalne zróżnicowanie w rozwoju rolnictwa i obszarów wiejskich w Polsce, a efektywność wykorzystania środków wsparcia Wspólnej Polityki Rolnej (Regional diversification in the development of agriculture and rural areas in Poland and the effectiveness of using the CAP support)*, Studia i Monografie, vol. 138, IAFE-NRI, Warsaw, p. 19.

[11] The average economic size of farms in the macroregion is over two times higher than the average indicator in the country; at the same time in 2007 almost one third of private farms were larger than 8 ESU. The comparison of these indicators for specific macroregions can be found in Table 2.

1). Productivity indicators for farms of central-western macroregion were the highest in the country. The surplus from agricultural production sold was most often invested in permanent production assets. It is also proved by the fact that in central-western macroregion owners of farms investing in permanent assets (57% of all farmers) and improving the quality of agricultural skills were widespread. The data collected by IAFE-NRI are evidence that over 36% of farms were well-equipped in funds of transport and machines for agricultural production.

Table 1. Selected economic characteristics of individual farms in macroregions covered by the IAFE-NRI research

Macroregions	Average agricultural land (in ha)	SD*	Work output per 1 ha of agricultural land (AWU/ha)	Commercial production per 1 AWU (PLN/AWU)	Large-scale commercial farms** (in %)	Farms with investments*** (in %)	Farms well-equipped in machines**** (in %)
Total	9.3	5.8	0.16	21 348	21.7	38.9	15.3
Central-western	13.8	11.8	0.13	34 126	42.1	57.3	36.4
Central-eastern	9.5	7.3	0.15	21 211	20.9	42.6	16.5
South-eastern	4.3	1.9	0.32	13 773	14.2	23.5	5.2
South-western	11.4	3.4	0.13	20 734	20.2	50.0	16.9
Northern	18.7	6.8	0.09	25 790	24.6	40.7	13.8

* Livestock in large numbers was taken into account using relevant conversion factors.
** Farms with high commercial production were those with agricultural produce sales value above the third quartile of this indicator measured for all surveyed farms.
*** The purchase of permanent assets and carrying out construction works were deemed as investment in farms.
**** The quality of machines in farms was surveyed with regard to having four kinds of devices: funds of transport, fertilising and plant protecting machines, sowing and planting machines, and harvesting machines. Farms having at least ten machines of the above groups were deemed as well-equipped.
Source: IAFE-NRI survey, 2005.

Central-eastern macroregion (grouping voivodeships: Lubelskie, Łódzkie, Mazowieckie and Podlaskie) is the largest of units isolated in the IAFE-NRI research[12]. It covers area with relatively the highest diversification in terms of natural conditions for running agricultural activity and also diversified management traditions. Therefore, no regional specialisation can explicitly be distinguished in the production profile of agricultural holdings, although modern dairy holdings are the most numerous in the area in the scale of the country. An average area of agricultural land belonging to farms from the central-eastern macroregion was relatively the closest to the national average. The relation of labour intensity indicators (0.15 AWU/ha in the macroregion to 1.16 in the country) and productivity developments (in 2005,

[12] It is a macroregion with the highest number of private farms per 1000 rural inhabitants. In 2007 this indicator was 40% higher than average in the country (Table 2).

the indicator of the amount of labour per area unit was, respectively, 3.3 to the total of PLN 3.4 thousand/ha, and amount of labour per one full-time employee was 21.3 to PLN 21.2 thousand/AWU) was shaped in a similar manner. According to the CSO data, in 2007 the whole macroregion held 747 642 farms which had 5749.3 thousand ha of agricultural land, and on average one farm had 7.7 ha of agricultural land (Table 2).

Table 2. Description of individual agricultural holdings in macroregions

Specification / macroregions	Average area of agricultural land per farm (ha)	Share of farms larger than 30 ha of agricultural land	Average economic volume	Share of farms > 8 ESU	Number of farms larger than 1 ha per 1000 rural residents	persons employed in individual farms per 1000 rural residents
Poland	**7.8**	**3.2**	**4.4**	**13.7**	**121.9**	**337.2**
Central-western	11.8	6.6	8.9	32.6	91.6	246.8
Central-eastern	7.7	2.3	6.1	14.1	170.5	427.1
South-eastern	3.9	0.6	2.0	3.3	124.9	397.6
South-western	10.5	6.3	4.8	13.7	83.8	228.8
Northern	16.2	11.7	7.6	26.0	71.2	183.2

Source: Elaborated on the basis of CSO data (mainly: Statistical Yearbook "Agriculture and Rural Areas 2007" CSO, Warsaw 2007)

It is often stressed that the farming of the central-eastern macroregion underwent significant structural transformation in the last years which showed, for example, in the polarisation process of farms. On one hand, there was a large group of strong and economically effective farms, while on the other, a significant number of farms were degraded and dropped out of the market[13].

The south-eastern macroregion covers voivodeships: Małopolskie, Podkarpackie, Śląskie and Świętokrzyskie and is thought of as relatively the weakest developed in terms of agriculture. It can be proven by a large percentage of small farms in terms of area and low economic size which on average amounted to 2 ESU (Table 2) in the scale of this macroregion. This translated also to high work-load of production and low productivity of work (table 1). Research of IAFE-NRI from 2005 showed that this is a macroregion, where holdings specialise in plant production, and thus the population of animals expressed in LU was the smallest in the country (on average less than 2 LU). Low level of concentra-

[13] A. Sikorska, *Źródła utrzymania rodzin użytkujących gospodarstwa rolne (The source of income of families with farms)*, Komunikaty Raporty Ekspertyzy, z 523, IAFE-NRI, Warszawa 2006, p. 19.

tion of land in agricultural holdings and poor level of equipment with agricultural machinery[14] translate into a low number of farms with economic size exceeding 8 ESU (3.3% against 13.7 in the country). In 2005 investment activity was taken on by as little as every fourth farmer from the region. In most units production was carried out on a small scale, or not at all, and in 2005 farms with high value of the sale of agricultural products constituted only 14% of all farms. In the macroregion, for a long time farms played mainly non-agricultural role. Good infrastructure, as well as good location near large agglomerations contributed to the dissemination of paid employment of most persons from the families of agricultural holding owners.

According to CSO data in 2007 there were 576,322 farms of average size of 3.9 ha of agricultural land in the region (against 3.7 ha of agricultural land in 2002). All in all, agricultural holdings covered the area of 2266.5 thousand ha of agricultural land.

South-western macroregion consists of the following voivodeships: Opolskie, Lubuskie and Dolnośląskie. It is one of the macroregions where agricultural holdings were slightly greater compared to the rest of the country. According to the data from the survey of 2005 their average size was slightly above 11 ha of agricultural lands. The dominant type of agricultural production within the discussed areas was plant production, while the average stocking density calculated in livestock units was only 3.4 and it was smaller than the average value of the indicator in the country. The agricultural performance calculated in goods production in the holdings were shaped at the level close to the nationwide average. Also the share of holdings with the economic size over 8 ESU corresponded to the average in the country (13.7%). The relatively large share of well-equipped large holdings (above 30 ha of agricultural lands) is of significant interest as it relates to the greatest in the country investment activity of the farmers. In the years 2000-2005 every second of farmers undertook actions aimed at modernisation and increasing the fixed assets of the holding (Table 1). Relatively low work burden (1.43 AWU) should be attributed to a slight, compared to the other macroregions, share of people employed in agriculture. As it follows from IAFE-NRI research in the years 2000-2005 the trends of structural changes in the South-West of Poland were deepened. Because of external conditions and the migration opportunities some holdings were liquidated. Apart from this, within the discussed context, relatively often cases of concentrating production resources and process of establishing new units[15] was noted. It can be estimated

[14] Units that were well equipped constituted only 5% of all workshops.

[15] Sikorska A.: „Przeobrażenia w strukturze społeczno-ekonomicznej wsi a proces włączania się Polski do wspólnej polityki rolnej Unii Europejskiej. Synteza", Research work No 1 HO2C03528, IAFE-NRI, Warsaw 2007, p.14, 22.

that concentration of holdings with high production scale consists there in approx. 20% of all units from the macroregion.

According to CSO data in 2007 there were 143,643 farms with a total of 1,502,100 ha of agricultural land in this region. On average, one farm measured 10.5 ha of agricultural land. Since 2002 an average farm area increased below 1 ha of agricultural land.

A characteristic feature of the northern macroregion (voivodeships: Zachodniopomorskie, Pomorskie i Warmińsko-Mazurskie) is constituted by the most beneficial agricultural structure at the national scale expressed by a relatively largest rate of farms of large area. The fact of existence of units with vast area results primarily from the shape of the agricultural structure in the past in these regions by the social agriculture system. The properties of agriculture in the described macroregion reflect also chosen economic outcomes of farms: the level of workload of production (the amount of work per area unit was the lowest in Poland and measured 0.09 AWU/ha and labour efficiency measured by funds of production per full-time job equalled 25.8 PLN/AWU). Similar as in central-western Poland in the area of northern macroregion the economically strong and profitable farms with a solid position in the agricultural business structure constituted a substantial group (table 1).

According to CSO data in 2007 in the northern macroregion there were 131,410 farms of a total area measuring 2,115,200 ha of agricultural land and their average area measured 16.2 ha of agricultural land. In relation to 2002 an average farm area increased by 0.8 ha of agricultural land.

2. Regional differentiation of the utilization of the Common Agricultural Policy support funds

Support of transformations in agriculture sector and in rural areas in Poland, with the participation of the EU funds until 2007 was financed within the frames of the pre-accession SAPARD Programme and two programmes, implemented after 1st of May 2004: Sectoral Operational Programme" Restructuring and modernization of food sector and development of rural areas in 2004-2006" (SPO) and Plan for Development of Rural Areas for 2004 – 2006 (PROW). SAPARD Programme played a function of preparatory programme for food industry and farmers as well as for institutions acting ion favour of agriculture in respect of adaptation to the new conditions of functioning in the European Union.

Generally, the support of rural areas and agriculture from the Common Agricultural Policy budget funds amounted to 44 billion PLN. The mentioned sum was supplemented by 22 billion PLN coming from the national budget.

According to ARMA data, the greatest contribution to the mentioned sum derived from the funds destined for direct payments, on which the total expenditures during the discussed period amounted to 38 billion PLN in total. Annually, ca. 1 400 thousand farms, possessing ca. 14.2 mln ha had taken an advantage from the payments; the mentioned area constitutes almost 90% of arable land in Poland[16].

The funds under the CAP allowed adapting 71 thousand farms to the European standards. More than 30 thousand farmers implemented investments in their agricultural farms on the sum of 2.6 billion PLN what increased their competitivity. The assistance was also granted to more almost 20 thousand young farmers who undertook the work in their farms. The EU support was also allocated to 1200 processing companies which received 1.65 billion PLN in total for modernization of production. More than 65 thousand farmers have retired since 2004, receiving the structural rent payment and transferring their land to the younger farmers. Above 600 thousand hectares were transferred in total. As calculated into one hectare of arable land, the EU aid amounted to 4 140 PLN during five years. It was more than 33.8 thousand PLN for one beneficiary (farmer or entrepreneur) and one statistical farm has received 26.8 thousand PLN[17] since 2004.

General characteristics of the support programmes

Special Accession Programme for Agriculture and Rural Development (SAPARD) played a role of instrument for supporting the changes in food economy sector and in rural areas in the countries – candidates for the membership in the European Union. In its assumptions, the mentioned programme had to serve the processes of structural transformations in the rural areas of the countries, applying for the entrance to the EU. The implementation of the discussed programme was also aimed at preparation of institutions and beneficiaries of the mentioned countries to taking an advantage of the Common Policy instruments after the accession to the European Union[18].

Due to a big interest of farmers and entrepreneurs in the possibility of obtaining the support, the budget of the programme, amounting initially to 944 mln EUR (708 mln EUR from the EU funds and 236 mln EUR form the national

[16] Based of information supplied by the Agency for Restructuring and Modernization in Agriculture, www. arimr.gov.pl
[17] ARMA data, www.arimr.gov.pl
[18] The legal background for SAPARD Programme was constituted by Council Regulation (EC) 1268/99 of 21 June 1999 and European Commission Regulation (EC) 2222/2000 of 7 June 2000

budget) occurred to be insufficient. Therefore, when striving at the possibility of supporting all projects which meet the requirements, the Ministry of Agriculture and Rural Development in agreement with the European Commission decided on shifting the funds form the budget of PROW 2004--2006 in the quantity of 140 mln EUR for the mentioned aims; their utilization was finally equal to 119.4 mln EUR. It funds that the previously adopted budget was fulfilled in 112%.

Value of the funds, granted to Poland under the SAPARD Programme by the European Union amounted to ca. 177 mln EUR annually in average, during the period of 2000 – 2003 and 500 mln EUR in total during the successive years until 2008. The mentioned funds were intended, first of all, for subsidies in the following sectors:

- improvement of competitivity of Polish agriculture and agri-food sector, on the national as well as international market;
- adaptation of agri-food sector to the requires of consolidated European market in respect of sanitary, hygienic and quality requirements;
- support of multifunctional development of rural areas through development of technical infrastructure and creation of the conditions for undertaking the non-agricultural economic activities in the countryside.

The deadline of the period of applying for financial support for the interested ones was ended on 20th of February 2004. During the discussed period, farmers, territorial self-governing units and entrepreneurs lodged their applications in the regional departments of ARMA; it was 31 098 applications in total. During the contracting period, ended on the 30th day of September 2004, ARMA concluded 24 431 contracts with the beneficiaries in total. The total sum of the granted financial support under the mentioned contracts was equal to 4 758.9 mln PLN[19].

After the accession of Poland to the European Union, Polish agriculture and food sector have been covered with two programmes. One of them was Sectoral Operation Programme: ”Restructuring and Modernization of Food Sector and Development of Rural Areas, 2004-2006” (being called hereinafter SOP), financed from the European Union funds, coming from the Guidance Section of the European Agricultural Guidance and Guarantee Fund (EAGGF) in combination with the national public funds (the State’s budget, self-governing units’ funds) and own funds of the beneficiaries. The total outlays of public funds were specified on the level of 1 787 812 868 EUR, including 1 192 689 238 EUR of the EU funds and 595 123 630 EUR of national public funds.

[19] Ex-post evaluation of SAPARD Programme implementation in Poland in the years 2000--2006, Agrotec, Agrotec Poland, IAFE- NRI, Warsaw 2007, p.21

The aim of the programme was to improve the competitivity and permanent and sustainable development of agricultural sector, support of processing industry in order to improve its competitive position and support for multi-functional development of rural areas. The mentioned above aims were implemented within the frames of two main priorities: “Support of the changes and adaptations in agri-food sector” and “Sustainable development of rural areas”.

Within the frames of the first priority, the restructuring and modernizing measures were undertaken in food sector; they were aimed at improvement of its competitivity and profitability, ensuring the safety and appropriate quality of production and adaptation to the European Union standards. Under the discussed priority, the actions aimed at support of investments in agricultural farm, setting up the young farmers, training, and support of agricultural advisory activity and the improvement of processing and marketing of agricultural products, were introduced.

The support, granted under the second priority served improvement of spatial management of the rural areas, making the rural areas more attractive as a place of living and running the economic activity, creating the new work places and reduction of unemployment in the rural areas, and by this, generating the new sources of income for the inhabitants of the discussed areas. To this end, there were undertaken the actions in favour of support for restoration of potential of forest production, being destroyed by natural catastrophes or fire, integration of land, renovation of countryside and preservation and protection of culture heritage, differentiation of agricultural and similar activities in order to ensure the diversity of actions or alternative sources of incomes, management of agricultural aquatic resources, development and betterment of technical infrastructure, connected with agriculture; also, pilot programme Leader + was launched.

The action in two main priorities was supplemented by the funds for the support of administration and introduction of the Programme, informational and promotional activity and institutional development.

The successive programme, being oriented to the support of improvement of agricultural sector functioning and of the quality of life in rural areas, was Plan for Development of Rural Areas 2004 -2006 (PROW); its strategic aims were implemented via the actions, considered in the II pillar of the Common Agricultural Policy:

1. Sustainable development of rural areas;
2. Improvement of the competitivity of agri-food sector.

Under the first goal, the undertaken actions were aimed at the support of agricultural activity in the less-favoured areas (LFA), support of agri-

environmental undertakings and improvement of animal welfare, afforestation of agricultural land and adaptation of agricultural farms to the European Union standards.
The second goal was implemented via a system of structural pensions, support of low-commodity farms and the support of the process of creating and development of the agricultural producers' groups. Additionally, the supplementation of direct payments and widely understood costs of the programme functioning were financed from PROW funds.

Financial funds for the implementation of PROW 2004-2006 derived from the Guarantee Section of the European Agricultural Guidance and Guarantee Fund (EAGGF) and from the national budget. The total sum of the support as provided by the Plan, amounted to 3 592.4 mln EUR, including one fifth, destined for supplementation of direct payments and for financing the project submitted to SAPARD Programme. Within the frames of PROW 2004 -2006, any financial limits for the implementation of the actions in the particular voivodeships were not specified.

The greatest sum, i.e. almost 4 billion PLN (more than 26% of the funds of PROW 2004-2006) was constituted by payments for the beneficiaries of action "Management of less favourable areas (LFA)". On the other hand, more than 20% of the budget was expended under the action "Supplementary area payments". The action "Adaptation of agricultural farms to the EU standards" consumed more than 17% of the budget (ca. 2.5 billion PLN).

A similar sum, i.e. more than 2 billion PLN (ca. 15%), was granted to the farmers under the action "Structural pensions". Financial support under the action "Support of low-commodity farms" was equal to almost 10% of the budget. The mans paid under the action "Support of agri-environmental undertakings and improvement of animal welfare" constituted about 6% (ca. 815 mln PLN) and the sum for the action "afforestation of agricultural land" amounted to ca. 3% (almost 400 mln PLN) of all PROW funds; on the other hand the support for the producers' groups was equal to more than 24 mln PLN what constituted only 0.17% of the whole spent sum.

Regional differences in utilization of the funds for the support of agriculture and rural areas

Utilization of assistance funds within the frames of the particular support programmes was highly differentiated, as affected by the spatial differences in production profile of agricultural farms, resulting from the specific natural (nature and climate) conditions and from the historically shaped specificities

of economic development. Also, the number of acting food industry enterprises in the particular regions decided on the level of allocating the funds, destined for the modernization of food industry enterprises in the particular regions of the country. The mentioned relationship is especially distinctly visible on the example of SAPARD Programme, within the frames of which the action aimed at improving processing and marketing of agricultural and fish products was implemented. Most of the applications concerning the actions, in which the entrepreneurs and agricultural producers' groups were the beneficiaries, were lodged in the central-eastern macroregion (especially Mazowsze and Podlasie) where the most important food processing enterprises were situated. On the other hand, in the central-western macroregion (where the farms, specialized in animal production are traditionally dominating) there was a concentration of the implemented projects concerning the support for development of the sectors of milk processing, slaughtering of slaughter animals, meat dressing or its processing whereas in the central-eastern macroregion, fruit and vegetable processing was prevailing[20]. It is an evidence of the effect of the programme on strengthening of regional specialization in the activity of processing enterprises in accordance with the dominating production profile of agricultural farms on a given area.

The highest sum of financial funds under the action aimed at the support of investments in agricultural farms was destined for assistance in the central-western macroregion (Tab.3); however, a real scale of differentiation is indicated by the level of the sum of the support, as calculated per one farm. When we take value of the mentioned indicator into consideration, we may state that the highest level of support under the discussed action was recorded in the central-western macroregion (more than 1260 PLN). The discussed region concentrates a high number of economically strong entities, the managers of which are characterized by a strong determination to improve the competitiveness of their farms. On the opposite end, we find the farms of the south-eastern macroregion where the support, as calculated per one farm, is three times lower (Tab.3). When considering the characteristics of the particular macroregions, it is easy to conclude that the support, granted to the farmers, is greatly absorbed by the managers of agricultural farms with a relatively high area of agriculturally utilized land (cf. Tab.2). Such regularity may be also observed when analyzing the level of the support, as calculated into one farm in the remaining programmes, co-financed from the EU funds (PROW and SOP). Also, after the accession, agricultural farms from the central-western macroregion were most successful in effectiveness of obtaining the funds for development, what was expressed by the sum, obtained for one farm (Tab.4).

[20] on the basis of „*Ex-post evaluation of implementation*…op.cit. p.42

Tab.3. Regional distribution of the support for rural areas and agriculture within the frames of the selected actions of SAPARD Programme

Specification (Macroregion)	Investments in agricultural holdings	Development and improvement of infrastructure of rural areas	Differentiation of economic activity in rural areas
	Sum of support		
	(*in thousand PLN*)		
Poland	1 063 576.0	3 310 740.0	572 862.0
Central-western	263 079.0	570 663.0	101 106.0
Central-eastern	483 636.0	908 012.0	135 337.0
South-eastern	175 300.0	1 131 313.0	208 347.0
South-western	46 730.0	336 906.0	48 133.0
Northern	94 831.0	363 846.0	79 939.0
	Sum of support		
	In PLN per farm	*In PLN per inhabitant of rural areas*	
Poland	589.5	223.7	38.7
Central-western	1263.9	251.1	44.5
Central-eastern	647.5	207.3	30.9
South-eastern	304.4	245.4	45.2
South-western	327.6	197.9	28.3
Northern	726.7	198.4	43.6

Source: Developed on the ground of data of the Statistical Yearbook of Agriculture and Rural Areas 2007, The Central Statistical Office, Warsaw 2007

The regularity in relation to spatial differentiation in the utilization of the support funds, depending on the level of development of a macroregion, has been also pronounced in the support of development in rural areas. It is reflected in the data concerning the implementation of the action, aimed at differentiation of economic activity under the SAPARD Programme. In the south-eastern macroregion, characterized by the highest participation of the economic entities, acting in rural areas in Poland, the sum of the support under the mentioned action, constituted more than one third of the action's budget. We may conclude that apart from the support for agricultural sector, the assistance, offered in the actions, oriented to development of non-agricultural functions of the countryside, is cumulated in the regions where the mentioned functions are relatively better developed.

Tab.4. PROW and SOP funds in 2004-2006 in macroregions

Specification (macroregion)	**SPO 2004-2006**			**PROW 2004-2006**		
	Total (in mln PLN.)	Per one inhabitant of rural areas (in PLN)	Per one individual farm (in PLN)	**Total (in mln PLN)**	Per one inhabitant of rural areas (in PLN)	Per one individual farm (in PLN)
Poland	6 971.1	471.1	3864.1	14 212.5	960.4	7878.1
Central-western	1 443.5	635.2	6934.9	3 004.7	1322.2	14435.3
Central-eastern	2 794.5	637.9	3741.2	5 909.1	1348.8	7911.0
South-eastern	1 117.9	242.5	1941.4	1 911.3	414.7	3319.4
South-western	655.7	385.2	4596.0	1 183.5	695.3	8295.4
Northern	950.9	518.6	7286.8	2 204.0	1201.9	16889.5

Source: Developed on the ground of data of the Statistical Yearbook of Agriculture and Rural Areas 2007, The Central Statistical Office, Warsaw 2007

In spite of the relatively small budget in relation to the needs of agri-food sector in Poland, SAPARD Programme had greatly contributed to development of agricultural farms and food industry enterprises which were aware of the modernization needs which were outlined in the light of Poland's accession to the European Union. The implementation of SAPARD Programme has contributed to development of agri-food sector via support in respect of adaptation to veterinary and sanitary standard of the EU, assistance rendered to Polish enterprises in respect of their preparation to utilizing the EU funds after the entrance of Poland to the EU, animation of investments in agri-food sector, development of processing companies what has a indirect effect on development of the market of agricultural raw materials' supplies.

Although the programmes which covered rural areas and agriculture after the entrance of Poland to the European Union, had a positive influence on economic development of the countryside, they contributed to further deepening of differentiation of its level in the regions. It is manifested by the indicators of utilizing the funds, as calculated into one agricultural farm and one inhabitant of rural areas in the particular parts of the country. The level of the support, as measured by the sums of PROW 2004-2006 funds, being calculated into one inhabitant of rural areas was strongly spatially differentiated: from ca. 1350 PLN in the central-eastern macroregion to ca. 415 PLN in the south-eastern macroregion. Similar disproportions in respect of the support level in the regions were recorded in case of Sectoral Operation Programme. Also, in the discussed case, the south-eastern macroregion was the area with the lowest level of support as calculated per one inhabitant of rural areas, i.e. 242 PLN; on the other hand, the highest sum of funds was directed to the inhabitants of the northern macrore-

gion. It is a result of the role which is played by agriculture in economy of the particular areas. The more differentiated is the economic activity and the economic activeness of inhabitants of a macroregion, the smaller are their efforts in obtaining the funds within the CAP frames.

The range existing in the level of the support in the particular regions was also affected by spatial differences in respect of the average size of agricultural farms and by the fact that the level of payments within the frames of programmes, available in the years 2004-2004, in most of the actions oriented to improvement of the competitivity of agricultural sector, was dependent on the area of farm.

Conclusions

Integration with the European Union has been, after the system transformation, the second main factor, determining the changes in development of Polish economy during the recent two decades. As a result of system reforms in Poland, market-oriented economy, capable of developing and competing in a global market has been developed. However, there was still a distinct difference visible in the level of life and of incomes of the population in Poland and in the Western Europe countries. The integration with the European Union has created the additional mechanisms owing to which it became possible to enter the path of gradual reduction of developmental gap which discriminated Poland from the so-called EU countries[21]. It was manifested in a visible acceleration of economic development which was accompanied by distinct strengthening of developmental background: increase of investment outlays, changes in labour market (especially limitation of unemployment rate), improvement of the results of public finances and a real increase of incomes.

The farmers had to adopt to the requirements which were on the Common Market, to satisfy the EU standards connected with the production quality, new requirements concerning norms and standards of manufacture. It was connected with the modernization needs of agricultural farms which were not always adequate to the production possibilities of the farms. Hence, there was often an argument repeated that direct payments and a part of the funds, available under the support programmes, had a social character, constituting the supplementation of incomes in agriculture, being lower than in other sectors of economy. Nevertheless, we should remember that the mentioned funds have also contributed to development of Polish economy, affecting, *inter alia*, the increase of individual consumption. It may be supposed that the dis-

[21] see Office of the European Integration Committee, 5 years of Poland in the European Union, Warsaw 2009, p.551

cussed funds often were directed to local entrepreneurs, having a positive influence on local economy. In another case, the actions of the support programmes, being considered as actions with a social nature, played a role of encouragement to greater involvement in agricultural activity. It was in the case of support for the persons who commenced their independent agricultural activity for the first time (the so-called young farmers). In the period of 2004-2006, the requirements towards the beneficiary of such action did not impose any conditions as to the aim of the destination of the granted funds; it caused the argument that the mentioned funds were destined only for consumption purposes[22]. A single support in the quantity of 50 thousand PLN did not allow conducting any serious modernization measures in agricultural farms, but imposed a duty of involving in activities if the agricultural farm for the period at leastern of 5 years. It is difficult to suppose that after utilizing the mentioned sum, being a premium for commencing the agricultural activity, the "young " manager will abandon or neglect the farm, as he having done the commitment to run it.

The actions, implemented under PROW were aimed at favoring the improvement of competitivity of agricultural farms and supporting the sustainable development of rural areas; due to a short period of the programme implementation as well as typically protective character, PROW has however contributed mainly to the improvement of incomes of rural population.

During the pre-accession period, the problem of regional differentiation in respect of economic development was discussed (it concerned the countryside as well as agriculture). The membership in the European Union was to create a big chance for diminishing these differences. The analysis of the utilization of funds in the particular macroregions of Poland shows that the membership in the EU has greatly preserved the historically-originated differences in development of agriculture and rural areas in the particular parts of Poland. The modernization processes in the regions, characterized by a disintegrated agrarian structure, have indeed contributed to the improvement of the conditions of functioning of agricultural farms, but they have not brought the expected equalization of the level of their competitivity in comparison to the farms in the regions, characterized by traditionally better results in agriculture. Moreover, income functions of the support instruments are pronounced, first of all, in the group of the economically strongest farms which usually have a big area of agricultural land at their disposal. It has been re-

[22] In order to prevent such situations in the requirements concerning the beneficiaries of the actions in PROW 2007-2013, the applicant for the support must be additionally insured in KRUS (Agricultural Social Insurance Fund) for three years and implement the earlier submitted business plan. Besides it, he must utilize at leastern 70% of the sum of benefit for the aims, connected with development of the farm, according to the assumptions of business plan.

flected in regional differences concerning the level of the support, as calculated per one agricultural farm. The macroregion with the greatest participation of economically strong agricultural entities was characterized by a big ability to absorb the funds from the European Union. Besides that, the level of the support in a part of the actions, directed to agricultural farms, was dependent on the size of the farm area; therefore, it was favourable for big farms and by this, the regions with a high participation of such units.

The instruments of support, activated within the frames of the CAP have generally strengthened the earlier shaped divisions and differences in economic functions of agricultural farms. This tendency was also enhanced by direct payments what may be evidenced by the fact that big individual farms took the most of the sum of payments, directed to individual agriculture. In connection with the big regional differences in structural features of agriculture from the particular parts of the country, they participated unequally in benefits due to the granted assistance; it was favourable for further increase of spatial differentiation in the conditions of agricultural production, in spite of general improvement of functioning conditions of the whole sector.

In the discussed situation, the question arises whether striving at equalization of regional differences should be one of the priorities of the policy in relation to agriculture and rural areas? The analysis of basic indicators, describing the agriculture in the particular regions and spatial allocation of the funds, as calculated per one farm and the number of inhabitants of rural areas indicated the mutual relationship between the level of economic development in macroregions and activity in obtaining the support funds. It funds that the assistance which ahs a positive effect on development of agriculture on the level of the country, leads, at the same time, to deepening of unfavourable (from the viewpoint of striving at equalization of developmental differences) phenomena in the discussed sector. The answer may be found in aiming at utilization of unique natural and structural values of the particular regions and striving at regional specialization, based on differentiation of function of agricultural farms. Such process may be observed when analyzing the directions of the CAP evolution, on the occasion of its successive reforms. Functions of agriculture, as being connected with landscape protection, spatial management, or production of renewable energy have acquired a greater meaning together with the actions in favour of differentiating rural economy via strengthening of its non-agricultural functions. It funds that in the future, the Common Agricultural Policy may stop to be an agricultural policy *in sensu stricto* and would become a policy of multifunctional development of rural areas and their social and natural environment.

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The Structural Changes in the Rural Areas and Agriculture: the Case of the Czech Republic

Characteristics of Czech countryside – factors influencing its development in the positive as well as negative sense

Czech countryside covers[1] three quarters of the area of the Czech Republic and is populated by 2.5 million inhabitants. Czech rural areas are very diverse.

Historically, the character of rural areas was formed in the consequence of the basic political and social changes, which in the 20.century were namely the WW 1, the consequent origin of the independent Czechoslovak Republic, land reform, the world economic crisis, WW 2, collectivisation of agriculture, so—called normalisation of the economic and social life after the 1968 and the end of the socialist regime in 1989. Each of these stages created a different kind of inequality. Part of these differences is regularly of a completely neutral nature and their influence is changing in connection to other factors. After the EU accession, the countryside development has been influenced by other socio-economic factors the aim of which is to eliminate such regional inequalities which could negatively differentiate the development of Czech countryside from that of the European countryside.

The changes after 1989 impacted the whole society, therefore, also the countryside. From the demographic viewpoint, several important changes occurred already during the first years after the revolution – young people got more possibilities to utilise their abilities and to get more knowledge and experience, what in consequence led to a steep decrease of the natality as well as the marriage rate. By these changes, Czech society is approaching the common West European society.

For the countryside, also the internal migration change was important. In the second half of the 20th century, the migration from the countryside to towns prevailed, while the situation turned around since the mid90s. At present, the migration from towns to the countryside prevails. During the first years, this phenomenon concentrated namely to the surrounding of big cities, therefore, it regarded the process of sub-urbanisation which was connected to the mass building of the so-called satellite townships. At present, the sphere of interest is widening, however, there still remain parts of the countryside which are suffering from de-population.

[1] According to the general definition, the communes up to 2000 inhabitants are regarded as rural communes

The situation in agriculture and rural areas in 1989 and the character of the post-November changes

The turbulent end of the year 1989 reached agriculture and the countryside in such structure of agricultural enterprises which had been formed since the end of the 40s of the 20th century in connection with the processes of the industry nationalisation, collectivisation of agriculture and centralisation of the rural population economic and social life. The first ideas on the changes towards market economy thus issued from the existing structure and some more or less clear ideas of the possible future development scenarios.

Agriculture and countryside were closely interrelated, the main production entities being the Unified Agricultural Co-operatives and the State Farms. The private sector was practically non-existent in agriculture[2] and agricultural primary production employed almost half a million workers. This, agriculture belonged to the sectors of national economy which participated in the important way in the rural employment. The period of the socialist large-scale production in agriculture and the socialist development of the rural way of life showed undoubtedly some positive features (e.g. production concentration and specialisation, investment resources concentration, industrialisation of agricultural production and the subsequent approaching of the farm work time conditions to those in other sectors, extensive social programs for agricultural workers, ongoing reconstruction of housing, increasing building of village family houses, increased level of living of rural countryside and other). Many of them had also a negative side (e.g. the proceeding non-functioning of the centralised management structures, decreasing profitability, labour productivity and efficiency of enterprises, deteriorated quality of the land fund, environment deterioration, non-renewable resources exploitation, etc.).

In short, it can be stated that the economic and social prerequisites of further development reached a critical, irreversible point. Different attempts at the change of the economic and social behaviour of population at sustaining all the features which rendered any forms of development impossible were of course necessarily unsuccessful. The most serious limiting factors were the nomenclature system of filling the top management posts, which made the creation of any competitive environment impossible, very limited possibilities of the utilisation of the knowledge and possibilities of people, determination of the life career according to the political criteria, filtering of the information from abroad, isolationism, threatening or removing of any opponents from the public life and other forms of repression. It was not by chance, that the socialist regimes of Central and Eastern Europe gradually collapsed both economically and socially.

[2] private farmers represented 0.49 % of permanent workers in agriculture

At the end of the 80s, the main problems of the countryside were: the continuing depopulation of rural areas, lack of non-agricultural job opportunities in the countryside which evoked a high level of commuting, low level of the infrastructure, which made life difficult namely in the smaller communes.[3]

The economic reform of agriculture issued from the demand to settle restitution claims, to perform the small and big privatisation and subsequently to transform the agri-food complex (AFC).

Restitution

The basic legal norms settling the rules of Czech agriculture transformation were the Land Act, i.e. the Act No. 229/1991 Coll. On settling the ownership rights to land and other agricultural property, as amended, and the Transformation Act, i.e. the Act No. 42/1992 Coll. on settling the ownership relationships and property claims in co-operatives, as amended.

Our legal system understands restitution as the situation when the property of the original owner went in past into the ownership of the state or other legal body, in agriculture typically into the ownership of a co-operative. According to the restitution law, such a property is returned back, i.e. restituted, to the original owner or other entitled persons. Therefore, the restitution regards the cases when the property went from the ownership of the original owner into the property of the state or other legal person during the so-called decisive period, which is the period defined specifically in each restitution act.

The main legal norm from the field of restitution was the Land Act, which was passed on May 24, 1991 and came into validity on June 24, 1991.[4] From this date, the restitution process was started, which regarded both the original owners (most of which did not live up to it) and their heirs. With regard to the fact that all legal heirs had to be recompensated regarding their share, the compensations of the restituted properties were divided (therefore, the number of restituents reached approximately the number of 3 million persons in the CR).

Notwithstanding the fact that restitutions presented a break in understanding private property and handling it, it had only a limited impact on the representative sociological research showed[5], that before collectivisation, Czech

[3] Majerová, V. at al.: Důsledky současných společenských změn v sociální oblasti v zemědělství a na venkově. (The impacts of the present social changes in the area of agriculture and countryside.) Final research report of the RIAFE, Prague, 1990, p. 4.

[4] Marchal, S. A.: Právní předpisy upravující transformaci českého zemědělství. (Legal rules settling the transformation of Czech agriculture). Internal study of the MoA CR, p.1. Beside s the Lnd Act, which settles the restitution rules in the sector of agriculture, restitutions were directed also by two other legal acts: Act No. 403/1990 Coll., on the mitigation of certain property wrongs, which settles the closest range of restitution cases,and further the Act No. 87/1991 Coll., on the out-of-the- court rehabilitations.

[5] Český venkov 2000 (Czech countryside 2000), questionnaire research, 2 142 respondents over 18 years from the communes up to 2 000 inhabitants

countryside was socially differentiated, there prevailed small and medium-sized farms and the restitution therefore regarded also mainly a small-scale category (up to 5 and 6-10 hectares of agricultural land). Only a negligible share of restituents (3%) then started private farming. We can suppose that in fact this was rather an extension of the already existing subsistence plot or garden. As the most suitable solution, they regarded leasing the land (10.3 %) or selling it (2.4 %). Land donation probably went inside the family or among relatives.

The working life was not much influenced by restitutions, neither was the financial situation of families or the wider family relationships. This is rather understandable with regard to the restituted property scope. On the other hand, even if the property did not bring any direct revenues, it presented the attempt to mitigate the past wrongs for the individuals and represented a certain life security which was positively perceived. On the other hand, the general attitudes to restitutions reflected the ideology and experience of the past decades. Almost one half of the respondents were of the opinion that the property should be restituted to the full extent. Therefore, this was the opinion also of the respondents who for whom the question was only hypothetical. However, almost the same number of respondents would have limited the extent of restitutions (from them, almost 1/5 were strictly against any property restitution, others would limit it by some given level – from 1 to 100 million CZK).The opinions on property restitution differed namely according to age and education. The younger or more educated people were in favour of property restitution, the older and less educated ones either limited or strictly refused it. Obviously, these attitudes issued from the life attitudes and experiences and were connected to further ideas on to whom the property should or rather should not be given back. The greatest openness regarding property restitution was shown towards the individuals, societies and organisations. Most strongly the respondents refused restitution claims of the gentry and church property restitutions. As could be expected, the opinions on restitutions were influenced by the political attitudes of the respondents.

Restitutions in rural areas regarded mainly land, live and material inventory, other land (forests, ponds) and farm buildings. The property is utilised mainly to their original purpose (either by the owner or the leasee). Their importance was mainly on the moral level, however, with regard to their scope, they did not present any decisive change of the property relations in the village and the complex picture of Czech countryside was not hanged in any considerable way.[6]

[6] Majerová, V.: Restituce. In: Český venkov 2000, ČZU, Praha 2000, str. 127-130

Big and small privatisation

The privatisation process was conceived in two consequent forms. The so-called big privatisation was based on the transformation of big state enterprises into smaller enterprises of different type, while the general rules of the de-etatisation process and privatisation were given by the transformation law. For the agricultural primary production state enterprises, there were proposed several forms of privatisation considering the local conditions (private farming, employees' co-operatives business companies connected with processing industry etc.).

Of a considerable contribution for the countryside, there was regarded the small privatisation, which should have opened theoretically the space for private enterprising. It was supposed that the interest in private business will be great and that it will participate considerably in the countryside development in many forms: creating new job opportunities, what would limit the increasing unemployment, extending the job (business) possibilities according to the interest and abilities of the individuals, strengthening the population stability, decreasing the high share of people commuting to work, improving the infrastructure level (shops, services, catering, crafts etc.), saving the inhabitants the time-consuming travelling after services, reflecting in the growing life-level of the businessmen and their families, contributing to the revival of the countryside.[7]

On the level of the decision-making sphere and the media, a massive return to private farming in agriculture was presupposed, the first sociological researches showed that the relationship to private enterprising was reflected on two levels – it was positive on the general level and people were of the opinion that it would contribute considerably to the countryside development. However, on the personal level, people are more reserved and the same people prefer keeping their hitherto jobs and employee positions. Private business had been interrupted for 40 years, family-type enterprises, business experiences, mentality and ethic had disappeared, therefore there was s nothing to continue in and the return to small family farms or craftsmen workplaces was not easily possible. The industry nationalisation, collectivisation of agriculture and the whole concept of the socialist personal as well as society consumption were based on totally different principles and created a different life-style – more tied and dependent on the state structures, less demanding for the personal endeavour. The presupposition that people will give up the already traditional advantages for the feeling of freedom in the insecure economic future did not issue from a realistic estimate

[7] Majerová, V. at al.: Důsledky současných společenských změn v sociální oblasti v zemědělství a na venkově. (The impacts of the present social changes in the area of agriculture and countryside.). Final research report of the RIAFE, Prague, 1990, p. 6-7

of human behaviour. In the first waves of business attempts, many small business subjects originated in the countryside, however, the severe market mechanism has liquidated a great part of them again. The ideas on the basic importance of private entrepreneurship for the rural areas development rather has not fulfilled.

The meaning and goals of the AFC transformation

The main idea of the Transformation Act was to adapt the co-operatives which originated before transformation according to other legal principles, namely the co-operative law, to the Business Code, i.e. the Act No. 513/1991 Coll. The transformation of agricultural enterprises thus went on parallel with restitutions and sometimes even in fact before them. The key notion of the Transformation Act then was the transformation project according to the § 9, as the transformation of the existing co-operatives into legal bodies according to the Business Code.[8]

The sense of the transformation process laid in reaching of two basic goals: revival of the private property economic function not only on the base of restitution, and reaching a basic change in the enterprise behaviour, both through the system of its internal organisation and management and namely through the functioning of the internal economic relationships as the basic prerequisite of the enterprise market behaviour.

It was obvious that the theoretical recommendation would at least partially differ from the Czech agriculture reality. Simultaneously, there were studied the proceedings in the neighbour countries which underwent the same processes (German democratic Republic, Hungary and Poland). The GDR was, according to the level of agricultural production concentration and specialisation, the country nearest to our level of development. However, the unifying process of both German states created very unique and specific conditions for the eastern part of the country, issuing both from the legislation and the agrarian policy principles of the Federal Republic Germany, as well as from the possibilities of the West German capital and specialists with experiences of the market economy enterprises functioning. In Hungary, the AFC transformation followed the same aims as in the CR, however, the starting conditions differed: the land farmed by co-operatives belonged to them or was in state ownership used by the co-operatives (the private land transfer had been paid for), in the state reform policy, re-privatisation was not utilised. The ownership wrongs mitigation regarded only real estates and was provided for by the form of tradable capitalised

[8] Marchal, S. A.: Právní předpisy upravující transformaci českého zemědělství. (Legal rules settling the transformation of Czech agriculture). Internal study of the MoA CR, p.2

state obligations at the name (owner). Their owner then could participate with the obligations in the privatisation of both state and co-operative enterprises. At the same time, the confronting character of the Hungarian legislation process issuing from the fight of political parties slowed down passing the new laws necessary for transformation. Polish agriculture differed from the Czech by the fact that the prevailing part of agricultural production was of the small-scale private character and it could be supposed that the central problem of the agrarian policy would be in future the possibilities of a higher concentration and specialisation of production.

The same as in the previous cases of the planned steps, also in this aspect the necessary rational changes clashed with the rural population public opinion. It was not easy to accept the fact that the consequences of the transition to market economy will impact namely the economic and social security of the individuals. The threat of unemployment, decreased level of living, a more difficult position in the increasingly competitive labour market, removal of the great majority of the advantages and social programs of the socialist agricultural enterprises (namely the cheap enterprise catering, contributions to children recreation as well as adult recreation, some advantages for the pensioners, etc.).

The greatest fears regarded the goods and services prices inflation and higher prices of food. Agricultural enterprises moved from the simple decreasing of the number of workers to the attempts at a rational forming of the social structure. The economic destabilisation of enterprises was caused namely by the increasing prices of fuels and energies, growing production costs, increased subsidies, problems with the agricultural products marketing and the farmers prices decrease. Searching for a new job was in many cases hindered by the higher age, lower qualification or a narrow professional specialisation of agricultural workers. The professions which could find work also outside agriculture (drivers, repair specialists, craftsmen) were in a more favourable position.[9] The real incomes decrease of agricultural households extended the self-supply strategies of the agricultural households' behaviour.

In conclusion, it can be stated that the private sector was created relatively quickly in the period 1990-1992, and that partially by the transformation of big state enterprises into joint-stock companies, partially by the development of small and medium enterprises. Also the structure of employment recorded considerably exchanges. Namely in the first phase of transformation, employment decreased in the big enterprises and grew, in the opposite, in the enterprises up to 200 workers. The transformation of Czech society impacted both town and

[9] Majerová, V.: Sociologický pohled na změny v československém zemědělství po r. 1989. Sociologie zemědělství 1/1992, str. 37

rural population and all spheres of human activity. Up to 2001, it was possible to prove the growing tendency of enterprising subject number in the CR, and that both of physical and legal bodies – by the full 1,205,582 compared to the end of 1992, when the number of entrepreneurs was only 656,123. This of course reflected also in the rate of entrepreneurs per 1,000 inhabitants which reached 180.87 by December 31, 2001. Further, it can be stated that, regarding the problems of acquiring the individual kind of entrepreneurs' licences according the legal demands, the unanimously highest increase was regarded by the free and craftsmen entrepreneur categories.[10]

A considerable increase of the small and medium enterprises' numbers occurred at the beginning of the 90s, when this trend reflected the ongoing economy transformation connected namely with the privatisation and restitution processes.

Since the year 2000, the numbers of small and medium enterprises is stabilised, but there have been differences in their structure. While the number of the medium enterprises stabilised already before the year 1995, the number of small enterprises stabilised after the year 2000, even if there can be found some fluctuations. The number of small enterprises (over 10 and up to 50 employees) reached its peak in 1997 and it is decreasing since then.[11] Small and medium enterprises represent in the individual sectors of the NE, besides other subjects operating there, a considerable resource of the offer of jobs in the national, and namely in the local labour market and thus influence the total employment.[12]

The complex development of main economic indicators

Already at the beginning of economic transformation, a steep decrease of employment was recorded, namely in consequence of the economic development. In the period 1991-1994, GDP dropped in average by 2.4 % per year and employment rate decreased by 2.3 %. Namely pensioners were pushed off the labour market in this period, what caused their transfer from labour market into economic inactivity and kept the unemployment rate at a relatively low level. In the long-term horizon, employment decreased till 2004.[13] The development of employment and employment rate during the last 15 years is given by Table No.1.

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[10] Statistické údaje Ministerstva průmyslu a obchodu, Registr živnostenského podnikání.

[11] Source: Malé a střední podniky (jejich místo a role v české ekonomice), krátká tématická analýza, ČSÚ, 2007.

[12] More infomations in: Pavlíková, G.: Trh práce, zaměstnanost a pracovní příležitosti na českém venkově. In: Majerová, V. a kol.: Český venkov 2006 - Sociální mobilita a kvalita života venkovské populace, ČZU v Praze, ISBN 978-80-213-1631-7 a Pavlíková G.: Struktura malého podnikání na českém venkově. In: Majerová, V. a kol.: Český venkov 2002 - Podniky a podnikání, ČZU v Praze, vydavatelství CREDIT Praha, ISBN 80-213-1002-2

[13] Kotýnková, M.: Trh práce na přelomu tisíciletí, VŠE v Praze, 2006.

Table No.1. Employment rate and the numbers of employed persons in the years 1993-2007

Year	Employment rate in %[1)]	Employment in ths persons
1993	69.0	4 873.5
1994	69.2	4 926.8
1995	69.4	4 962.6
1996	69.3	4 972.0
1997	68.7	4 936.5
1998	67.5	4 865.7
1999	65.9	4 764.1
2000	65.2	4 731.6
2001	65.2	4 727.7
2002	65.6	4 764.9
2003	64.9	4 733.2
2004	64.2	4 706.6
2005	64,8	4 764.0
2006	65,3	4 828.1
2007	66,1	4 922.0

Source: SSO: labour market in the CR 1993 - 2007; Employment and unemployment in the CR according to time series.
Note: 1) unemployment rate according to VŠPS, data for person's of the age 15-64.

After 1989, the citizens were offered new labour opportunities in the form of private enterprising. During the 90s, the numbers of employees ad co-operative members decreased ad the number of entrepreneurs (employers and self-employed) gradually increased. The following overview shows the development tendencies in the individual categories of working population in the NE up to 2007.

The ongoing socio-economic changes were also reflected in the changed structure of employment in the individual sectors of the NE. A considerable decrease of workers occurred namely in the primary sector and the growth in the tertiary sector. The greatest decrease was recorded in 1991 and 1992. In this period namely the ancillary and affiliated production sector workers left agriculture. While in 1993, the primary sector (including agriculture, forestry and fishery) employed 375 ths workers, in 2000 there were only 240.7 ths, what represents the decrease by 134. ths workers. The decreasing trend continued also in the following years and in the last year (2008) the primary sector registered only 163.1 ths workers, i.e. 3.2 % of the total workers in the NE.[14]

[14] Source of the data – CSO, Labour market in the CR1993 - 2007.

Table No.2. Classification of employment and position of the workers in the NE in the years 1993-2007

Employed in the NE	Total	Employees	Employers	Self-employed	Production co-operatives members	Helping family members
1993	4873.5	4238.6	130.5	308.2	181.6	14.4
1994	4926.8	4278.0	156.6	338.7	132.8	20.2
1995	4962.6	4274.4	188.0	374.6	99.4	25.8
1996	4972.0	4278.1	202.3	377.8	91.3	22.3
1997	4936.5	4249.0	198.7	388.4	80.4	19.9
1998	4865.7	4138.4	202.5	437.5	64.5	22.6
1999	4764.1	4024.1	195.7	464.0	55.1	25.1
2000	4731.6	3971.7	196.2	486.1	50.8	26.6
2001	4727.7	3969.8	186.2	499.7	43.8	27.7
2002	4764.9	3966.4	192.6	540.5	35.8	28.9
2003	4733.2	3893.7	196.8	581.3	28.0	33.0
2004	4706.6	3890.2	187.5	573.2	24.3	31.1
2005	4764.0	3979.5	177.1	551.1	21.3	35.0
2006	4828.1	4032.0	195.9	550.8	16.3	32.5
2007	4922.0	4111.2	184.0	582.3	14.1	29.8

Source: CSO: Labour market in the CR 1993-2007.

In the Czech Republic, the development of unemployment during the whole transformation period differed from the other Central and Eastern European countries. The unemployment rate of the CR fluctuated on the level of 3-4 % during the whole transformation period. The low unemployment rate led, among other, also to the pressure on the real wages increase and thus to weakening of one of the biggest comparative advantages – a cheap qualified labour.

After 1993, when the unemployment rate was 3.5 %, it grew steadily, with the slight exceptions of the years 1994 and 1995. In 2000 the average unemployment rate moved mainly above the level of 9 %. It then regarded mass unemployment of a sustained tendency and negative individual and social consequences. For the individuals, it meant the decrease of income with the consequent decrease of the level of living and the total life chances.

The long-term unemployment impacted first less qualified people and women after the maternity leave. After 1996, the unemployment of handicapped citizens increased rapidly, and also the situation of school graduates was critical. The offer of labour was in many professions completely different from the demand structure. Unemployment impacted also qualified male workers, who always used to have an advantaged position in the labour market compared to women or handicapped citizens. Women prevailed among the unemployed.

Alarming was also the still increasing number of the unemployed school graduates and young people.

The following table presents the development of unemployment rate and the numbers of the unemployed in the period 1993-2007.

Table No.3. Unemployment rate and the number of unemployed persons in the years 1993-2007

Year	Unemployment rate in %	Unemployment in ths persons
1993	4.3	220.0
1994	4.3	221.2
1995	4.0	208.1
1996	3.9	201.5
1997	4.8	248.3
1998	6.5	335.7
1999	8.7	454.1
2000	8.8	454.5
2001	8.1	418.3
2002	7.3	374.1
2003	7.8	399.1
2004	8.3	425.9
2005	7.9	410.2
2006	7.1	371.3
2007	5.3	276.3

Source: CSO: Labour market in the CR 1993 – 2007.

Labour market in the countryside

Employment in rural areas belongs still to the discussed questions. However, from the statistical viewpoint, it belongs among the problem topics, the same as defining of the countryside. The data are registered for the individual regions, respectively districts, but there are no statistics for rural regions or communes. It is only possible to analyse the selected data from the 2001 Census of People, Flats and Houses (further SLBD, which however, are already rather obsolete. Another source of data is the representative sociological researches, which, however, do not supply sufficient data in longer time series.

The first publication of the Czech Statistical Office (CSO) interested in the countryside was published at the end of 2008 under the title “The variants of the Countryside Delimitation and Their Reflection in Statistical Indicators in the Years 2000-2006“. Its aim was namely the definition of the notion countryside and acquiring a set of the relevant statistical indicators connected to it. The publication includes eight proposed variants of the countryside delimitation and the comparison of the series of different indicators for the indi-

vidual variants and regions. Regarding employment, the following data are offered (total, men, and women):

- Jobs (i.e. the number of workplaces per 1000 employed living in the region;
- Persons employed in agriculture;
- Employment rate (total, men, women);
- Job applicants (share in the population of the age 18-64);
- Development of the job applicants numbers in the years 2000-2006.

However, also this publication often draws from the SLBD 2001 data (the level of economic activity, number of jobs, share of people employed in agriculture), because no newer data are available in the demanded structure. Nevertheless, it is necessary to positively evaluate the first complex analysis regarding the topic, which brings about new and necessary information on the countryside.

For example, the graphs and the conclusive tables are showing that the level of economic activity in the countryside is (and that in all variants) lower approx. By 2 % than the CR average (61.3 %). This difference is lower regarding men (0.9 %), while it is considerably higher for women (3.25 % difference for the countryside as the total of communes up to 2 000 inhabitants, compared to the CR average, which is 53.6 %). Also the number of jobs (i.e. the sum of the permanent residents employed in the region plus the balance of commuters) per the total number of the employed living in the region shows considerable differences between the town and countryside. While in towns this value overreaches 1,100, in rural communes it moves in the interval 614-653 according to the variant. It means that towns are typical by the surplus of job opportunities over the number of inhabitants, while in the countryside the situation is the opposite.

Unemployment is another indicator usually connected with the countryside; however, this statement is not always supported by statistical data. The 2001 Census brought a surprising result – the unemployment rate in rural communes (up to 2000 inhabitants) was lower than in towns (8.93 compared to 9.38 %)[15]. However, as it is shown by the analyses of D.Spěšná[16], the situation changed in the following year and in 2007 the average registered unemployment rate in rural communes was by one half of the percentage point higher than in towns. However, rural unemployment is of a pronounced seasonal character.

[15] Maříková P.: Český venkov ze statistického pohledu, in: Majerová V. a kol.: Český venkov 2003 – Situace před vstupem do EU, str. 44

[16] D. Spěšná a kol.: Agrární zaměstnanost v kontextu rozvoje venkova, tématický úkol VÚZE, 2007, str. 23-26

The role of agriculture in the rural labour market

As already mentioned, agriculture is not at present the main economic branch of the Czech rural areas, which would employ the majority of population. The sector employs only less that one tenth of the rural areas inhabitants.[17]

Employment in agriculture is not only concentrated in rural communes (Spěšná states that in 2001, 63.2 % farmers originated from the countryside), but its share is continually increasing towards the smaller rural communes, as it is shown in the following table.

Table No. 4. Share of persons working in agriculture (incl. forestry and fishery) in the total economically active population according to the size of the commune

Share of workers in agriculture in %	Number of communes in the category	Share in rural communes (%)	In that the size category of the commune			
			Up to 200 inhabitants	200-499	500-999	1 000-1 999
Up to 4,99	845	15.00	123	230	289	203
5 - 9,99	1 336	23.1	236	470	398	232
10 - 14,99	1 233	21.88	315	488	298	132
15 - 19,99	898	15.94	315	354	175	54
20 - 24,99	558	9.90	208	246	79	25
25 - 29,99	349	6.19	170	149	26	4
30 - 34,99	203	3.60	121	73	7	2
35 - 39,99	113	2.01	85	23	5	0
40 - 44,99	50	0.89	43	5	2	0
45 - 49,99	21	0.37	17	3	1	0
50 +	28	0.50	28	0	0	0
Total	5 634	100.00	1 661	2 041	1 280	652

Source: SLBD 2001, CSO Prague (own computations).

In most rural communes, the share of people working in agriculture is lower than 20 % (from the total economically active persons); however, there are 28 communes with the share exceeding 50 %. Higher percentages of farmers (over 30 %) are concentrated into the small communes (up to 200 inhabitants). Then, neither in the smallest communes is agriculture the basic economic branch. According to the SLBD 2001 data, the highest share of rural population worked in the secondary sphere that is in industry (42.7 %), 39 % in the tertiary sector and 11.1 % in the primary sector. In towns, the employment in services prevails, which is the sector offering further possibilities also for the future development of the countryside.

[17] In 2001 in rural area 12%, in cities 2,3%.

Agriculture included in total 139, 338 economic subjects at the end of 2007 (according to the Register of Economic Subjects), the biggest part of which, more than 122 ths, and represented private entrepreneurs.[18] The basic overview of the agricultural subjects is presented by the following table.

Table No.5. Farming subjects according to the legal form

	Number of farming units	**Acreage of agricultural land in hectares**
Farming subjects total	39,396	3,518,073
In that according to legal form:		
Physical bodies total	36,455	1,034,568
Legal bodies total	2,941	2,483,505

Source: CSO, Structural Results of Agriculture 2007, data by September 30, 2007

From the presented overview of the latest statistical findings, it is obvious that the activity in agriculture is mainly performed by the physical bodies (namely agricultural entrepreneurs, individual farmers) than by the legal bodies, i.e. the companies, enterprises and co-operatives. These, however, in contrary to physical bodies, farm a considerably higher share of agricultural land. The most usual form of legal body in agriculture is a business company, co-operatives represent only less than one fifth of the total legal bodies.

Conclusion

Social-economic development from the 90s of the 20th century influenced considerably the Czech rural population life. It has reflected not only in the changed employment structure, but also in the basic changes of the subjects acting in rural areas and farming agricultural land. Transformation of agricultural co-operatives and other important changes in the property structure (privatisation, restitution) occurred. All these processes were reflected namely in rural areas. They brought about both positives, such as the possibility of private enterprising, restitution of the previously nationalised property and transition to market economy, but on the other side also many negatives. The hitherto social certainties were endangered, prices of the goods and services grew, the society has differentiated socially and unemployment increased. The negative consequences were manifested more in the countryside, where, above all, the employment was pronouncedly reduced in consequence of the end or changed form and orientation of agricultural enterprises. For some of the rural inhabitants, however, these changes presented a challenge to start or to renew private farm-

[18] Source: ČSÚ, Organizační statistika za 4. čtvrtletí 2007.

ing. Others were seeking employment in other sectors, what led to the increase in the services sector.

At present, agriculture does not fulfil the key role in the rural economy any more. Employment is concentrated to the other sectors, neither is the rural life so closely interconnected to agricultural production as it used to be in past. This situation is not only typical for the Czech Republic. It is mentioned also in the study Scenario 2020, which states in its conclusions: „Rural activity can exist without agriculture: rural dynamic is not equivalent to strong agriculture, and strong agriculture can exist where rural dynamic is limited.“[19]

Czech rural areas development was supported also by the EU accession. One of the positive consequences of this step is also the possibility to utilise the European funds financial means. At present, the most important for the countryside is the newly established EAFRD. Among other, it enables farmers to diversify into non-agricultural activities, what brings about the further development possibilities. Positive is above all the fact that the fund is not aimed at farmers only, but also at other actors of the rural areas. The measures aimed at these groups in the Program of Rural Development of the CR for the period 2007-2013 are included in the axes II. and III. Axis IV. is aimed at the Local Action Groups projects.

The future dynamics of rural development will depend namely on the improvement of the rural population quality of life as the basic prerequisite of the rural space stabilisation.

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Structural Changes in and Disadvantages of the Agri-Food Sector and Rural Areas of Hungary

Introduction

The preparation of the Hungarian agro-economy for European Union (EU) accession was uneven; therefore the experiences and results of EU membership until now are also uneven. To date, there have been more consequences of the accession which are endangering the future of Hungarian agro-economy than positive effects. In addition, these latter concern only a few branches of the agro-economy. The transformation of Hungarian agriculture has still not been completed; the country's position cannot be compared to that of the EU-15 countries which have been accustomed to a market economy for decades. Hungary has competitive disadvantages inherited from the past that have become even more apparent in the more intense market competition following the accession [see Popp and Potori, 2006*a*].

Hungary has suffered loss of markets partially due to the inherited weaknesses (weak organisation and obsolete technology, dispersed land structure, extreme differences in the quality of the production and farming activities, etc.) and in part to certain macroeconomic, social and political factors; structural strains have emerged and a great number of agricultural producers have discontinued their farming activities. Following the EU enlargement, the loss of markets and deterioration in the livestock raising and horticultural branches has further accelerated [see Udovecz and Potori, 2005; Udovecz *et al*., 2007; Udovecz *et al*., 2008]. Within a very short time, Hungary became a net importer of basic commodities (e.g. pork meat, dairy products and fruits) [see Potori and Nyárs, 2007]. Excess grain went to intervention stores, because crops arrived at lower prices from South America or from the new independent states of the former Soviet Union to the South European regions in need [see Popp and Potori 2006*b*].

This paper aims to briefly introduce the structural changes in the agri-food sector and in rural areas of Hungary in the past few years, while underlining the most crucial structural disadvantages. Many of the statements presented here are based on interviews made in 2008 with stakeholders in the different product chains,

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not only in Hungary but in neighbouring countries as well. As regards the specificity of problems, no solutions are suggested here.

Unfavourable macroeconomic and legal environment

The problems of the Hungarian agriculture and food industry are due not only to the special properties of agricultural production or food manufacturing, but have a horizontal character. The country's competitiveness problems are evident in several fields. Firstly, its taxation system is judged as extremely bad. High taxes are accompanied by poor quality public services; opinions on law enforcement and health care, but above all, on the social policy aimed at reducing poverty and inequality of chances are especially negative. In addition, most of the indicators in the field of education and training also denote a remarkable competitiveness handicap.

In 2006, the total revenues from taxes and contributions within the GDP amounted to 37.1% in Hungary, exceeding the Czech Republic (36.9%), Poland (33.5%) and Slovakia (29.8%). In 2007, the country realised the highest annual growth of this index from among the 30 OECD Member States; total revenues from taxes and contributions amounted to 39.3% of GDP [OECD, 2008].

Taxes imposed on labour are particularly high; the actual tax burden in this field considerably exceeds even the Western European average. The average proportion of the aggregate tax burdens on payroll costs and labour was of 42.5% both in the case of the EU-15 and the OECD Member States, while it amounted to 43% in the OECD member EU-19 countries in 2007. At the same time, the total tax burden in Hungary amounted to 54.4%, ranking the country second after Belgium (55.5%) among the OECD member EU-19 countries. The high costs of labour encourage illegal employment.

The administrative charges borne by the enterprises in Hungary are excessive, amounting to 6.8% of GDP [European Commission, 2007], placing the country among the tail-enders within the Community. Only one third or one quarter of the burdens derive from EU obligations, the major part, an estimated HUF 1,000 billion, is generated by the Hungarian regulatory and administrative environment. Instead of regulatory systems which are simple and easy to comply with, market participants face complicated legal provisions, ever more difficult to observe.

The incidence of the black economy in the GDP is estimated at 20 to 30% in Hungary, in contrast with the 7 to 8% in the developed EU Member States (in the opinion of market players, the domestic estimate is valid practically for all agricultural branches; furthermore, for all product chains [see Udovecz *et al.*, 2009]). According to experience, the hidden economy flourishes where tax burdens are relatively high, legal security is weak and there is acute corruption and enduring

and widespread unemployment. The lack of transparency in the taxation system corrupts above all the tax morality of smaller enterprises.

The black economy renders integration and concentration in product chains more difficult, as well as efficient representation and assertion of interests. As any activity can be more profitable in the black economy, it does not pay to join the legal economy (e.g. a producer organisation or a producer group). This is (also) a reason why a considerable proportion of Hungarian producers are not organised and do not use professional consulting, leading to major competitive disadvantages.

Due to their nature, black marketeers exercise huge pressure on buying and selling prices (e.g. a considerable portion of the goods in cross-border grain trade is transferred without being invoiced, therefore even the largest traders are compelled from time to time to abandon some of their important markets such as the northern part of Italy). Illegal enterprises operate at lower costs, thus reducing the output prices and forcing up input prices (e.g. in the pig raising sector, higher prices are paid for piglets and pigs for fattening) and they sell their products at higher prices (without invoice and VAT payment) that are cheaper for processors, while legally operating enterprises are forced out of business.

The strength of contractual relationships is fundamental for the competitiveness of the economy. In Hungary, the situation is especially critical due to payment delays, non-payment, black marketing and to default or failure of delivery by subcontractors or suppliers. In addition to the inaccuracies of the frequently modified legal rules, also the quick obsoletion and the lack of legal knowledge of managers (entrepreneurs) and legal counsels contribute to this situation.

Changes to the economic and legal environment occur in an *ad hoc* and incalculable manner. The continuous changes and the lack of transparency present a great temptation for influencing the decisions on the allocation of the EU supports, frightening away foreign capital at the same time.

In Hungary, the high level of interest rates impairs the competitive position of domestic enterprises both in the domestic and foreign markets, as they have access to resources required for the indispensable improvements or for the financing of their production only at high costs. This was of little account for creditable enterprises in the past, as they were able to draw loans in foreign exchange (FX) under more favourable conditions. However, due to the financial market crisis, the costs of FX loans have also increased.

Downstream regionalisation and rationalisation

To have an accurate picture of the agricultural production in Hungary, it is worth overviewing the position of the processing industry and trade. Transport, refrigeration and other logistic issues will have an ever increasing influence on the

international competitiveness and on sustainability (environmental protection, crude oil prices, etc.) in the different product chains. Concentration, specialisation and regionalisation of processing and trade will further increase in the future, and stakeholders should be prepared for that. In the long term, it is of no avail to look for tools which encumber or prevent the imports of agricultural and food products, or to experience the restrictions on imports as a "success" and to communicate this as an "achievement", instead of focusing on the necessity of, and revealing the possibilities for, improving international competitiveness.

Large food industrial companies in Europe and overseas have transferred and continue to transfer their activities abroad, with the aim of gaining markets. In Europe, the borders are steadily losing importance (also) in this respect. The Hungarian food economy is necessarily integrated into the regional "division of labour". Since the specialisation and expansion of the leading companies is indispensable, the principal question is: will Hungary remain a country mainly producing raw materials or a country manufacturing products with higher added-value? Will it assume mainly unskilled work, simply carrying out instructions, generating low profits, or instead, tasks requiring high levels of qualification, granting high degree of freedom in decision-making and yielding high profits?

As a consequence of regionalisation, the efficiency and thus also the profitability of the food industry and food trade improve, as the advantages deriving from the differing consumption structure of the different countries may be better exploited (e.g. pork lard is popular in Hungary, while it is almost unmarketable in the neighbouring Austria; therefore a company operating in the field of secondary processing and food retail will of course attempt to optimise to some extent the distribution of pork meat in the markets preferring different products). Also, primary processors endeavour to optimise their output/sales according to the local consumption habits and to the demand and offer (e.g. in some countries cutlet is more popular, while in others pork ham is preferred). Holdings have production facilities in several countries and compare the production costs, processes and practices ("customs") on a daily basis and usually invest the funds available for development – in compliance with their growth strategies – in countries where the highest profits may be realised. As a matter of course, their decisions are influenced by the "profit transfer" possibilities granted by the different national regulations, which are not available for domestic enterprises operating only within their own domestic market.

Hungary represents a small consumer market and the enterprises (Hungarian companies and local businesses and subsidiaries of foreign companies) are small in international comparison; they are compelled to predominantly satisfy the domestic market demand with their production, or this is their "role". Hungarian owned enterprises try to maintain their market share but only a few of them are able to

expand their activities due to the lack of capital, to the obsolete technology, poor innovation and small volume but, above all, to the fact that they mainly produce products intended for niche markets. The export-oriented food producers have withdrawn from the country and have abandoned, or continue to abandon, production. For the time being it seems that Hungary will not have a leading role in regional food production (with the exception of arable crops that may be considered as raw materials). Furthermore, with the actual proprietary structure, even the maintenance of the existing positions is problematic [Udovecz *et al*., 2009].

Due to the price increases of basic materials and of energy, taxes and employers' labour costs, outdated factories and obsolete products, as well as in the consequence of forcing development support granted to small and medium size factories beforehand, production capacities and jobs are steadily lost. Reasons for factory shutdowns and business reductions include bankruptcy, winding up, outsourcing, rationalisation, focusing on core activities, as well as the change of technology, replacement of labour, currency exchange rates, input prices and loss of markets. It is still not clear whether the final objective of the concentration of the food industry is through market acquisition in the product chains or in the rationalisation of production.

According to the data of the Hungarian Central Statistical Office (KSH), in 2007 domestic food industrial production decreased by 4.7% and domestic sales by 5.6%, from which it can be concluded that Hungary did not succeed in controlling the increase in imported foodstuffs. It is also evident that the economic difficulties have contributed to the deterioration of the position of the domestic food industry (and especially that of the meat and milk processing enterprises) and of the livestock raising sector. It is apparent that no increase in the living standards of the population – facing decreasing or stagnating wages and pensions during the past two years, hardly maintaining the level of consumption through drawing FX loans – can be expected within the short term, i.e. during the next one or to years.

Continuous innovation constitutes an important precondition of survival. However, from the EUROSTAT assessment it is clear that the development and investment inclination and ability of the Hungarian food industry enterprises is very low in international comparison. Neglect of innovation may be attributed to several reasons. On the one part, firms with really strong capital position and provided with proper technologies are mainly owned by foreign investors and operate as subsidiaries of multinational companies. Within the multinational groups of companies, the R+D tasks can be divided among the members. The really innovative, new products are often developed and manufactured by the parent company, and subsidiaries – in the better case – take over the know-how against payment of a fee or, more frequently, the finished product is directly

imported. The medium size enterprises, as a rule, are poor in capital, with few resources remaining for R+D.

Agricultural support

In Hungary, agricultural policy means in practice "support policy", having the main objective of drawing the available EU funds in full and dispersing such funds as widely as possible, without regard to the long term disadvantageous economic and social effects. The Hungarian system of agricultural subsidies has encouraged excessive investment in machinery and ill-considered plantings. No efficient methods have been developed for monitoring the results and the long term positive effects "promised" in the applications and for preventing irresponsible decisions.

Rural development subsidies constitute the most important sources of investments and improvements in the years to come. However, drawing down of the development subsidies remains below the expectations, especially as regards livestock farmers, because the great majority of market players is not attracted to modernisation due to the acute lack of capital, the expensive loans, the market conditions and prospects, as well as to the maintenance for several years of the production obligations imposed as precondition to eligibility for support. However, until 2013 there is no chance for reviewing rural development and the reallocation of funds among the axes.

The introduction of the CAP and the application of the new direct support system has had different impacts on the different sectors. Thanks to the increase of supports and incomes, the arable crop farmers, especially producers of grains, oilseed, protein and fibre plants, have gained a favourable position. From among livestock farmers, beef and sheep raisers receive direct supports. The branches of "granivores" (pigs and poultry), not directly regulated, and therefore falling into a disadvantageous position following the EU accession, may be supported to a very restricted extent, even at a cost to the national budget; they may receive support only for financing the establishment of animal welfare conditions, waste disposal and veterinary costs.

In 2004, 208 thousand farmers applied for direct subsidies in Hungary, their number decreasing to 188 thousand in 2008. This is due to the liquidation or merger of some smaller farms. The major part of the complementary national direct payments topping up the single area payment has been decoupled from production by 2008 (see attachment).

Demographic and social problems in agriculture and rural areas

Inactivity of the working-age population is one of the most important limiting factors precluding growth of wealth and stable state economy. Since the EU accession, the number of jobs has increased in all Central European countries except

for Hungary. In addition to the good standard of public education, in the Czech Republic and in Slovenia the mainly small but favourable changes in the taxation system, as well as the reduction of the pension system's counterincentive effects have contributed to the growth of employment. In Slovakia, cuts in labour taxes to an extremely low level in international comparison and the reduction of social allowances have also contributed (Table 1).

Table 1. Rates of employment and unemployment in the OECD and EU Member States in 2007

Country	**Employment**[1] (%)	**Unemployment**[2] (%)
Austria	71.4	4.4
Belgium	62.0	7.5
Czech Republic	66.1	5.3
Denmark	77.1	3.8
Finland	70.3	6.9
French	64.6	8.3
Germany	69.4	8.4
Greece	61.4	8.3
Hungary	57.3	7.4
Ireland	69.1	4.6
Italy	58.7	6.1
Luxembourg	64.2	4.1
Netherlands	76.0	3.2
Poland	57.0	9.6
Portugal	67.8	8.0
Slovakia	60.7	11.1
Spain	65.6	8.3
Sweden	74.2	6.1
United Kingdom	71.3	5.3

[1] Percentage of the population between 15 and 64 years of age.
[2] Rate of unemployed as a percentage of the economically active population.
Source: EUROSTAT.

In Hungary, the employment rate practically stagnated between 2000 and 2007, despite the remarkable economic growth, while it has slightly decreased in the last year. This is due to the fact that several important elements of economic

policy – operating a number of counterincentives acting against taking up employment – have not been changed since the change of regime; at most the period of stabilisation during 1995 and 1996 can be considered as an exception. Increasing the pensions and granting the social aids has been always more important for the decision-makers than improving the quality of public education, having crucial importance for the employment, and of public transport, or even the perceptible decrease of labour costs.

In the first quarter of 2008, the unemployment rate amounted to about 8%, against 7.4% in 2007; this means nearly 333 thousand registered unemployed persons. The economically less developed Northern and Eastern Hungarian regions are especially affected.

According to the data of the Ministry of Social Affairs and Labour, a very small proportion of the persons with low level of education is employed: just one quarter only of the men completing only eight years of elementary school have a job; less than one tenth of men and just 2% of women with less than eight years of elementary education are working. Nearly half of the persons registered as jobseekers have completed eight years of elementary school. The majority of persons receiving regular social aid have low education; their incidence is regionally concentrated, 90% of them living in the most disadvantaged micro-regions.

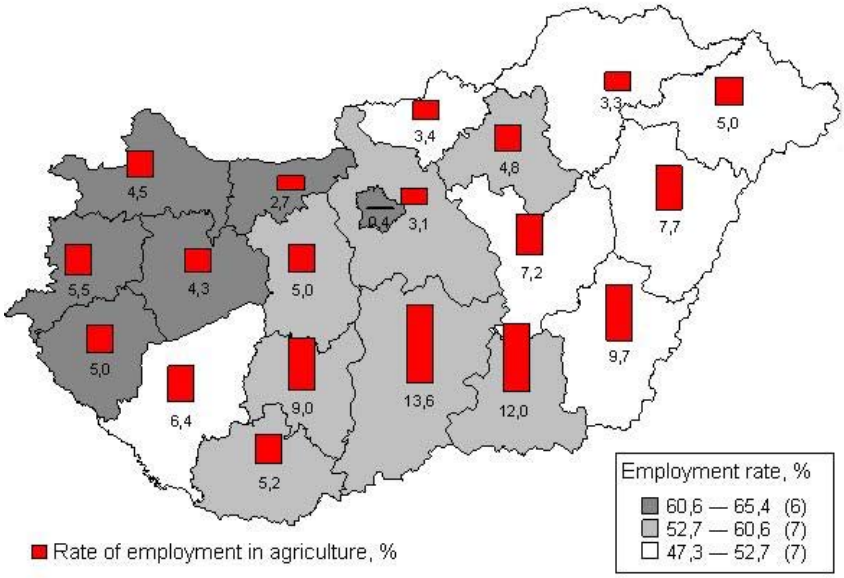
Unfortunately, the development funds intended for the strengthening of cohesion do not lead to considerable changes. The comprehensive assessment of the State Audit Office during evaluation of the implementation of the first National Development Plan has emphasised that the principle of equal opportunities had not been sufficiently applied in the utilisation of the EU funds; more successful applications had been submitted by enterprises with stronger capital position, by more developed small regions and by larger settlements, thus further increasing their existing financial and economic advantages. At the same time, the ex-post financing of the EU supports leads to liquidity problems in the case of applicants with weak capital supply, compelled to counterbalance these effects by temporary reduction of their business.

Though unemployment is a nation-wide problem, meeting the demand for manual labour is becoming ever more difficult in agriculture, due to disinterest and lack of motivation – at least within the margins of legality. Therefore, formerly profitable sectors have shrunk or even disappeared (e.g. harvesting herbs and fruit picking), and the less developed small regions and settlements lag behind even more. However, the horticultural sectors, for example, could have a more important role in providing subsistence for people living in the rural areas and maintaining the population of these regions.

The number of farms performing agricultural activities decreased in Hungary between 2000 and 2007 from 967 thousand to 626 thousand. These are mainly

agricultural households; the number of commodity producing farms (exceeding 2 European Size Units) can be estimated at about 90 thousand. In 2007, private farms operated on 56% of the agricultural land, and corporate entities on 44%. The share of agriculture in employment has fallen within 15 years to 5%, i.e. to one third of its previous total.

Figure 1. Employment rate and percentage of employment in agriculture in 2005

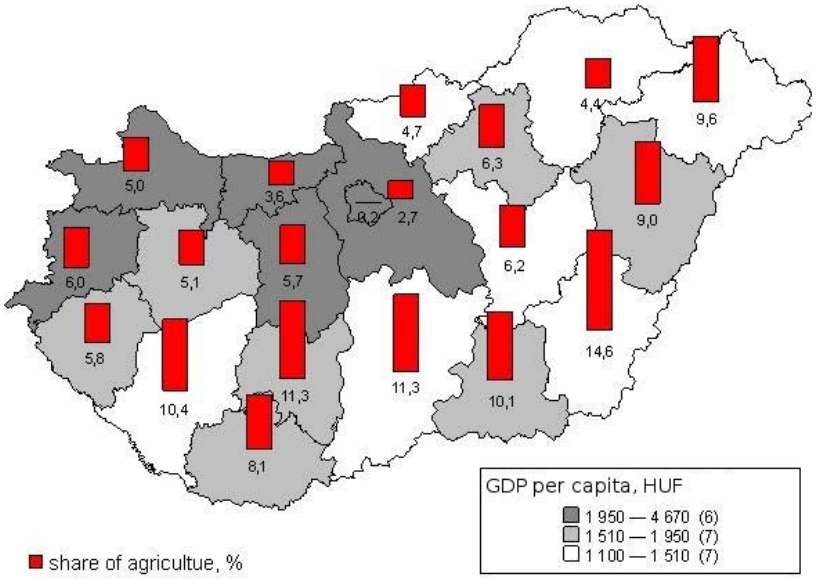


Source: Agricultural Economics Research Institute, Regional Policy Department.

Low agricultural employment characterises the economically more developed regions, among them the vicinity of Budapest and Northern Transdanubia, as well as Northern Hungary, which is provided with less favourable ecological conditions and is also economically less developed. On the contrary, in some counties of the Great Plain the percentage of those employed in agriculture even exceeds 10%. In these regions, agriculture also represents a considerably higher proportion of the local GDP (Figure 1 and Figure 2).

The most severe social consequences of the structural changes in agriculture are to be found in the Great Plain region. Nearly 44% of the population involved in agriculture is living here. This is explained by the income granting a living (or income support) in the areas with favourable natural conditions, or, in other areas (Northern Hungary), by the constraint of subsistence, the need for self-sufficiency. There are also salient differences according to settlement types in the employment proportion of the agricultural sector: attachment of people living in villages is three or even four times stronger than that of townspeople. In fact, there are no other available income sources for many people living in small villages.

Figure 2. Per capita gross domestic product and the share of the agriculture therein



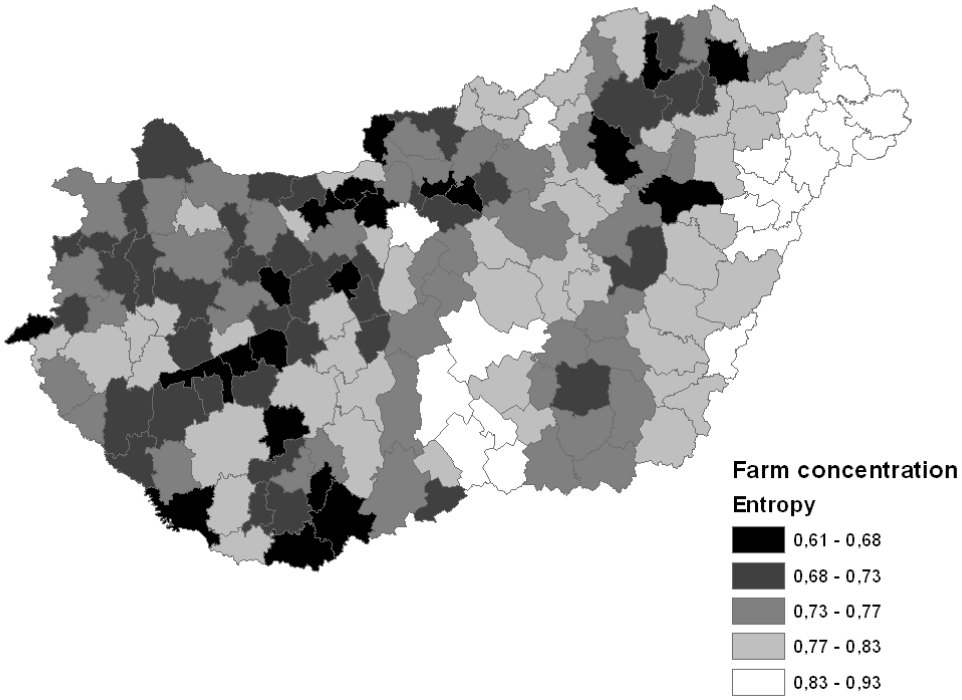
Source: Agricultural Economics Research Institute, Regional Policy Department.

Figure 3 shows the farm concentration of crop production at micro-regional (LAU1) level. The entropy of land use is lower if the farm concentration is high; dark areas on the map refer to a structure of large holdings, while light areas have a structure of small farms. In those areas where the share of agriculture is higher, either as a percentage of employment or local GDP, the concentration of land use is lower. Most of the Great Plain falls into this category.

On the other hand, in areas where the industry is much more developed, such as around Budapest and the northern part of Transdanubia, the concentration of the farms is greater. This can be explained by the proximity of significant employment opportunities in the manufacturing and service sectors that has encouraged the migration of the agricultural workforce away from farming. Corresponding to the international trends and processes in the world market, it is likely that the concentration of crop production will increase in the future, but it will affect different parts of the country differently. In the Great Plain region especially, significant tension can be expected in the labour market as the farm structure becomes more concentrated.

The less favoured situation of the Great Plain is worsened by the high production risks which are caused by the lower annual rainfall, the extreme distribution of the precipitation throughout the year, the poorer water absorbing and preserving capacity of the soils and to the threat of flooding from swollen rivers and from a rise in the water table in low-lying areas.

Figure 3. Farm concentration of crop production, 2007



Source: Pesti [2009].

Hungarian agriculture is characterised by ageing of holders: in 2003, 39%, while in 2007 already 42% of the land area of private farms has been cultivated by farmers over 55 years of age, while the proportion of the areas utilised by the younger holders has been stagnating (Table 2). This is partly due to the fact that a career in agriculture is not attractive for the young, as the average wages in this branch of the economy amounted to merely 74.8% of the national average.

Table 2. Distribution of the private farmers by age group in proportion of their land use

Age Group	2003	2005	2007
< 35 years	8.2%	9.1%	8.3%
35-54 years	52.7%	52.8%	49.3%
≥ 55 years	39.1%	38.1%	42.4%

Source: Farm Structure Survey.

Supports intended for rejuvenating agriculture, first of all the pensioning off of people before they reach statutory retirement age, has not yet led to the desirable results. Following publication of the call, only 61 farmers submitted their applications in 2008 and the majority thereof has been rejected. The

Ministry of Agriculture and Rural Development has already modified the strict conditions (e.g. the transmitter now may have incomes from other activities, may keep a limited number of animals for his/her self-subsistence, an agricultural university degree of the assignee is not desirable anymore, etc.) but regardless of this, no break-through can be expected as the transfer of livestock farms still remains subject to payment of duty.

The unfavourable age structure of farming is slightly modified by the level of qualification of the farmers. Though 72% of the commodity-producing private farmers (exceeding 2 European Size Units) have no agricultural qualification, about 67% of the utilised agricultural area is cultivated by farmers having special qualifications (Table 3).

Table 3. Distribution of the farmers by degree of qualification in percentage of the land used by them

Agricultural training of the holder (manager)	**2005**
Basic training	6.5 %
Agricultural training	67.5 %
Practical experience only	26.0 %

Source: Farm Structure Survey.

In 2005, altogether 5% of the farms have conducted some activities beyond basic agricultural activities, connected however with farming. The most popular diversified activities were the provision of agricultural machinery services, transport, carriage and fruit and vegetable processing. Rural tourism with catering and handicrafts are less common. The expansion of the activities is much more typical of the larger farms with stronger capital position and led by people with higher qualifications than of the small farms struggling for subsistence.

Developments in the major agricultural sectors

Among others, Potori and Nyárs [2007] and Udovecz *et al*. [2007] have already reported on the evolution of markets and on the short term anticipations based on the experiences gained during the first years of EU membership. The following notes add to these reports.

Cereals and oilseeds

Cereals and oilseeds production is the sector of the Hungarian agriculture that has been most integrated into the international market. The presence of international trading companies, the established business relationships and the relatively settled market has allowed the country to exploit the sales possibilities abroad. Despite this,

Hungary did not succeed in properly managing the market disturbances which emerged – partly due to the introduction of the common market regulations – following EU accession [see Popp and Potori, 2006*b*].

Due to the continuous decline in livestock numbers, domestic demand for grain fodder has decreased, therefore, in addition to exports, more sales possibilities could be expected only from industrial processing. However, the extreme price fluctuations experienced recently and the saturation of the European bio-fuel market have dissuaded those intending to invest in bio-ethanol production in the country (in the second half of 2008, only one bio-ethanol factory operated using just 50% of its capacity). And as to exports: due to the high transport costs, in case of a strong supply market, Hungary can be competitive in Europe and in the Mediterranean region only at very low prices. The logistic disadvantage deriving from the country's isolation from seaports is further enhanced by the weak competitiveness of the railway transport (expensive track use, long turn-round times, and lack of covered loading platforms and of weighbridges). The transportation of dry bulk commodities on the internal waterways is not easy either, due to the lack of covered loading platforms and of vessel capacities; but above all, to the extreme changes in the water level (the Danube is navigable in about six to nine months in a year). The advantages of road transportation consist in the relatively quick access to the national road network, the oversupply of transport capacities, in the possibility of return cargo and in the relative stability of the related costs.

The correct choice of varieties and the application of agro-technology are very important in arable crop production. Producers often commit the error of sowing "success varieties" on the basis of the previous year's experiences, although there may be large differences as regards achievements attainable with the seed varieties by regions and by years. The low rate of renewal and the use of farm saved seed are increasingly typical in Hungary, since the use of official certified seed is no more a precondition for granting subsidies.

The lack of irrigable lands constitutes a further problem. The expansion of irrigation seems to be the most simple solution for preventing or reducing drought damage; however, in addition to high costs, the implementation of new irrigation systems has several other drawbacks (e.g. when implementing a water supply backbone system, the approval of landowners along its path has to be obtained, what is in several cases inexecutable). According to censuses regarding farm structure, the area of irrigable lands amounted to 308 thousand ha in 2000, but only to 141 thousand ha in 2007; thus the ratio of irrigable lands declined from 6.8% to 3.3% (the EU average exceeded 13% in 2005, according to EUROSTAT data). Taking into account the climatic, soil and other conditions in Hungary, preferably more than 10% of the agricultural area is to be irrigated.

As a consequence of the above factors, extreme weather conditions result in extreme variations in production. The harvest of cereals and oilseeds is mainly dependent on weather conditions, above all on the annual rainfall and its distribution. In addition, the available stock is characterised by lack of homogeneity, by quality variation, imputable to the dispersed land structure, the excessively wide assortment, the withholding of inputs and to the mixing of lots. Thus, in case of a supply market, competitors have an advantage over Hungary. Exporters have to increasingly be aware that commodities of standard quality are and will be supplied to the traditional export markets in large quantities also from third countries with at least € 20-30 per ton price advantage. Large foreign mills require homogeneous goods. Hungarian wheat exports are typically sold for feed; only in better years is some wheat sold for quality improvement to neighbouring countries.

None of the cereal processing industries are in a favourable situation, indicating the danger of Hungary becoming a raw material producer. As a consequence, marketing risks for farmers may increase, while the added-value may be realised abroad (the country exports jobs). The competitive edges of the processing industry are principally corrupted by unexploited capacities, the low level of technology, the black economy, and the pressure exercised by commercial chains on prices. As profitability is low, investments may primarily be expected by foreign owned companies.

During recent years, about 2 to 2.2 million tons of cereals have been used by the processing industry. The milling industry represented the largest share thereof, with 1.2 to 1.3 million tons. According to stakeholders, no remarkable increase in the demand for raw materials can be expected in this sector either; however, there is a possibility for rationalisation of the market. It may be a slow process but the presence of foreign capital is already perceivable, both as regards innovation and in the increase of efficiency.

The quantity of oilseeds available for export depends on the raw material requirements of the domestic processing industry, among others on the implementation of the envisaged new vegetable oil (or perhaps bio-diesel) production capacities. The already existing large crushing mills (i.e. at Martfű, Sajóbábony and Visonta) and the ones planned in the short term (i.e. at Foktő and Hódmezővásárhely) may process approximately 1.7 million tons of oilseeds annually. It is not possible to meet this demand from domestic production only, but potential imports should be taken into account, for example from Ukraine and Romania. It can be expected that Hungary's main markets (i.e. the Netherlands, Austria and Italy) will also require Hungarian oilseeds in the future; however, rape-seed exports may strongly fall back or even entirely cease in the medium term.

Fruits and vegetables

In Hungary, horticultural production is characterised by two extremes. Some farmers are producing with obsolete methods, due to the lack of capital, with low yields as a result. At the same time, a group of producers has emerged that employs intensive and professional growing technologies; their yields are close to the best in Europe. Among the 27 EU Member States, Hungary ranks 11th on the basis of vegetable production volume and 9th or 10th as regards fruit production. Horticultural products account for about 17-18% of the gross production value of the country's agriculture.

In Hungary, the vegetable growing area decreased from 120 to 90 thousand ha in the years following EU accession, while that of fruit production varied between 80 and 90 thousand ha. Despite this, the production of vegetables amounted to 1.8 million tons on average for the years 2004 to 2008, approaching the record yields of the 1990s. However, at the same time the production quantity of fruits decreased considerably, falling back to one quarter of the average yields of the 1990s for some fruits (e.g. for apricots and plums).

Export revenues from fresh and processed vegetables and fruits increased from € 588.2 million of 2004 to € 763.8 million by 2008. At the same time, the share of these two sectors within the aggregate export value of the agriculture and food industry decreased from 19.3% to 13.6%, which can be explained by the dynamic increase of exports of other agricultural sectors (in the first line, by putting on the market the grains accumulated in intervention stores). 80% of the Hungarian vegetable and fruit export is directed to the EU Member States. The value of imports of fresh and processed vegetables and fruits increased from € 321.6 million in 2004 to € 510.6 million in 2008; however, the foreign trade balance of the horticultural products has been always positive, due to the exports of vegetables.

First of all, the efficiency of the horticultural production and marketing is impaired by the small proportion of irrigable lands and the low degree of organisation of the producers. However, the integration of the producers already started in the years preceding the EU accession: while there was only one registered producer organisation in 1999, 69 of them already operated in the year of accession and about 100 producer organisations with small memberships were registered in 2005. Their number halved by 2008, due to mergers. Unfortunately, only 20 to 25 thousand farmers are members of some organisation, hardly amounting to one fifth of all fruit producers. Producer organisations market only 15-16% of the total Hungarian vegetable and fruit production.

In Hungary, 26% of the vegetable growing lands and only 6% of the orchards are irrigated. With this proportion, the country is last but one among the 27 EU Member States. The main reason for the lack of irrigation consists, in addition to high electricity costs, in the obsolete irrigation systems.

Dairy

The cattle stock in Hungary has almost continuously decreased in recent years: it totalled 701 thousand heads on 1 December 2008, 3% less than the five years ago. Similarly to other EU Member States, the number of cows presents a decreasing trend; it fell by 6% between 2004 and 2008, reaching 324 thousand on 1 December 2008.

Following the EU accession, domestic milk production has also declined. In addition, the geographical distribution of the cow stock is quite uneven with the processing capacities in many regions. In comparison to the EU average, the cow stock per dairy farm in Hungary is high, production is more concentrated. In the cost structure, feed costs constitute the weakest point in the country. Though there are great differences among the dairy farms, the majority of the raisers fall behind the competitors as regards the efficiency of feed utilisation and green fodder use. The relatively high costs of labour reveals a disadvantage in the field of organisation and productivity, though global competitiveness will be determined by the relative cost efficiency already in the medium term. As from 2004, Hungary has become a net importer both in volume and in value of the foreign trade of milk and dairy products. The share of imported dairy products in final consumption is estimated at 30 to 35%.

Since the time of EU accession, Hungary's raw milk exports have increased more than ten times, amounting to 313 thousand tons in 2008, or about 15% of the production. In milk equivalent, 20 to 25% of the dairy products are also exported. The structure of exports regarding both the countries of destination and the range of products has been changed during the last one or two years. Although raw milk deliveries to Italy still represent the bulk of the exports, the share of Romania and Slovenia has grown considerably. Producer prices of milk in Hungary are mainly determined by the sales prices of exports to Italy, besides the indirect effects of prices in Germany. The imports of raw milk, cream and bulk butter have also continuously increased since the accession. The utilisation of the national milk quota hardly reaches 85%.

Producer prices of milk in the EU have peaked at the end of 2007. Domestic prices followed the EU trends with a couple of months of delay and started to decline only after January 2008, from € 377.2 per ton. During 2008, the producer price of raw milk has continuously fallen, threatening the position of milk producers. In 2009, further decrease is expected, due to the reduction of feed prices. The gradual elimination of the quota system may have an indirect but shocking influence on the milk sector in Hungary. Member States with better production efficiency may take over the Italian market, thus narrowing the sales possibilities for Hungarian farmers, while as a consequence domestic prices could become even more depressed.

Despite the large number of processors, concentration in the dairy industry is relatively high. The utilisation of capacity has slightly improved during the last few years on average, but continues to be very low (just around 50%, according to estimates). The milk market is characterised by a high degree of inelasticity; neither producers nor processors are able to quickly react to the market changes. In order to better utilise their capacities, processors should co-operate with each other; the lack of such co-operation is one of the factors weakening their competitiveness. While in the past the dominant strategy focused on the increase of market share, today the increase of profits has become the main objective, e.g. through restructuring the product range or better utilisation of capacity. Although processors aim at product development and at more up-to-date packaging and marketing, they still lag behind their competitors as regards innovation, and the domestic market is still dominated by brands which existed prior to the transition.

As regards marketing, the dominant players are commercial chains with strategies focused unilaterally on the consumers. They adjust quickly to price movements and with their own-brand products they are weakening the market positions of processors (the expansion of producers' brands may only be expected in the case of products with a higher added-value). The dairy industry is under pressure from two sides; the commercial sector depresses prices because of the strong competition for consumers, while processors are competing with each other and with exporters for raw materials and for the better utilisation of their capacities. Since the Hungarian dairy industry has a disadvantage against competitors in terms of efficiency and technology, the market share of domestic processing companies may further shrink, unavoidably leading to a selection among enterprises and projecting an inflow of foreign capital.

Pigmeat

The decline of pig stock in Hungary started already prior to the EU accession. On 1 December 2008 the number of pigs totalled 3.38 million, 1.5 million less than on 1 December 2003. The major part of this fall was due to the decrease (1.1 million) of the stock held by private farmers. Also the changes in the number of sows reflect the pig stock decrease. On 1 December 2008 the sow stock totalled 230 thousand heads, compared to 327 thousand on 1 December 2003. Nearly 66% of the pig stock was already held by pig raising plants with a stock over 1 thousand heads in 2007. During the period between 2003 and 2007, the number of farms raising 1 to 50 pigs decreased by 151 thousand, while their pig stock has declined by 800 thousand heads.

In 2004, Hungary became a net importer of live pigs both in quality and in value. The live pig imports increased from 31 thousand tons in 2004 to 72 thousand tons in 2008. On the contrary, exports amounted to merely 32 thousand tons in 2008.

The overwhelming majority of live pig imports originated from Poland. The proportion of imported live pigs exceeded 18% within the total buying up quantity in 2008. As regards pork meat, the foreign trade balance was negative in quantitative terms only in 2005, remaining positive throughout in value. The export value amounted to € 234 million in 2008, while that of the imports to € 155 million.

Contrary to Western European countries with developed pig raising sectors, the farms have not specialised in Hungary, though different raising technologies are required for the breeding stock and for fattening pigs. Most pig raisers, having no arable lands, are facing difficulties because they are not able to produce sufficient grain fodder and to dispose of, in a safe manner, the generated liquid manure. The current Land Act does not allow land acquisition or long term lease by legal entities, thus land ownership and land use are largely separated from livestock farming. As regards efficiency, the most severe problems are in the smaller progeny, the slow weight increase and the low efficiency of feed utilisation, the long fatting period, the extended rotation of sows, as well as the considerable labour costs. Without modern plants and technology, it is not worth applying high value genetics. Green or brown field investments, or closing for a while and disinfection of the existing plants prior to the settlement would be the best solution to this problem.

Domestic pork meat producers are not able to enter into competition with the leading pork producing countries also due to geographic, eco-political and social reasons. Due to the geographical location of the country, both the purchase of protein resources and the exports of pork meat to third countries are remarkably more expensive than in the case of the competitors, as a consequence of higher transport costs. Also the heating and cooling costs are higher than for example in Denmark or in Brazil, where there are less temperature fluctuations. The number of crimes against property has increased in the livestock farms, thus the necessity to organise guarding and protection also increases production costs. Additional problems to be faced by the domestic pig raisers consist in the high interest rate of foreign capital (14 to 16%), the unorganised product chain and the lack of professional consulting.

Today in Hungary, the income positions of the companies performing further processing are more stable, while pig slaughtering and cutting is usually loss-making. It is expected that the production of meat products will be better able to yield profits in the long term; therefore, enterprises desiring to remain in the market in the slaughtering and cutting business must make serious efforts to improve their efficiency. Following the increase of the VAT rate to 20%, ever more companies in the meat industry avoid paying tax; according to estimates, about 25 to 35% of the carcase meat is sold on the black market.

Poultry

The consumption of poultry meat has increased considerably in Hungary; since 2004, these are the most preferred meat types. As from the EU accession, the percentage of imported products has expanded from 10% to 15% within the total poultry meat consumption. Between 2004 and 2008, the composition of consumption had hardly shown any variations, contrary to the consumption habits undergoing remarkable changes. At present, cut poultry products have a leading role, their share exceeding 70% in 2008. In recent years, the consumption of poultry meat has shifted to the highly processed convenience products.

Nearly 80% of the Hungarian poultry stock consists of hens and broilers, with broilers being determinative. The number of broilers presented significant fluctuations from 2003 to 2008, between 15 and 27 million. Since the EU accession, the stocks of laying hens, turkeys, geese and ducks show decreasing trends. Also the continuous strengthening of the requirements concerning raising conditions and of animal health has contributed to the decline of poultry meat production in the country. Following the vanishing of backyard poultry raising, most of the medium-size farms have also been liquidated, therefore a few large producers now control the market. Due to the weak concentration of the processing industry, several enterprises may be terminated in the short term. In the absence of important financial investments and/or of sufficient capital reserves, hardly any developments improving international competitiveness are likely to be achieved in the next few years.

In 2008, Hungary exported 128 thousand tons of poultry meat, while imports amounted to 57 thousand tons. Thus the foreign trade balance has increased to 71 thousand tons, thanks to the rise in turkey, duck and goose meat sales on foreign markets. The yearly average of broiler meat exports varied around 30 thousand tons between 2004 and 2008; however, foreign sales are clearly showing a decreasing trend during this period. In 2008, the balance of broiler meat exports and imports amounted to plus 8 thousand tons. The buyers of Hungarian broiler meat include both EU Member States and Russia.

Commercial chains are prevailing in the finished product marketing; their share in the fresh meat sales is steadily increasing. The position of large processors is prejudiced by the strong pressure on prices by illegally operating plants. The black economy is considerable also in the poultry sector, it hampers concentration. In addition, an enormous challenge is also represented by the fact that cheap parts (i.e. legs and wings) are dumped on countries like Hungary from other Member States, where the demand is concentrated on chicken breast sellable at a high price level. It would be reasonable for the large processors to form marketing groups, although this is fundamentally prevented by the fact that, due to mutual distrust, they have no disposition for co-operation and exchange of information on any level.

Domestic waterfowl consumption is primarily restricted by the price sensitivity of consumers. Furthermore, waterfowl is not attractive for the younger generations, due to their high calorific and fat content. The main problem in this sector is due to the ever stricter animal welfare standards, rendering uncertain the production of fattened fowl. During the animal welfare scandal initiated by the *Four Paws* organisation from Austria, chopped products from duck and goose liver processing have been taken in focus, which constitute serious competition for the German market players. As a consequence, the largest fowl processing plant has stopped its product lines. Its withdrawal from the market has rendered uncertain the subsistence of the fowl raising farmers.

Though broilers raised in Hungary are up to the world standard, producers are able to exploit the genetic potential of the breeding stock only in part, because the raising technologies are of a lower standard. Remarkable differences may be detected among the single groups of poultry farmers as regards their technical equipment, skills, efficiency indices and production costs and profitability.

Stakeholders in the product chain consider the applied raising technology as unsuitable. Decision-makers failed to give preference in tenders for support to the modernisation of buildings; thus it is increasingly difficult for farmers with obsolete stables to comply with the stricter animal health requirements. The support system should encourage the reconstruction and establishment of plants applying a closed breeding and raising technology and the containment of traditional fowl keeping. The vertical integration implemented on the waterfowl product chain is very beneficial in terms of efficiency. The foreign capital behind the different processing plants interested in processing fowl for roasting and for meat products highly contributes to the mitigation of the differences between the domestic and Western European slaughterhouses and processing plants. The fact that, due to the single channel marketing and to the insufficiency of capital, producers are largely defenceless against slaughterhouses constitutes a problem.

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SAPS & CNDPs HUN 2004-2008

	2008	2007	2006	2005*	2004	
					After 01/05	Before 01/05
SAPS	**€ 132.83 /ha** *HUF 32,255 /ha*	**€ 105.52 /ha*** *HUF 25,583 /ha*	**€ 102.29 /ha** *HUF 24,421 /ha*	**€ 86.21 /ha** *HUF 18,904 /ha*	**€ 70.22 €/ha**	-
CNDP Beef	**HUF 46,000 /head**	**HUF 41,000 /head**	**HUF 40,000 /head**	**€ 145.26 /head**	**HUF 34,700 /head**	-
CNDP Suckler Cows	**HUF 31,500 /head** **+HUF 9,350 /head**	**HUF 28,500 /head** **+HUF 8,000 /head**	**HUF 35,000 /head**	**€ 130.21 /head**	-	**HUF 40,000 /head**
CNDP Cattle Extensification	**HUF 17,050 /head**	**HUF 13,800 /head**	**HUF 13,000 /head**	**€ 48.76 /head**	-	-
CNDP Ewes Meat Milk	**HUF 1,640 /head** **HUF 1,315 /head**	**HUF 1,600 /head** **HUF 1,300 /head**	**HUF 1,500 /head** **HUF 1,200 /head**	**€ 6.05 /head** **€ 5.02 /head**	-	**HUF 1,600 /head**
CNDP *Rural World*	**HUF 1,400 /head**	**HUF 1,200 /head**	**HUF 1,180 /head**	**€ 4.20 /head**	-	-
CNDP Dairy	**HUF 8,030 /t**	**HUF 8,070 /t**	**HUF 8,100 /t**	**€ 19.43 /t**	-	**HUF 2,000 /t**
CNDP Tobacco Virginia type Burley type	**HUF 898,500 /ha** **+HUF 266,000 /ha** **HUF 715,000 /ha** **+HUF 205,500 /ha**	**HUF 880,000 /ha** **+HUF 120,000 /ha** **HUF 700,000 /ha** **+HUF 90,500 /ha**	**HUF 985,000 /ha** **HUF 779,000 /ha**	**€ 3 508.42 /ha** **€ 2 774.86 /ha**	**HUF 740,000 /ha** **HUF 580,000 /ha**	**HUF 8,000 /ha**
CNDP Rice**	**HUF 58,100 /ha** **+HUF 18,400 /ha**	**HUF 56,500 /ha** **+HUF 11,000 /ha**	**HUF 66,000 /ha**	**€ 91,97 /ha**	**HUF 59,000 /ha**	
CNDP Arable Crops	**HUF 11,200 /ha**	**HUF 12,000 /ha** *HUF 11,542 /ha*	**HUF 12,765 /ha** *HUF 12,405 /ha*	**€ 80.92 /ha** *HUF 19,142 /ha*	**HUF 11,000 /ha** *HUF 9,000 /ha***	
CNDP Nuts	**HUF 30,100 /ha**	**HUF 29,500 /ha**	**HUF 31,000 /ha**	**€ 120.75 /ha**	-	
CNDP Energy Crops Cereals and oilseeds Energy grass Short rotation coppice	**€ 45/ha*****	**€ 45/ha*****	**HUF 7,600 /ha** **HUF 20,000 /ha** **HUF 46,900 /ha**	**€ 27.00 /ha** **€ 32.00 /ha** **€ 194.13 /ha**	-	

* For CNDP limits only: € 1 = HUF 240 (maximum payment amounts were given in euro by the national legislation in 2005). ** Limit was lowered due to tight budget.
*** SAPS reference area was changed from 4,355,000 to 4,829,000 ha in 2007. **** CNDP for rice was included in the CNDP for arable crops in 2006.
***** From EU budget.
Italics: amount of actual SAPS and CNDP payments (deductions were made because of an overshoot in area). **Red letters**: decoupled payments (starting in 2007).

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Regional differences of Bulgarian rural development

Introduction

All regions, which do not include on their territory a settlement (town) with a population over 30 000 inhabitants and a density under 150 people per sq. km are classified in Bulgaria as rural. From a statistical point of view they are not accounted at any administrative division level, excluding the municipality one. The administrative division is based on the European NUTS and LAU 1/2 classification of the country. According it, Bulgaria is subdivided into NUTS 0 – the country, NUTS 1 – 2 zones from the six planning regions, NUTS 2 – six planning regions, NUTS 4 districts, LAU 1 – municipality and LAU 2 – a settlement. There is a big variety of criteria, featuring the municipalities – as different kinds of rural, less favoured areas est. Considering this in the present research will be studied the regional problems of different levels of territorial division, according the available statistical information.

1. Regional Aspects of the Agricultural Development

1.1. Regional agricultural development

Agriculture is an important branch for Bulgarian economy. Despite the progressive diminution of its part in GVA, it is considerably over the average for EU. For 2006 this index for Bulgaria is 8.6 compared to 1.9 for EU-27.

The primary sectors' part in the national economy is a natural process, but in the same time, it is a result from the agriculture decline. The data shows that for the period 2000-2006, the production amount has been retained and the diversions are due to the climatic conditions in the respective year. In five from the sixth regions the part of agriculture in GVA is relatively the same; in the South-West region (SW) it is considerably lower.

In two planning regions – South-Central (SC) and North-East (NE), has been produced almost half of the agricultural production in the country. Agricultural production per ha is higher than the average for the country in two regions – SC and SW, which reflects the different production structure first of all.

Figure 1. Share of agriculture and forestry in GVA
by planning regions in 2005, %

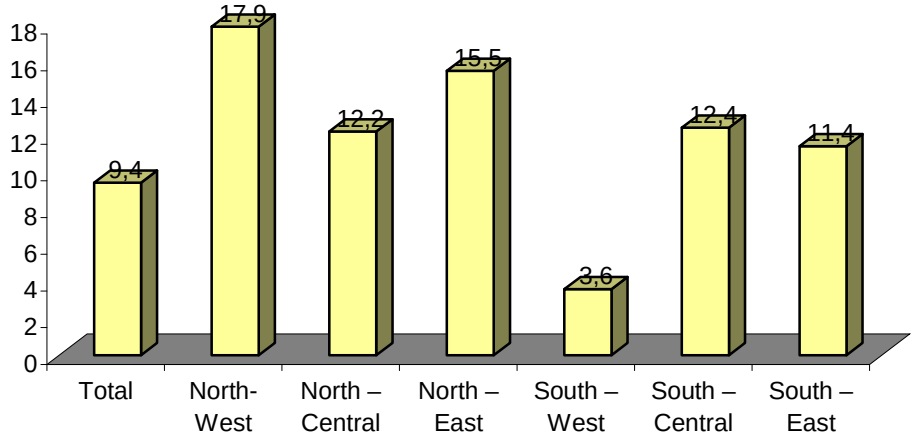


Table 1. GVA in agriculture and forestry by planning regions
and on ha, 2005 г., thousand Levs

	Total	North-West	North-Central	North East	South-West	South-Central	South-East
GVA	3 322 232	320 921	500 370	746 867	507 715	896 939	349 420
%	100	9.7	15.1	22.5	15.3	27.0	10.5
Utilized agricultural area	5 190 053	529 048	1 021 877	1 228 203	693 053	1 064 793	653 079
GVA/per ha	640.1	606.6	489.7	608.1	732.6	842.4	535.0

The part of the unutilized agricultural land (UAL) is higher – 9.1%, in the NW it reaches 17.2% of the surface with agricultural destination. It is considered that the statistical data sub-estimates the surface of the abandoned agricultural land.

Table 2. Milk production by planning regions in 2006, Thousand liters

Planning regions	Total	Cow milk	Buffalo milk	Sheep milk	Goats milk
Total	1 471 389	1 260 883	6 891	104 201	99 414
North-West	141 652	116 202	1 951	7 217	16 282
North-Central	224 852	186 610	1 676	12 900	23 666
North-East	363 588	311 690	412	30 229	21 257
South-West	166 025	135 845	444	14 050	15 686
South-Central	418 370	379 938	1 763	23 946	12 723
South-East	156 902	130 598	645	15 859	9 800

Source: Ministry of Agriculture and Food Supply. Agrostatistics Directorate.

Two thirds of the milk production are concentrated in 3 regions: SC – 28.4%. North West (NW) – 24.7% and NC – 15.3%.

In conclusion. we can notice the following:

- The part of the agriculture and the forestry in the GVA of Bulgaria is considerably higher than the same of EU-27.
- For the period 2000-2006 there are not considerable changes in the production amount of the sector.
- In two regions of planning - SC and NE has been produced almost the half of agricultural production in the country.
- In structural aspect the agricultural land is occupied mostly by cereals - 31%, permanent grassland and meadows orchards – 36% and technical oleaginous crops – 15.55 %.
- The production per ha is considerably lower than the same in EU-27.

1.2. Impact of SAPARD upon agriculture and the rural regions

The objectives and aims of SAPARD, developed in the NARDP (2007--2013) and in RDP, are still far away of achievement.

At a first place can not be outlined a considerable increase of the agricultural competitiveness. The share of this sector into the GVA and the GDP continues its drop down, mainly due to the crisis situation in the branch. At the same time, the impact upon the environment and the support for agriculture in LFA is relatively weak. Of a greatest significance is the circumstance of lack of notable change in the social-economic situation in the rural regions. Opposite, the economic growth lags from the registered in the urbanized regions and as a consequence the quality of life yields, compared to the one in the towns.

It could be remarked that SAPARD is not in condition and has not the aim to completely overcome the negative trend of development of the rural regions. Of no doubts are the positive effects of the program's development. At the same time, the program's achievement has some unexpected, but worrying results. The assimilated through the program financial means increased the grade of regional differentiation - the less developed planning regions were granted a smaller financial resource. Still more indicative is the frame of the individual beneficiaries – the huge producers and processors absorbed the prevailing part of the subsidies. At the same time is obvious the positive impact:

- upon the employment - through opening of new and more qualitative working places;
- production modernization. especially in the food products processing sector. and some cases of improved infrastructure.

The advance related to the environmental preservation is modest. The problems proceed from the strong insufficiency of waste matters collection capacity, sewerage system and lack of processing installations. The basic contamination sources are the ones with phosphates and ammonia of the

superficial and sedimentary waters. Local water contaminations by animal wastes; damages caused by abandoning of utilized lands, perennials and pastures, as well as deserted and not maintained systems of land tenure.

As a principle, the environment preservation measures have not a direct economic effect, although in a long-term aspect they lead to a sustainable development. The modest results are due to the strong priority of SAPARD in the fields of farm modernization investments and the processing sector, as well as to the late start of sewerage systems projects performance.

2. Social-economic and demographic differences

2.1. Divergence of labour market in the rural zones of the planning region

The regional divergence of rate of unemployment, measured by standard deviation and rate of variation is high. At the end of the period 2002-2006. its values are considerably higher rather in the beginning (tabl. 3). This means that the taken measures for the overcoming of the social-economic backwardness of the rural zones of different planning regions in Bulgaria have not achieved the desired effect referring the unemployment level.

Table 3. Descriptive statistics of basic indicators for labor market in the rural zones of the planning regions

	mean	min	max	standart deviation	coefficient of variation
2002					
Unemployment rate	25.24	16.86	31.68	4.98	19.73
Long-term unemployment [1]	53.36	45.70	61.01	5.07	9.50
Youth unemployment2[2]	28.82	26.22	33.14	2.27	7.88
2006					
Unemployment rate	18.25	10.67	31.91	7.12	39.3
Long-term unemployment	61.35	55.5	76.61	5.93	9.67
Youth unemployment	20.49	18.15	23.85	1.82	8.88

Source: Regions. districts and municipalities in the Republic of Bulgaria 2002. NSI; Regions. districts and municipalities in the Republic of Bulgaria 2006. NSI; author's calculations.

The maximum value of the rate of unemployment in the rural parts of the planning regions of Bulgaria during 2006 is registered in NW. It is almost three time as high as the minimum – the one of the South-West planning region (SW).

As it is seen from fig. 2 the prevailing part of rural municipalities with most problematic labor market during 2006 and 2007 are located in two of the planning regions – NW and South-East planning region (SE). The statistical data indicates for a similar frame during 2002.

[1] *Ratio of the unemployed* registered more than one year

[2] *Ratio of the unemployed not older than 29 ages*

The planning regions differ from one side in unemployment level at their rural zones and from the other in the basic structural features of the unemployment. For example the standard deviation of relative part of long-term unemployment reaches high and growing values for the analyzed period (tabl. 3). Most impacted from the long-term unemployment are the already mentioned regions – NW (71.61%) and SE (66.75%).

The problem of the labor market in this two planning regions has already converted in a social integration problem. Due to the high values of the rates of unemployment and its high sustainability (the high shares of the long-term unemployment) exists a danger of marginalization of large layers of rural population in the discussed planning regions.

Figure 2. Unemployment rate in the rural zones of the planning regions, 2006

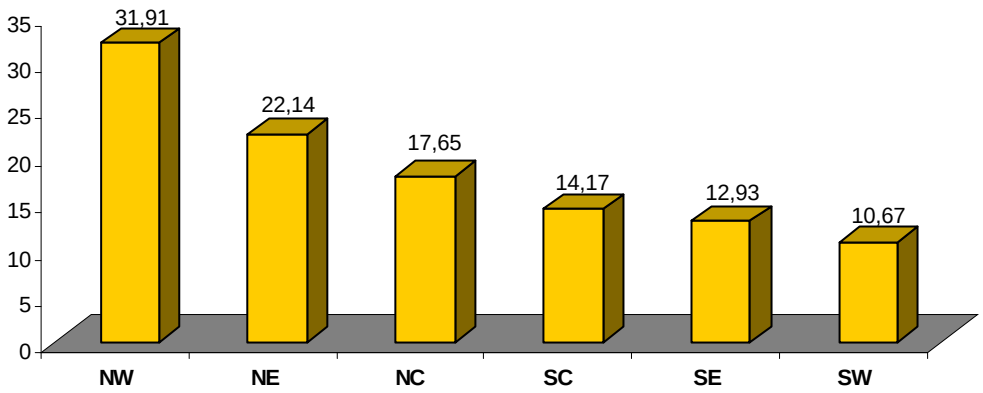
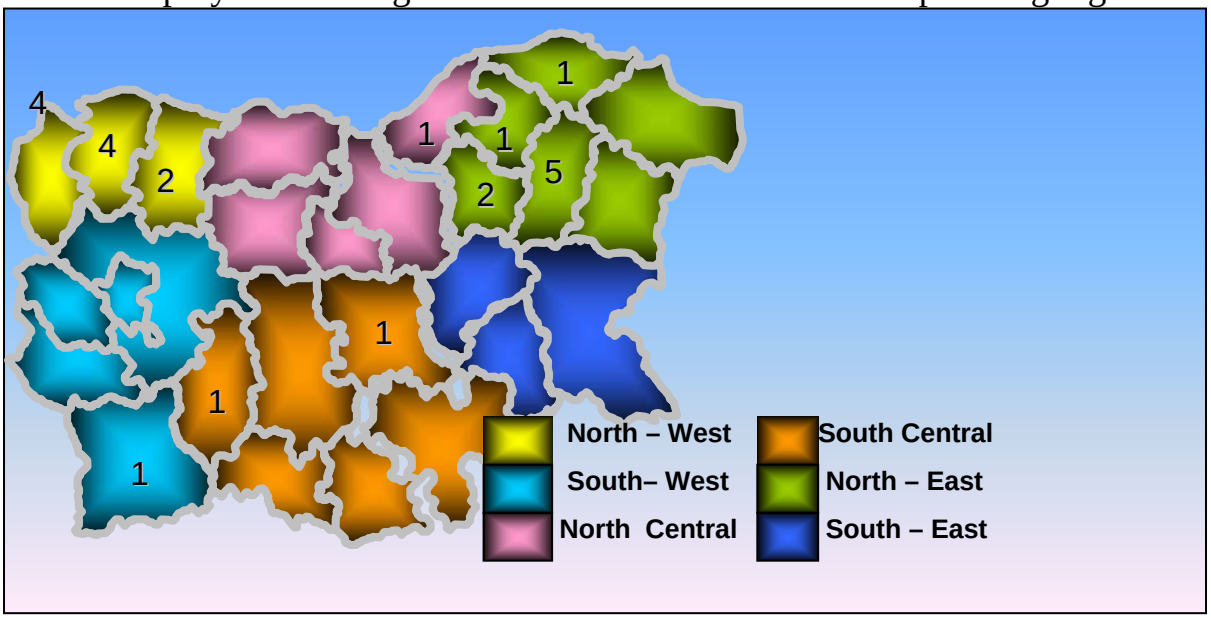


Figure 3. Number of rural municipalities with a highest average year level of unemployment during 2006 and 2007[3] for the different planning regions



[3] Three times higher than the average for the country

The data of the unemployment structure (tabl. 3) indicates that only the regional differences of the youth unemployment are not significant.

Several economic and demographic particularities of the NW sharpen the market problems of labour in the rural municipalities.

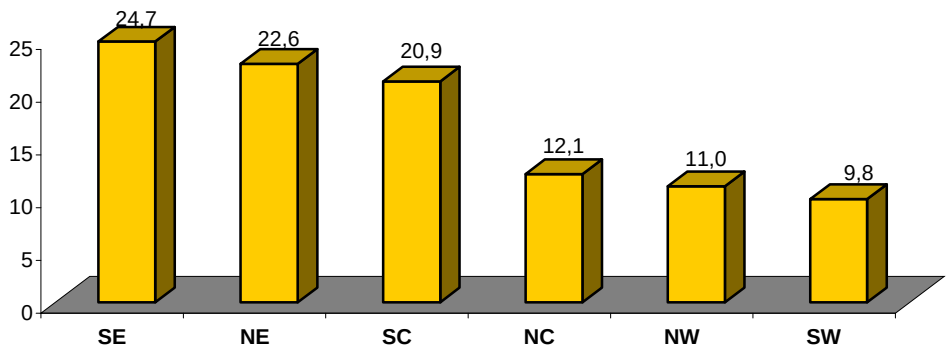
At a first place it is a region with undiversified economy with dominant and high employment in agriculture. It could be assumed that these particularities of the regional economy having in mind the Bulgarian particularities of agriculture employment – high and sustainable hidden unemployment in the branch (Malamova, 2008) will generate additional tension at the labor market in the rural regions of the SW.

The statistical data for the sales incomes per inhabitant for the period 1999-2002 show that only for the SW municipalities with a high level of unemployment (with a very small exceptions) esteem a firm trend of a decrease of company's activity. The reasons for this could be searched in some unfavorable features of the regional business environment.

A specific demographic feature of the NW rural zone is the high rate of age dependency[4]. (79.0% for an average value for the planning regions of 61.4%). This means a relatively higher charging of the working age population with the costs of the maintenance of the "dependent" ages and consequently, a higher sensitivity of the labor force to the quality of employment in the aspects of productivity and payment.

The active measures of the employment policy directed toward this planning region should emphasize upon improving the environment for the development of small and middle enterprises and the stimulation of business for the employment extension ant improving its quality.

Figure 4. Relative shares of the occupied persons with lower secondary and lower education for planning regions, 2006



[4] *The age-dependency rate is the ratio between the number of dependants (according to the UN methodology- persons aged 0-15 and 65 and olde) per 100 persons of the independent population (15-64 years) at the end of the year , the age dependency rate.*

Another planning region with a high tension at the labor market in its rural part – NE has specific particularities of the labor force which should be foreseen in the planning and directing the active measures of the employment. As it is notable from fig. 4 it belongs to the regions with high relative share of the low educated layer of the employed – (22.6% for maximum value - 24.7%, minimum value of 9.8% and an average value for the planning regions-18.6%) . This hides risks for the discrepancy of the education and qualification of the labor force to the market's demand.Therefore the active policy should emphasize upon the development of the human resources through qualification and pre-qualification providing a capacity and experience for a higher rate of accession of the European funds financial means and stimulation of business for the development of the forms of continuous training.

2.2. Rural population development by planning regions and districts

The constant decrease of the rural population is one of the most serious problems of the development of Bulgarian villages. During 2006 its number has decreased with 8.2% compared with 2001. The process of diminishing of rural population is connected with strong worsening of its age structure which causes an increase of the index middle age of the village inhabitants. In 2001, this index was 44.2 years, while during 2006 it reached 45.3 which is with 5.6 years higher compared with the average age of the urban population [2].

Although the rural population all over the country decreases are observed different rates of this trend for the specific planning regions. The percentage of reduction of rural population during 2006, compared to 2001 varies from - 10.1 for NW to – 4.2% for the SE. Excluding the Region of Sofia-city where the inhabitant's number increases in all remaining regions is observed a diminishing number of village population. This indicates that the migrating from other parts of the country people prefer to settle either into the capital or into the nearby located villages.

There are several districts with specific ethnic features throughout the country where a lower rate of decrease of rural population is observed compared to the average one for the country as a whole. Such are for example the districts of Razgrad, Targovishte, Shumen, Hascovo and Kardzhali where the Turkish ethnos is prevailing. For them the decrease varies from - 2.8 to - 3.9 %. Similar is the situation in the district of Sliven mainly inhabited with a gypsies ethnos which for the studied period has lost around 2.4 % from its village population.

The dynamics of rural population are determinately impacted by the flowing processes in the natural and mechanical movement of population. Analysis of the changes in natural growth of the number of rural inhabitants during 2006

compared to 2001 indicates a preservation of its negative values. The NW leads the list with highest negative natural growth. during 2006 with - 24.0 % while the lowest one (- 8.5) belongs to the SE part of the country. The lowest and the highest margins of the value of the index of natural growth of rural population studied by regions are correspondingly – 31.9 for the district of Vidin and - 2.0 for Kardzhali district [3].

The developed quantitative feature of rural population in a high grade is determined by the mechanical movement of people toward the settlement direction in the migration processes. The remittent trend of the migration processes into the country and of the decrease of the relative share of the migration flow "from village to town" started during the 90 years of the last century continues its actuality. Due to the constantly decreasing number of village population and especially of personages of the younger age groups it has dropped down from 34.3% for the period 1976-1985 to 24.7% during 2004 and almost preserves unchanged till 2006 – amounts to 24.8%. Analogical is the situation with the migration flows "town-town" and "village-village".

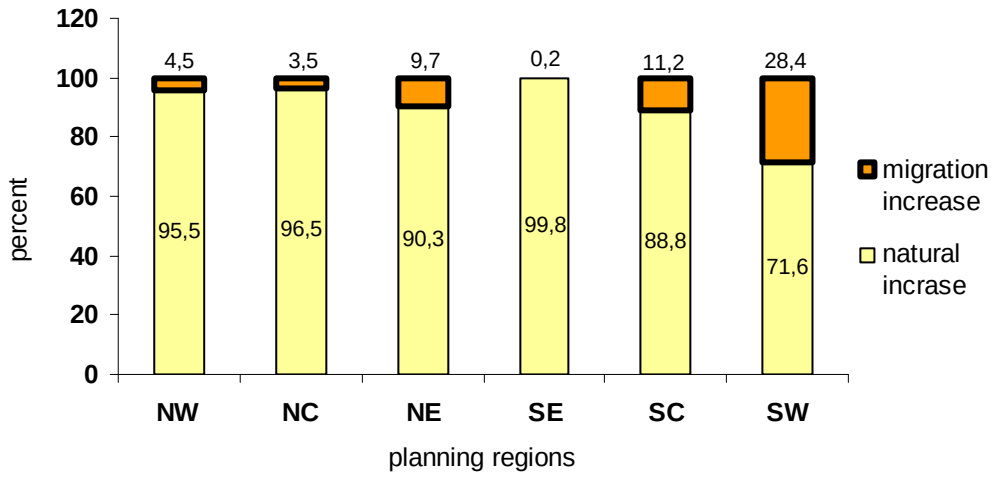
The launched drastic changes in the Bulgarian agriculture at the end of the 20^{eth} century impacted in a determined grade the range of resettlements from towns to villages. The restoration of property upon land gave an initial impetus towards returning back to the villages of part of this population which had left them due to different reasons in the previous periods. The relative share of the migration flow "town-village" during 1992-1993 reached 23.4 % compared to 13.3% during 1985. Posterior the gradually observed enthusiasm for returning to the native places started to slow down and since 2004 till nowadays the share of the migrated personages from towns to villages detained its constant level – around 20%. It is obvious that in the near future the level of impact of this factor over the demographic potential will remain approximately the same as a basic source of human resources for the villages [3,4].

The outlined conclusions related to interior migration directions are not valid in an equal grade for the full number of regions. The region of Smolyan for example is with a biggest deviation from the common trend where practically the share of the migration from villages to towns reaches 40% and is comparable to the scale of outflow of rural population typical for the 70-80 years of the past century. Practically the depopulation of the villages of the Smolyan region continues. On one hand it is due to their mountainous and semi-mountainous terrenes' location and on the other this fact is indicative that in spite of the favorable ecologic features of the region, as a lower level than the average values for the country as a whole of harmful emissions in the atmosphere – sulfur and ammonia oxides, methane etc.; and the valuable natural features of the villages in

the region, the economic, technical, social and other kind of living conditions in these hard accessible places make them not desirable as a permanent living place. In the Rodopi Mountain settled places in the region of Smolyan the unemployment index has one of the highest values – 16.2%, against 9% for the country during 2006. In some typical village communes of the region it is still higher, reaching levels of 22.6%.

The significance of the natural and mechanical growth for the change of the number of rural population by regions of projection could be followed from

Fig. 5. Relative shares of natural and mechanical growths in the change of rural population during 2006 (%)



Source: Own calculations.

As it is seen from the graphic upon, in the formation of the human potential, the natural growth has a rather higher significance compared with the mechanical growth. This result could be explained with the advancing in age of the village population, which leads to high values of the mortality index and correspondingly a low birth rate. This is typical for the majority of the planning regions. Exceptions from this conclusion represent only the SW, SC and Central regions.

The process of natural and mechanical movement of population has caused a determined distribution of villages' population (index of variation among regions with a value of 7.1). The largest part of rural inhabitants lives in SC – almost 30%. A smaller amount, respectively 19.7% and 17% of rural population is concentrated in the NE and SW. Near to these values is the relative shear of rural population of the NC – 15.6% [3,4]. On the base of the performed analysis of the dynamics of total and rural population for the period 2001 – 2006 in regional and district aspect could be made the following more significant conclusions:

- Although, a general trend of decrease of rural population is observed. its strength varies for the different planning regions and districts. Highest rate of rural population looses is outlined in the regions of Vidin, Montana, Pazardzhic and Yambol, while lowest looses of human resources are registered in the villages of the regions of Dobritch, Sliven and Stara Zagora. The number of rural population in the region of Sofia –city has grown up with 5.8%.
- The villages located around Sofia – city differ considerably from the point of view of their strength of attraction compared to the villages located on the territory of the other big district centers. The compounding villages of the biggest district centers as Plovdiv, Varna, Ruse, Sofia-district, Pleven, Yambol etc. continue to attract and extract inhabitants from smaller settlements.
- With a higher rate of importance for the decrease of the rural population is the negative natural growth than its mechanical movement. This is typical for all the planning regions.

3. Possibilities to decrease the social-economic and demographic differentiation

3.1. Impact of the rural tourism upon the social-economic development of the planning regions

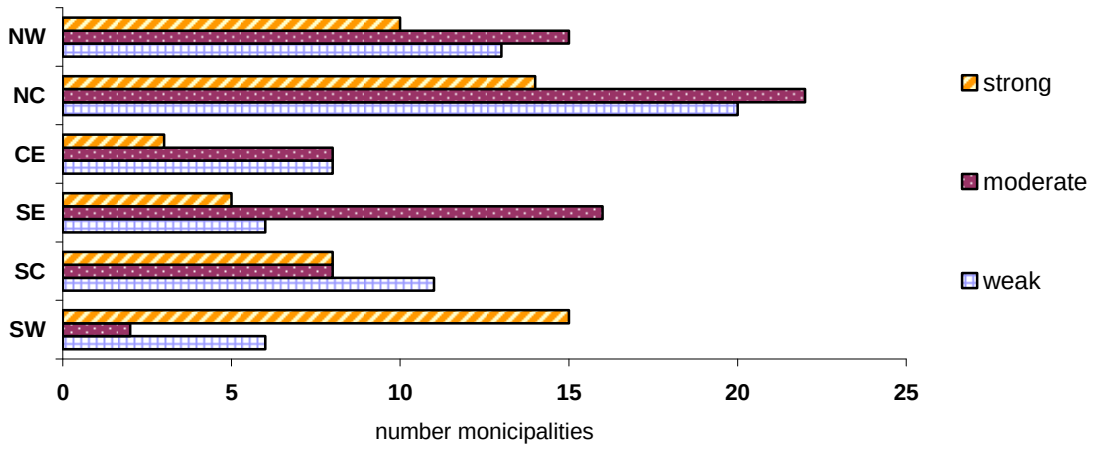
During the last 10-15 years is observed an accelerated development of rural tourism as a significant alternative form of occupation and income source of population in the rural regions. There are over 500 centers, offering rural tourism services. Their establishment and functioning have an important positive influence upon the social-economic development of rural areas in various aspects. The most significant of them are as follows: increase of the employment rate and the incomes of the part of local inhabitants, while the tourist infrastructure is being set up; employment and incomes of the occupied in tourism; stimuli for the improvement of the general infrastructure and services in a determined municipality, due to the common requirements for tourism development; investment of a part of incomes from tourism in tourist infrastructure or in other activities; stimulate the agricultural development. handicrafts and the processing of food products, due to the increase of the demand of quality products by tourists and local inhabitants; improving of the business climate of the corresponding municipalities; the valorization of agricultural production and other branches, offering it to tourists; contribution for the depopulation of rural municipalities vitalizing a number of activities for the needs of tourism; improving of the demographic development; bettering of the conditions of storing and utilization

of the local resources; attracting the interest to the local way of living, traditions and culture; and generally enrich the spiritual live of local population.

All these effects are not only a result of the development of rural tourism. At the actual stage, the occupied in the tourist branch supplement their employment and incomes with other activities (over 60% of the inquired by the Institute of Agricultural Economics/IAE/ quotation). Some additional activities, achieved in the rural regions are of importance but the influence of the rural tourism has more complex character. It is directly or indirectly linked with lots of other activities (branches and sub branches). Part of the mentioned directions of impact refers only to the occupied in tourism and their families, but most of them reflect positively upon the living conditions of the whole local community. In complex terms, they have a significant contribution for the vitality of the rural regions.

The impact of the rural tourism upon the social-economic development of rural municipalities by planning regions has different intensity and significance. The differences are determined by the peculiarities of the regions: grade of development of the rural tourism and the presence of possibilities of combining or supplementing it with other kinds of tourism; development of other branches related to it: grade of development of services and infrastructure. The analysis of the tourist resources and the grade of their development, show that of a bigger importance for them are the natural features, followed by the purposefully created human activities, as well as the direct participation of the subjective factor. The complex appearance of all these factors determines a different grade of influence of rural tourism (Fig. 6).

Figure 6. Classification of rural municipalities by planning regions, according the grade of impact or rural tourism upon the social economic development



In Bulgaria, as a whole in more than 80% of the rural municipalities and in 72% of the total municipality number the tourism and in a high grade the rural one influence the social-economic development. It differs by planning regions and municipalities. For a small number of them, the tourism is a main branch. A highest grade of influence, according municipality number with developed tourism has the SE and SC, followed by the SW.

SE is typical with strongly developed sea tourism, which influenced positively the rural tourism in the nearby sea cost areas in the Southern part of the region. The more detailed analysis of the grade of impact of the rural tourism in this region shows, that highest is the share of the municipalities upon which its impact is strong or moderate (36%). Similar distribution of the impact is observed in the SC. In this region, the most significant factor which strengthened the rural tourism development, respectively its impact upon local development is the beautiful nature and vast mountains, especially the Rodopi, where are concentrated most of the tourist locations and the impact over the social-economic development of the municipalities is extremely strongly expressed. For 36% of the municipalities with tourism this impact is considerable and for 39% it is moderate. In the SW which traditionally includes municipalities with other kind of developed tourism in 34% of the rural tourism municipalities its impact is strong, in 39% it is moderate and only in 17% - weak. In the NW the rural tourism has a strong and moderate influence respectively in 28% and 8% of the municipalities and in 65% of them it is weekly expressed. This is logical. as actually the rural tourism in the NWR is concentrated in some limited zones – in and around Vratza Balkan, Berkovitza, Varshetz etc. In these micro regions it is successfully combined with mountain and SPA tourism. More special attention deserves the NC. In it the share of the municipalities upon which the rural tourism strongly impacts the social-economic development is lower. However the municipalities with strongly expressed influence overpass 41%, the ones with a moderate such are almost 30% of the total number. The natural center around which gravitate the municipalities with strongly developed tourism, including the rural type is the Central Balkan and its lower parts. It forms as a region with strongly developed tourism, where the rural extremely successfully supplements the mountain, fishing and hunting ones, dominating in the building infrastructure. In the NE dominates the sea tourism and in only 22% of the municipalities the rural tourism has a significant impact.

The analysis of the development of the rural tourism in Bulgaria indicates that for the bigger part of the rural municipalities it has positive, well expressed influence upon their social-economic development. The grade of impact by planning regions and especially by municipalities is different. A biggest impor-

tance for the local development has the rural tourism for micro regions, approbated as tourist destinations.

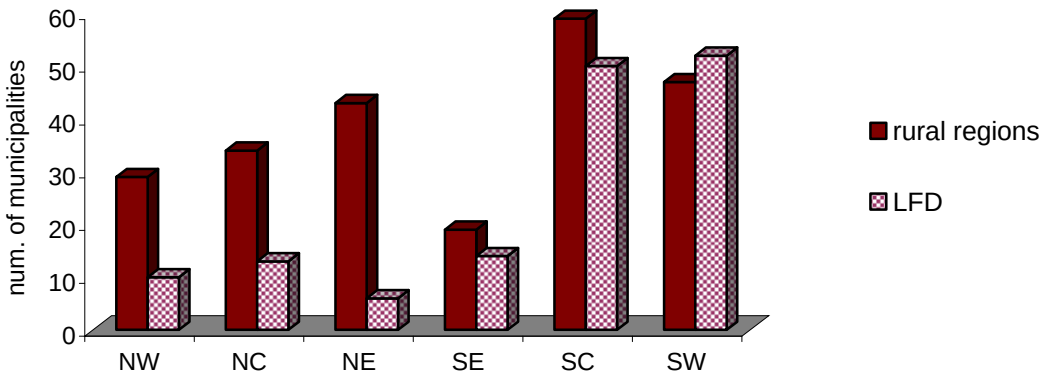
The rural tourism can not significantly decrease the social-economic differentiation of the regions due to different reasons: differences in the economic abilities, enterprise of local population, the distribution of the SAPARD financial means, the created traditions and available resources. In the better developed regions (SC, SE, NC) there is a higher number of municipalities with a strong tourism influence. Only in some parts of the SC it is concentrated in weaker municipalities, featured with interesting natural resources.

For decreasing of the regions' differentiation is important through the state policy and the PDRR to grant a larger amount of financial means to the weaker developed areas with natural resources until 2013. The rural tourism is an extremely important alternative for their social and economic development.

3.2. CAP financial resources assimilation problems in Less Fovoured Areas in Bulgaria.

The Less Favoured Areas (LFA) in Bulgaria cover 48% of the country's territory. 25% of UAA and 50 % of the territory belonging to a settlement (TBS) . The small size difference between the rural areas and LFA range in Southern Bulgaria show that both types of regions are concentrated on the same territory (Fig. 7). Typical representatives for such dislocation are the SE, SC and the SW from the 6 planning regions. They are characterized by a mountainous relief. Exception makes the NE region which is plain surfaced and with a highest part of fat land. The LFA in NE are defined on the base of a low land category.

Fig. 7. Scope of rural areas and LFA by municipalities



In result of natural restrictions in LFA, farmers are in unfavourable condition, in comparison to other country regions. LFA are characterized with lower agriculture producer's incomes, resulting from unfavourable natural conditions,

the limited economy diversification and strong social-economic and demographic problems. The CAP measures aim to counteract these objectively stipulated differences. Unfortunately, there are a lot of problems to solve.

- *Small-scale of land ownership and landuse typical for these regions*.

The agricultural farms up to 1 ha is the minimum size of the eligibility criteria for measure "Farmers payment in areas different from mountains" and for the Schema for Single Payment per Area 78% of all country farms are in this category, but they cultivate 6.8% UAA. In this group are included mainly farms from the LFA. The average farm size for the country is 0.4 ha. If the consolidation of the land ownership and land use is not achieved a considerable part of the agricultural producers would not benefit from the financial support for agriculture. The small farmers don't have a sufficient economic stimulus to participate in the different CAP schemes and measures, even at a high rate payment per ha, because the small sized farms are condition for high transaction costs per ha and low total amount of the farm subsidy. This conclusion has been confirmed by the pilot scheme for LFA, in which case 70% of the financial resource, total amount for the 5 pilot municipalities have been assimilated by one of them, which is not mountainous and this allows more consolidated land use.

- *There is a lack of landownership and landuse identification* for a large part of the agricultural land. Big part of potential beneficiaries does not possess documents for property or for renting, due to not-concluded court cases for property partition, land divisions, appealing decisions of the land commissions. lack of notary certified rent contracts.
- *A considerable part of the stockbreeders in the LFA do not own land at all or it is quite insufficient.* Actually they graze livestocks on common municipality and state pastures, abandoned lands and forestry pastures etc. usually without a contract, so they can't receive compensatory payments per ha without regulate the land using.
- *A not regulated procedure for common use of the municipal and state common lands and pastures*. The Ministry of Agriculture and Food elaborated a regulation recommending the common land use by cooperation. The proposed order for common usage is a step forward the correct direction but delayed and not solving satisfactorily the problem.
- *There is also a problem, related to the use of common lands and pastures from the residuary fund managed by the municipalities*. Lands with non-clarified property are rented one year by year, while for the majority of the financial support measures and schemes are required property documents or rent contracts for a 5-years period. The changes of the LALOU since 2007 offer a solution of this problem, although it could be applied after at least 5 years.

The outlined problems are reason for the CAP funds not to contribute for the overcoming of the social-economic backwardness of LFA. The necessity of purposeful measures for moderating of the financial support assimilation' problems is extremely important.

As a result of the performed analysis the main directions to avoid the problems of the CAP financial funds assimilation in the LFA, problems.

- Processes' acceleration of agricultural land ownership identification. For accelerate the division processes it is expedient to change the legislation. On the analogy of clause 32, paragraph 1 of the Law of property: "The general property is owned and managed in accordance to the decision of the owners possessing more than the half of the common property" the land division could be possible in case when more than 50% of the owners reach to an agreement.
- Efficient problem solution for the municipal and state common lands and pastures use. To establish a mechanism motivating and stimulating mayors to apply the rules of common use of municipal and state common lands and pastures.
- Introduction of minimum livestock density for the common lands and pastures as an eligibility condition for direct and compensatory payments' beneficiaries, not as GAEC.
- Agricultural land ownership and landuse consolidation.
- In the Rural Development Program 2007-2013, the higher limit is 100 ha for the LFA measures and the compensatory payments are differentiated according to the farm size, with highest values for the small and middle-sized farms. The national agricultural policy has to be oriented to the consolidation of small farms, with potential to be transformed in family farms from West-European type, and to create conditions for sustainable development of big farms, having predominantly own land, or rented land on long-term period.
- To introduce the normative livestock density per ha as an eligibility condition into the pilot scheme and not as a part of GAEC.

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Socio-economic development and agricultural structures of the Slovenian countryside

Introduction

Slovenia is one of the most diverse European countries. It has little more than 20.000 km^2 and 2 million inhabitants. It lies on the junction of Alpine, Mediterranean and Pannonian landscapes which contributes to a great relief and cultural diversity. The relatively unfavourable natural conditions result in a large number of small settlements and specific land use structures. It has an above average share of rural areas and unfavourable natural conditions for an intensive agricultural production. The administrative organisation of Slovenia is structured only on the national and the local level. The basic unit of local self-government is municipality of which Slovenia has 210. The average size of a municipality is less than 100 km^2 and they are smaller in the eastern part of the country which is predominantly rural. On the NUTS 3 level Slovenia is divided into 12 development regions. They function only for statistical purposes and for the implementation of programming and granting of direct aids under the national regional policy. The average size of a region is 1.689 km^2 which is three times smaller than is the average in Central and Eastern European Countries. Table 1 shows differences of the average size on the NUTS 3 level in CEEC countries.

Table 1. Area and the population in CEEC countries on the NUTS 3 level

	NUTS 3	Total area (km^2)	Population (mio)	NUTS 3/(km^2)
EU 27	1.303	3.828.219	494	2.938
Slovenia	12	20.273	2,0	1.689
Bulgaria	28	111.910	7,6	3.997
Hungary	20	93.030	10,1	4.652
Poland	66	312.685	38,1	4.738
Czech Republic	14	78.866	10,3	5.633
Romania	42	238.391	21,5	5.676
Slovakia	8	48.845	5,4	6.106
Lithuania	10	65.200	3,4	6.520
Estonia	5	45.226	1,4	9.045
Latvia	6	64.600	2,3	10.767

Source: EUROSTAT

In the last years Slovenia has created institutional development and extension of the scope of regional policy instruments. Promotion of balanced economic, social, and spatial development on the whole territory of Slovenia is the

main development goal of regional policy. Despite of great importance of a balanced regional development in the policy agenda the regional differences are still increasing. Because of that Slovenia prepared several development programming documents such as Slovenian Development Strategy, Spatial Development Strategy, National Development Plan 2007-2013, National Strategic Reference Framework 2007-2013 and Operational Programmes. The most important programming document is Slovenian Development Strategy (2005) which sets out the vision and objectives of Slovenian development. The most relevant and recent document which was adopted in March 2008 is the National Development Plan 2007-2013 which has five development-investment priorities:

- Competitive economy and faster economic growth
- Effective creation, two way flow and application of knowledge for economic development and quality jobs
- Efficient and less costly state
- Modern social state and higher employment
- Integration of measures to achieve sustainable development

The fifth capital development priority integration of measures to achieve sustainable development promotes harmonised regional development, development of the countryside, strengthening food security and improving the quality of life in urban and rural areas.

Main socio-economic characteristics of Slovenian regions

The regional characteristics and socio-economic situation of Slovenian regions are explained with a Development Deficiency Index. The Development Deficiency Index (DDI) is a composite index that was introduced into Slovenia's regional policy as a part of the National Regional Development Strategy adopted in 2001, and has been used as a basis for allocating direct and indirect regional incentives. The index is composed of eleven indicators classified in three groups:

- Indicators of development (GDP/capita, Taxable earnings per capita, Value added of commercial companies per employee and Employment population ratio)
- Indicators of deficiency (Registered unemployment rate, Ageing index , Share of the population with the connection to the public sewerage system)
- Indicators of developmental opportunities (Number of years in formal education, Share of NATURA 2000 areas in the total area, Density of settlement and Labour migration index)

The first group presents indicators of development. GDP per capita is the most frequent indicator for assessment of the development. The regional distribution of GDP per capita (2006) shows great development differences between

regions. The Central Slovenia region has a significantly higher GDP per capita (144%) than the national average and contributes 36% to the national GDP. The Central Slovenia region is more urbanised and it has an above average share of the services sector in the structure of GDP. The less developed is the Pomurska region where they reach only 2/3 GDP per capita of the Slovenian average.

Taxable earnings per capita are based on all taxable earnings of the population and indicate the economic strength in the area and not its economy. It is mainly dependent on the registered salaries and pensions of the selected area. This indicator is indirectly related with the degree of unemployment and with the share of rural population. Taxable earnings per capita between the regions have not changed significantly in the last years. An above average income tax is present in four regions (Central Slovenia, Coastal-Karst, Goriška and Gorenjska). According to the data from 2006 the Pomurska region has only 75.5% of the Slovenian average and the Central Slovenia region has 121.5% of the Slovenian average.

Value added of commercial companies per employee is an indicator which shows the labour productivity of the companies. In the year 2007 it was the highest in the Central and South Eastern Slovenia. Labour productivity is the lowest in the Pomurska region with 71.2% of the Slovenian average.

Employment population ratio or employment rate tell us the share of working population which is employed. Full employment is the goal in the different strategic documents and it is a generator of development. Because of that it is one of the indicators for the calculation of Development deficiency index. According to the data from 2007 the highest employment population ratio has the Inland-Karst region with 64.2%, and it was above the average also in the Central, South Eastern, Goriška, Gorenjska and Coastal-Karst region. Employment rate is the lowest in the Pomurska region where with 55.4% it lags behind the Slovenian average by 8%. In the following table indicators of development on the NUTS 3 level are presented.

The second group of indicators represents indicators of deficiency. The first indicator is the registered unemployment rate. This one is together with the GDP per capita the most frequently used indicator which shows underdevelopment and structural problems of the regions. The registered unemployment rate was in 2007 the highest in the Pomurska region with 13.4% and it exceeded the Slovenian average for 74%. The lowest unemployment rate was in the Goriška and Gorenjska region with 4.9%.

Table 2. Indicators of the development on the NUTS 3 level

	Area (km2)	Population (000)	GDP per capita (€)	Taxable earnings per capita (%)	Labour productivity	Employment rate
SLOVENIA	20.273	2.010	15.446	100,0	100,0	60,4
Pomurska	1.337	122	10.223	75,5	71,2	55,4
Podravska	2.170	319	13.052	86,8	83,9	57,1
Koroška	1.041	73	11.850	88,8	82,0	58,0
Savinjska	2.384	258	13.749	90,8	87,4	59,8
Zasavska	264	45	10.497	90,5	86,3	57,3
Spodnjeposavska	885	70	12.505	86,6	110,9	58,9
South-Eastern	2.675	140	14.341	95,9	114,3	62,2
Central Slovenia	2.555	503	22.286	121,5	114,5	63,0
Gorenjska	2.137	199	12.980	101,8	96,0	61,2
Notranjska-Karst	1.456	51	11.505	99,6	82,8	64,2
Goriška	2.325	119	14.785	103,6	97,7	61,6
Coastal-Karst	1.044	106	15.747	107,2	103,2	61,2

Source: Statistical Office of the Republic of Slovenia.

The second indicator within this group is the ageing index. This index represents the ratio between the old (65 years and older) and the young population (0-14 years). Due to increased lifetime expectancy and lower birth rate the number of old population is increasing. In 2003, the average aging index in Slovenia was for the first time more than 100, which means that in the structure of population there were more old people than young people. According to the data from 2007 all Slovenian regions have the ageing index above 100. It was the lowest in the South-Eastern Slovenia with 100.6%, and the highest in the Coastal-Karst region with 146%, which is 26.4% above the Slovenian average.

Population connected to the public sewerage system is the third indicator which shows the ratio between the total number of population and the population that are connected to the public sewerage system. Data are available from 2002 census. The lowest ratio has the Pomurska region with 31.2% and the highest one Central Slovenia with 66.9%. The average ratio in Slovenia is 49.9%.

In the third group, indicators of developmental opportunities are presented. First indicator within this group is the number of schooling years which is the most comprehensive indicator that shows educational level of the population. It is available only in the census years, which is the biggest disadvantage of this indicator. Education level of the population measured by the average number of schooling years is quite uniform between regions. It is the highest in Central Slovenia with 11.27 years and the lowest in the Pomurska region with 10.0 years, which is 94% of the Slovenian average.

Table 3. Indicators of the defficiency on the NUTS 3 level

	Indicators of deficiency		
	Registred unemployment rate (%)	Aging index (%)	Connection to the public sewer system (%)
SLOVENIA	9,4	115,1	49,9
Pomurska	15,7	121,2	31,2
Podravska	12,7	125,3	44,2
Koroška	10,1	104,7	49,3
Savinjska	11,6	104,3	39,4
Zasavska	12	132	63,5
Spodnjeposavska	10,5	118,1	34,2
South-Eastern	8,6	100,6	36,8
Central Slovenia	7,2	110,1	66,9
Gorenjska	6,4	107,9	52,4
Notranjska-Karst	7	123,4	40,5
Goriška	6,2	134,1	47,7
Coastal-Karst	7,2	146	59

Source: Statistical Office of the Republic of Slovenia

In the third group, indicators of developmental opportunities are presented. First indicator within this group is the number of schooling years which is the most comprehensive indicator that shows educational level of the population. It is available only in the census years, which is the biggest disadvantage of this indicator. Education level of the population measured by the average number of schooling years is quite uniform between regions. It is the highest in Central Slovenia with 11.27 years and the lowest in the Pomurska region with 10.0 years, which is 94% of the Slovenian average.

The indicator Share of NATURA 2000 areas in the total Area shows the ratio of NATURA 2000 areas between regions. Slovenia has designed 286 NATURA 2000 sites: 260 according to the Habitats Directive and 26 according to the Wild Birds Directive. The sites in total encompass 36% of the country, which is the highest rate in EU. The highest share in relation to the total area has the Inland-Karst region with 53.6%. An above average share is also present in the South Eastern, Gorenjska, Goriška, Pomurska and Coastal-Karst region. The lowest share has the Savinjska region with only 16.6% of the total area covered with NATURA 2000 areas.

Density of Settlement is indicator which shows us under-population or overpopulation in each region. In some regions are sparsely inhabited areas which require big investments in the public infrastructure to ensure quality housing conditions. According to the data from 2006 has Slovenia 99,6 inhabitants/per km2. The most sparsely inhabited regions are Inland-Karst region with 35 inhabitants/ km^2 and Goriška region with 51 inhabitants/ km^2. Only Central Slovenia region with 196 inhabitants/ km^2 for two times exceeds Slovenian average.

Labour migration index is the last index used for the calculation of Development Deficiency Index. Labour migration index is the number of persons in paid employment in a certain territorial unit by workplace and the number of persons in paid

employment in the same territorial unit by residence (%). According to the data from 2007, the Central Slovenia region with 121.5% has the highest labour migration index. In all other regions the labour migration index is below the average, which means that they have less working places than work population. The lowest labour migration index is in the Zasavska region with 73.9%.

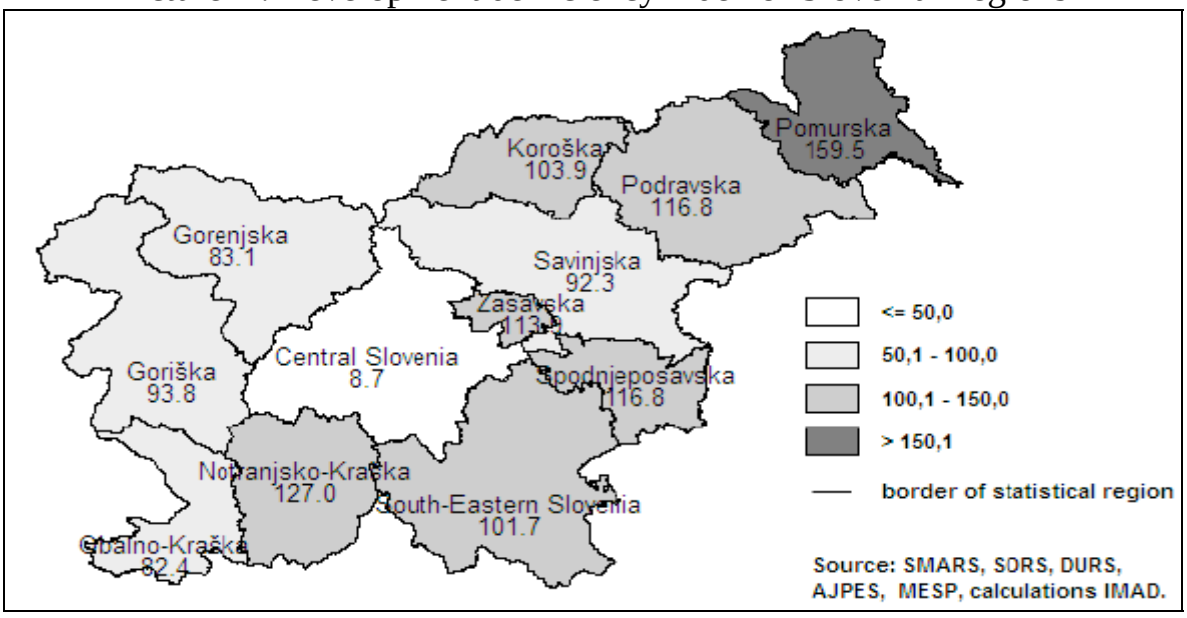
Table 4. Indicators of the developmental opportunities on the NUTS 3 level

	Years of formal education	Share of NATURA 2000 areas (%)	Labour migration Index	Density of settlements
SLOVENIA	10,64	35,5	100	99,1
Pomurska	10,02	43,5	90,3	91,2
Podravska	10,6	28,8	97	147,0
Koroška	10,33	19,5	88,7	70,1
Savinjska	10,39	16,6	97,9	108,2
Zasavska	10,34	21,8	73,9	170,5
Spodnjeposavska	10,19	18,5	84,2	79,1
South-Eastern	10,14	48,4	91,4	52,3
Central Slovenia	11,27	21,6	121,7	196,9
Gorenjska	10,7	44,3	86,1	93,1
Notranjska-Karst	10,29	53,6	78,4	35,0
Goriška	10,42	47,1	96	51,2
Coastal-Karst	10,7	48,2	98,8	101,5

Source: Statistical Office of the Republic of Slovenia.

The DDI shows significant differences between the most and the least developed regions and relatively smaller differences among other regions. Central Slovenia is strongly in the lead while the Pomurska region lags far at the back with the highest DDI. Other regions can be classified in two groups, the first one having a DDI lower than 100 and the second one having it higher than 100. This classification of regions according to the DDI is useful in practice for both classification purposes and as a criterion for the allocation of regional development funds.

Picture 1. Development defficiency index of Slovenian regions



Agricultural structure of Slovenian regions

Although agriculture contributes less than 2% to Slovenia's GDP it is still an important economic activity, especially in the regions where there is the lack of other employment possibilities.

Slovenia has unfavourable conditions for an intensive agricultural production since more than 75% of agricultural holdings are situated in the less favoured areas and cultivate more than 70% of all utilised agricultural area. In three regions (Koroška, Zasavska and Inland-Karst region) the total utilised agricultural area is categorized as less-favoured area. In the table x the basic characteristics of Slovene agriculture on the NUTS 3 level are presented.

Table 5. Main characteristics of the Slovenian agriculture on the NUTS 3 level

	Number of agricultural holdings	Utilised agricultural area (ha)	Number of AWU	AWU/holding	AWU/ ha UAA
SLOVENIA	75.340	488.774	83.950	1,11	0,17
Pomurska	9.794	65.498	10.120	1,03	0,15
Podravska	12.746	82.065	15.037	1,18	0,18
Koroška	2.702	20.393	3.281	1,21	0,16
Savinjska	11.445	67.810	14.427	1,26	0,21
Zasavska	942	5.446	1.301	1,38	0,24
Spodnjeposavska	5.074	27.820	5.227	1,03	0,19
South-Eastern	8.137	49.437	7.951	0,98	0,16
Central Slovenia	8.565	65.003	11.063	1,29	0,17
Gorenjska	4.480	33.726	5.271	1,18	0,16
Notranjska-Karst	2.816	21.544	2.497	0,89	0,12
Goriška	5.704	31.703	5.265	0,92	0,17
Coastal-Karst	2.934	18.329	2.509	0,86	0,14

Source: Statistical Office of the Republic of Slovenia.

The Podravska region with above 80.000 hectares has the highest share of utilised agricultural area and it is the leading region in terms of the number of agricultural holdings. More than 35% of all Annual Work Units are found in the Podravska and Savinjska region. The Zasavska region with 1.5% contributes the smallest share of labour force in the Slovenian agriculture. The average number of Annual Work Units per agricultural holding varies from 0.86 AWU in the Coastal-Karst region to 1.38 AWU in the Zasavska region. The average number of Annual Work Units per hectare of agricultural land in the Inland Karst region is with 0.12 AWU/ha UAA two times lower than in the Zasavska region (0,24 AWU/ha UAA).

There are great differences between the regions in the farm size structure. In three regions (Coastal Karst, Pomurska, Goriška) more than 2/3 of agricultural holdings own less than 5 hectares of utilised agricultural area.

The average size of an agricultural holding is 6.5 hectares of utilised agricultural area. Farms in the Inland-Karst region cultivate 7.7 ha of UAA, which is 40% more than farms in the Spodnjeposavska region with 5.5 ha.

Table 6. Land use structure and livestock on the NUTS 3 level (2007)

	Land use (ha)/ holding				Livestock /holding		
	UAA	Arable land	*Permanent crops*	Pastures and meadows	LSU	Cattle	Pigs
SLOVENIA	6,5	2,5	*0,6*	4,5	6,8	11,6	17,2
Pomurska	6,7	5,6	*0,4*	1,6	6,6	13,5	33,8
Podravska	6,4	3,7	*0,8*	3,2	7,6	15,1	16,5
Koroška	7,5	1,3	*0,5*	6,3	8,7	12	3,8
Savinjska	5,9	1,4	*0,5*	4,5	7	10,9	4,5
Zasavska	5,8	:	*:*	5,6	5,4	8,3	2,8
Spodnjeposavska	5,5	2,2	*0,6*	3,4	4,7	9	11,6
South-Eastern	6,1	1,9	*0,3*	4,6	5,6	10,3	14,5
Central Slovenia	7,6	2,2	*0,2*	5,6	8,3	11,9	54
Gorenjska	7,5	2,2	*0,4*	5,7	9,1	14	6,7
Notranjska-Karst	7,7	0,6	*:*	7,4	7	7,1	3,5
Goriška	5,6	0,6	*1,7*	5,4	4,4	7,6	5,2
Coastal-Karst	6,2	0,8	*1,5*	6,3	2,6	6	-

Source: Statistical Office of the Republic of Slovenia.

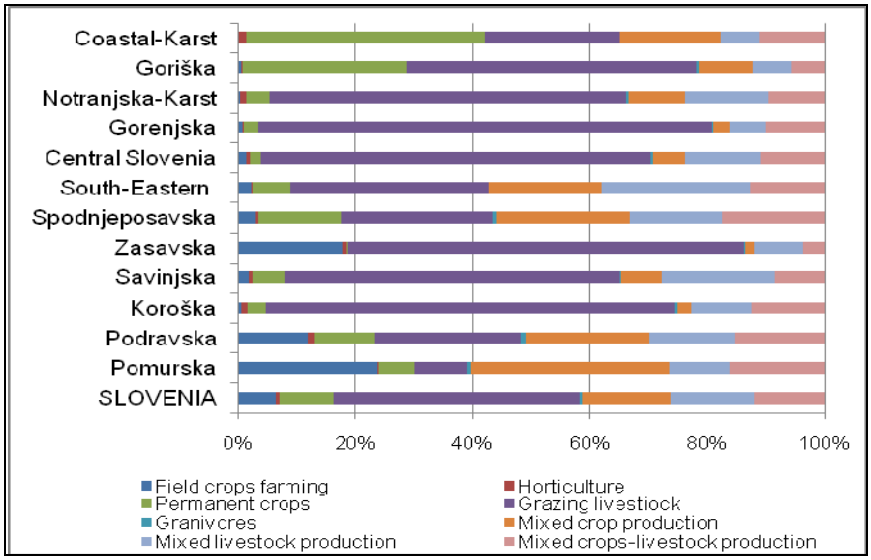
One of the most characteristics consequences of specific natural conditions suitable for agricultural production in Slovenia is the great share of absolute grassland and the relatively small share of arable land and permanent plantations in the structure of agricultural land use. The Pomurska and the Podravska region have an above average share of arable land, the Goriška and the Coastal Karst region are predominant in the production of permanent crops while in all other regions pastures and meadows prevail.

Due to specific natural conditions livestock breeding is the most important agricultural activity in Slovenia. Nearly 2/3 of all agricultural holdings involved in livestock production were engaged in cattle breeding. The Pomurska and the Podravska region breed an above average number of cattle per agricultural holding, which shows the intensification of agricultural production in those two regions. Pig production as the second most important animal production is concentrated in the Pomurska and the Central Slovenia region while in other regions the self-supplying character production on family farms predominates.

Slovenia has the lowest rate of specialization in agriculture among all European countries. Only half of Slovenian farms are specialized in one of the production types and they cultivate nearly 70% of all utilised agriculture area.

There are great differences among the regions. More than half of farms that are specialised in field crop production are situated in the Pomurska region. The Savinjska region has the biggest share of farms that are specialized in the rearing of grazing livestock. The Podravska region has the highest share of farms that are specialized in pig and poultry production. Fruit and wine production farms as the main type of farming prevail in the Coastal Karst and the Goriška region.

Picture 2. Agricultural holdings by types of farming on the NUTS 3 level (2007)



Source: Statistical Office of the Republic of Slovenia.

Implementation of Rural Development Programme 2007-2013

In the following section, an analysis of the measures contained in the Rural Development Programme 2007-2013 which contribute to the implementation of the fifth priority of the National Development Plan is presented. On the NUTS 3 level, measures of 1st, 3rd and 4th development axis are analysed. Under 1st axis, measures for improving the competitiveness in agriculture, forestry and food industry sector are to be found. The main reasons for the improvement of efficiency are unfavourable age and low educational structure of agricultural holding managers. The second reason is the improvement of the unfavourable size structure of Slovenian farms.

Measures taken under 3rd axis of rural development programme enhancing the employment in non-agricultural and agriculture related activities. The arrangement of the rural settlements and their cultural heritage promotes the development in rural areas and raises the living standard in rural communities.

In the Table 7 the number of applications, contracts and devoted funds by individual measures under 1st and 3rd axis are presented.

More than half of all applications were approved for the measure Modernisation of Agricultural Holdings. Among production activities, investments in dairy farming and cattle production prevail. In connection with the type of investments the highest share is occupied by the investment in stables and in purchase of agricultural machinery.

Table 7. Number of applications and devoted funds for the 1st and 3rd development axis

	Number of applications	Number of contracts	Approved funds (€)
Setting up of young farmers	355	322	6.760.600
Early retirement of farmers	28	28	96.000
Modernisation of agricultural holdings	1401	963	23.379.206
Improving the economic value of forests	512	336	7.295.491
Adding value to agricultural and forestry products	66	51	7.079.961
Improving agricultural infrastructure	7	6	1.968.535
Supporting and setting up of producer groups	3	3	875.991
Diversification into non-agricultural activities	131	83	676.585
Support for the creation and development of micro enterprises	71	54	5.411.311
Village renewal and development	32	11	795.693
Conservation and upgrading of the rural heritage	14	3	55.186

Source: Ministry of Agriculture, Forestry and Food.

There is a big difference between the number of applications and concluded contracts. This shows that farmers still have problems with administrative procedures and applications to the public tenders.

The table below shows approved applications for the axis 1 measures at the NUTS 3 level. There are significant differences between the regions. More than 20% of all applications were approved in the Savinjska region followed by the Podravska region with 17% and the Pomurska region with 11% of all applications. In the Zasavska region which has great structural problems only 14 applications were approved.

Table 8. Distribution of the axis 1 measures on the NUTS 3 level

	Modernisation of agricultural holdings	Supporting of young farmers	Improving the economic value of forests	Adding value to agricultural and forestry products	Improving agricultural infrastructure	Supporting producer groups
SLOVENIA	963	321	336	51	6	7
Pomurska	112	39	15	8	4	1
Podravska	196	44	25	11	2	2
Koroška	82	43	42	1	0	0
Savinjska	207	53	93	4	0	0
Zasavska	8	6	3	0	0	0
Spodnjeposavska	40	25	11	6	0	0
South-Eastern	78	20	28	3	0	0
Central Slovenia	87	33	47	1	0	1
Gorenjska	88	29	43	7	0	0
Notranjska-Karst	20	2	12	1	0	0
Goriška	30	23	15	5	0	2
Coastal-Karst	15	4	2	4	0	1

Source: Ministry of Agriculture, Forestry and Food.

Among the measures implemented under Axis 3 the greatest interest was shown for the diversification into non-agricultural activities and creation of micro-enterprises. The majority of applications were approved in the Goriška and Savinjska region while in the Zasavska region they did not approve any application.

Table 9. Approved applications for the measures of the 3rd development axis on the NUTS 3 level

	Diversification into non-agricultural activities	Support for the creation and development of micro enterprises	Village renewal and development	Conservation and upgrading of the rural heritage
SLOVENIA	73	54	12	5
Pomurska	5	4	3	
Podravska	10	2	3	
Koroška	9	2	0	
Savinjska	10	9	3	
Zasavska	0	0	0	
Spodnjeposavska	5	1	0	
South-Eastern Slovenija	4	9	0	
Central Slovenia	8	6	1	
Gorenjska	3	7	0	
Notranjsko-kraška	5	3	0	
Goriška	10	10	1	
Obalno-kraška	4	1	1	

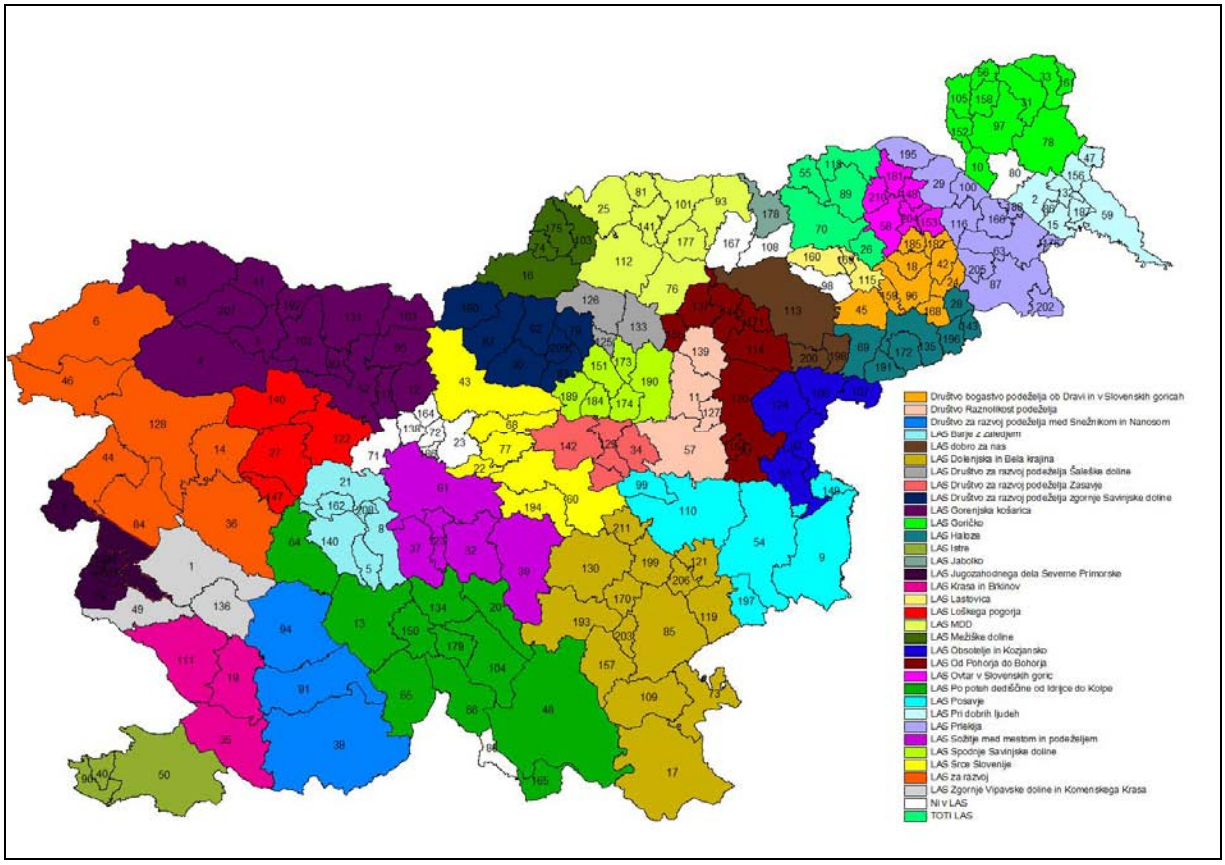
Source: Ministry of Agriculture, Forestry and Food.

The 4th development axis of Rural Development Programme 2007-2013 is the LEADER axis which presents a novelty in the Slovenian agricultural policy. In January 2009, Slovenia finished the selection procedure for Selection and Confirmation of Local Action Groups. In this programming period Slovenia will have 33 Local Action Groups, which covers 97% of rural areas and 94% of rural population. The Local Action Groups prepared Local Development Strategies where they defined strategic objectives and priority tasks. Defining development vision and strategic objectives represents the crucial part of each strategy. A comprehensive analysis of 33 Local Development Strategies indicates a great diversity of Slovenian countryside. All the strategies are prepared with "bottom-up approach" and taking into account the principles of sustainable development. This implies that balanced economic, social and spatial-environmental goals are presented.

An analysis of strategic objectives in the local development strategies shows that development of micro enterprises and tourism represents the greatest opportunity for a faster restructuring and economic growth of rural areas. Strategic objectives in the field of agriculture are still mainly oriented towards the improvement of production (especially in the production of safe and quality food) and marketing of agricultural products. The great importance is also given

to development of agricultural infrastructure and protection of the environment in rural areas.

Picture 3. Local Action Groups in Slovenia



Source: Ministry of Agriculture, Forestry and Food.

Conclusions

We can tell that there is strong connection between the development level of the region and the share of agriculture. Regional disparities are bigger in the regions with the higher share of agriculture. It is important that in the less developed regions agriculture still represents a generator of development and provides retention of the population in remote areas. The less developed is the Pomurska region which is characterized by agriculture. In this region agriculture contributes 8.3% to the Gross Value Added which is three times higher than the national average. The main factors which influence structural difficulties of the region are bad traffic connections, the highest rate of registered unemployment and the lowest population growth. The most developed region is Central Slovenia which has the greatest number of people and is the second largest in terms of territory. The essential advantages are its central position, good traffic connections and the fact that the country's capital is located in it. It contributes more

than 1/3 of national GDP. Agriculture contributes only 1% to the Gross Value Added, which is the lowest share among all regions.

Agriculture plays a major role in maintaining natural resources. Low level of intensification in agriculture, specific land use structures and high share of NATURA 2000 areas contribute to the well preserved countryside.

New employment opportunities and diversification of activities in rural areas which are carried out through the measures of the 3rd and 4th development axis will contribute to diminishing the regional differences. Capacity building and implementation of local development strategies represents new developmental opportunity on the local level. At the end it may be concluded that Slovenia will have to continue with substantial investments in the development of transport infrastructure as well as investments in education and information infrastructure.

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Modern condition and structural transformations in the development of agriculture and rural territories in Belarus

At the beginning of 90th of the twentieth century countries of the Former Soviet Union, Central and Eastern Europe have started to realize reforming of agriculture and land reform.

According to the accepted official acts the process of reforming of the agricultural enterprises In Belarus excluded shock decisions and increasingly corresponded evolutionary stages.

Productive cooperative societies (59 %), the municipal regional unitary enterprises (22 %) and public joint-stock companies (8 %) prevailed among the model set of reorganisation of former traditional collective farms and state farms, however there were other forms (table 1).

Table 1. Dynamics of business entity of large-scale marketable agricultural enterprises in the process of market reforming of agroindustrial complex in Belarus, 2000-2008

Business entity of an enterprise	Years				
	2000	2005	2006	2007	2008
Collective farms	1720	17	12	15	4
State farms	463	8	6	6	2
Republican unitary enterprises	73	126	115	111	100
Utility regional unitary enterprises	–	20	18	13	13
Utility district unitary enterprises	126	305	297	297	299
Public joint-stock companies	3	114	112	120	117
Private joint-stock companies	15	27	25	20	18
Limited companies	1	1	2	3	2
Collective agricultural enterprises	27	195	226	–	–
Cooperative society	15	878	798	941	820
Private unitary enterprises	–	20	27	19	14
Farms	–	9	6	4	2
Total	2457	1720	1644	1548	1391

Source: It is calculated on the basis of data of the Ministry of Agriculture and Foodstuff of the Republic of Belarus.

Our research shows in whole economic indicators of work of cooperative societies were not steady last years. So the process of debt accumulation is going on, profitability of manufacture has become in 3-4 times below demanded in the standard. Practically there are no intraeconomic ties based on principles of cost accounting into them. It can testify to the insufficiently deep approach to reforming, simplistic procedures of re-registration of the former collective farms in new structures without change of essence of their organisation.

Experience of transformation of agrarian sector in some countries in Central and Eastern Europe shows that presence of unprofitable farms and also low level of agriculture profitability in Belarus are connected basically with that operating methods of reforming touch on productive relations and property relations rather poorly, do not create an economic base for development of business and motivation of agribusiness. In this connection they are not in many cases inefficient.

It testifies to necessity of complex perfection of productive relations in the agricultural organisations and in the first place intraeconomic relations which should concern bases of market motivation of commodity producers.

In this connection it is offered to put principles of privatisation and personification of property and means of production, motivations of labor by means of accumulation of the property and capital, participation of workers in profits of the enterprises, development of business accounting and business in the basis of such perfection.

In Belarus unpromising agricultural enterprises are leased out and saled to well-to-do businessmen.

Experience generalisation shows one of the basic problems of passing of property to new owners is the cost estimation of property complexes that is inadequate to substance. According to the legislation operating in our republic the method of accumulation of actives (a so-called property method) is used mainly which has essential lacks. In connection with numerous revaluations for last 10-15 years cost of the fixed assets of the agricultural organisations stoped to correspond to real market cost, in most cases it is overestimated (in comparison with deterioration).

The order and mechanism of sale of the unprofitable agricultural organisations should consist of several stages: decision-making on sale; creation of the competent commission and establishment of its full functions; the publication in the press of the information about enterprise sale; the written notice of creditors; drawing up of deed of assignment; definition of enterprise price; the conclusion and registration of sale contract; the conclusion and registration of lease contract of the ground area; calculations with members of agricultural production cooperatives, etc. Not all this procedures are used systematic in the republic.

The research shows the most simplified variant of estimation of cost of property complexes of the unprofitable organisations amongst all possible approaches (there are profitable, cost-is-no-object and comparative approaches) is the cost definition on the indicator «net wealth».

The indicator «net wealth» characterises the property cost generated at the expense of own sources. Besides it gives the chance to correct volumes of the fixed capital (taking into account physical and moral depreciation), the sizes of long-term financial investments, raw materials, materials, debts and enterprise obligations according to their real condition.

Now in Belarus scientists have prepared standard-methodical materials of sale of the property complexes of farms (which are reorganising) to potential investors for practical use, developed the project of privatisation (repayment) of the rented state unitary enterprises and also scientifically-practical recommendations about estimation of enterprise cost in the conditions of reorganisation and methodical instructions about order and conditions of the direct sale to artificial persons of a farm as property complex.

In Belarus there is an increase in number of proprietors of lands as a result of the pursued land reform. The amount of the legal certificates has increased. They are committing related to ground areas. The existing legislative and standard base provides possibility of the market turnover of lands. It was promoted by acceptance of new Civil and Ground codes.

It is necessary to underline practically any country of the world does not resolve the full free disposition of lands, i.e. it does not the right of the absolute estate of lands without the state control for target and effective utilisation of the ground capital.

The major economic tool in management of rational use of ground resources is the cost estimation (price) of lands which should serve as a basic mechanism of creation of the proved system of taxation and pricing, drawing up of contracts on the long-term and short-term rent, pledge and use of other elements of effective ground relations.

The carried out calculations have shown that on the average in Belarus the price per 1 hectare of agricultural lands is 1250 dollars and fluctuates from 200 dollars per 1 hectare at the cadastral valuation less 20 points to 3400 dollars at the valuation over 46 points.

Strategy of gradual transition to the market realised in Belarus has allowed to reach certain positive results. The research shows that last years there is positive development in increase of production of agricultural products (table 2).

Table 2. Indicators of development of branches of livestock farming in the large-scale commodity agricultural organisations in Belarus, 2005-2007

Indicators	Unit of meas-urement	Years			2007 in % to 2005
		2005	2006	2007	
Cattle and poultry sales on slaughter (live weight) – total Including:	thousand tone	813,0	914,0	972,8	119,7
cattle	-//-	387,4	410,3	420,7	108,6
pigs	-//-	272,2	310,0	335,5	123,3
poultry	-//-	150,6	191,3	214,4	142,4
It is made (grown up) cattle and poultry (live weight) – total	-//-	892,6	1,001,3	1,058,0	118,5
Average daily gain of store-cattle and cattle on fattening					
cattle	g	498,0	516,0	521,0	104,6
pigs	-//-	443,0	468,0	478,0	107,9
Average weight of cattle which is saled in meat-packing plants					
cattle	kg	412,0	420,0	435,0	105,6
pigs	-//-	103,0	105,0	107,0	103,9
Milk production	thousand tone	4,172,5	4,535,1	4,702,8	112,7
Milk sale	-//-	3,349,6	3,713,7	3,869,7	115,5
Marketability	%	80,3	81,9	82,3	+ 2,0 п.п.
Average milk yield per a cow	kg	3,682,0	4,016,0	4,115,0	111,8
Egg production	million pieces	1,919,1	2,185,1	2,084,7	108,6
Laying ability of hens	pieces	272,0	282,0	287,0	105,5
Number of cattle in the close of the year					
Cattle	thousand heads	3,543,8	3,621,1	3,686,8	104,0
Including cows	-//-	1,199,8	1,199,5	1,203,1	100,3
Pigs	-//-	2,508,1	2,632,9	2,622,2	104,5

Source: It is calculated on the basis of data of the Ministry of Agriculture and Foodstuffs of the Republic of Belarus.

The data in table 2 show in 2007 increase in production of meat, milk, egg in the republic has reached basically at the expense of growth of productivity of animals.

Last years the average weight of cattle delivered to meat-packing plants is stably raising and was 435 kg in 2007 counting on one head, but in 2005 – 412 kg, pigs – accordingly 107 kg and 103 kg.

After the long break in 2007 the average milk yield per a cow reached 4,115 kg. However on the given indicator Belarus concedes to the countries with developed agriculture. So on the average in EU dairy cattle yield is almost in 2 times above. For example, in Sweden in 2002 milk yield per a cow was 7,734 kg, in the USA – 8,431 kg, in the Republic Korea – 9,053 kg, Israel – 10,421 kg.

It is necessary to notice the technological and resource potential of plant growing and livestock farming in Belarus is used insufficiently - on 50-60 % (according to Belarus experts).

Effectiveness increase of agricultural production in the country is in close interrelation with investments in this branch of national economy. The analysis shows capital investments in agriculture in 2007 in the republic was 3,803,8 bn rbl. (in the current prices) or 14.6 % to the general investments into the fixed capital on the national economy. It is one of the highest indicators for years after reform.

At the same time now one of vital issues in the agricultural organisations is the extremely insufficient provision of own circulating assets. According to scientifically-based standard is the minimum admissible level of the own circulating assets should be not less 20 % in their general sum, actually it had negative value (-39,0 %) in the end of 2007 on the average in the republic. Only 23 % of farms amongst their total amount had the positive size of the own circulating assets. Specific weight of creditor debts which was at the beginning of 2008 64 % has essentially increased in the structure of sources of formation of the circulating assets of the agricultural organisations. It testifies to the general astable financial condition and weak level of solvency of farms.

The proportion between the fixed and circulating assets at the optimum value 1:0,5 at the beginning of 2008 was 1:0,2 on the average in the republic though last years the positive tendency of increase in the given proportion was outlined here. According to available calculations the agricultural organisations have less 20 trillion rbl. of the circulating assets than it requires this standard.

Efficiency of carrying out of the agrarian reform substantially depends on the investments whose attraction in agriculture is the most actual problem. On the assumption of Polish experience and also our scientific research it is possible to tell that problems of investments are necessary to solve by mobili-

sation of various sources, but own funds of the enterprises should be the first of them, of course.

The estimation of investment possibilities of the enterprises has shown now the main task is the increase in profit and full use of depreciation charges to technical modernisation of the basic production assets and especially their active part.

One way of solving of the problem of attraction of additional investments into agrarian sector in Belarus can be creation of the National Investment Company of the Real Estate which begins to supervise social and economic development of rural territories. It is possible to create such company as a public joint-stock company.

The company can be the proprietor of the means of production and the objects of social infrastructure placed in the countryside.

However the complexity consists in that debts of the agricultural enterprises do not give possibility to leave it on the repayment. The factor of current liquidity of property is less the standard value (the fact – 1.35, the standard – 2.0) that practically can not be sufficiently stable. The index price inparity between agricultural production and industrial production resources was 326 % in 2003–2007 on the average in relation to 1990.

Higher rates of price rise for industrial resources are the natural phenomenon of the market economy. But it requires regulating influence of the state during formation of the interbranch prices and proportions.

It is necessary to notice the state renders to agriculture in Belarus multilateral financial and material aid. Budgetary and credit support (exemption of interest rates of credits) of agrarian manufacture is on the average more 10 % of the consolidated state budget last years (2004-2007), that in the gross production value of agriculture is 28–30 %. Though counting on 1 hectares of agricultural lands the centralised resources are 200-250 dollars.

As a result of the large centralised investments and restoration of industrial potential profitability of the agricultural enterprises has considerably raised (table 3).

The analysis of the financial condition of the agricultural enterprises of Belarus has shown that it still remains insufficient in spite of the long tendency of increase of profitability of manufacture (table 4). The data in the table 4 show the general financial debts under obligations of the organisations of the Ministry of Agriculture and Foodstuff of the Republic of Belarus in 2008 have increased in 2.6 in comparison with 2005 including delayed debt accordingly in 8.3 times.

Table 3. Results of economic activities of the agricultural enterprises, 2006-2007

Region	Profitability in all agriculture, %		Including profitability of branches in realisation, %			
			plant growing		livestock farming	
	2006	2007	2006	2007	2006	2007
Brest	13,4	14,0	-2,1	0,6	10,8	-1,5
Vitebsk	6,2	8,3	-25,7	-9	-15,5	-9,4
Gomel	16,9	15,5	1,7	-10,8	7,3	-10,2
Grodno	10,1	13,0	3,4	-2,2	12,3	-3,8
Minsk	11,6	10,4	-9,4	-2,5	-2,1	-6,5
Mogilyov	17,8	18,0	1,8	1,1	13,6	0,9
Total	12,6	12,7	-4,2	1,2	4,6	1,0

Source: It is calculated on the basis of data of the Ministry of Agriculture and Foodstuff of the Republic of Belarus.

Table 4. Financial obligations of the organisations of the Ministry of Agriculture and Foodstuff of the Republic of Belarus for 2005-2008, bn rbl.

Type of debt	At the beginning of the year				2008 to 2005, time
	2005	2006	2007	2008	
Short-term and long- term credits and loan of banks	1,307,1	1,998,2	3,028,5	4,002,9	3,06
Bill payable	2,556,2	3,352,8	4,364,0	5,455,4	2,13
Including to supplier of goods, labor and services	1,348,4	1,411,6	1,626,1	4,390,0	3,26
remuneration of labor payment	60,4	75,4	94,2	117,1	1,94
payment of taxes and duties	144,6	150,6	164,7	191,6	1,33
assignments in fund for social protection	310,3	376,6	356,3	369,2	1,19
TOTAL	3,863,5	5,424,1	7,458,1	10,196,5	2,64
Including delayed debt	145,9	1223,3	788,0	1208,6	8,28

Source: It is calculated on the basis of data of the Ministry of Agriculture and Foodstuff of the Republic of Belarus.

Nevertheless last years the agroindustrial enterprises of the country are quickly increasing volumes of production and its sale as in domestic market (in

the republic level of food safety is supported at the expense of own manufacture at a rate of more 70 %) and abroad.

Belarus fulfils goods turnover with more 140 countries of the world. For example, in 2007 92 % was the turn of goods and 8 % – services in the structure of international trade in the goods and services. For comparison: these indicators in the world market are accordingly 80 and 20 %.

The greatest specific weight in the foreign trade turnover of primary agricultural commodities and ready foodstuff in Belarus is occupied with the CIS countries. The specific weight in 2007 was 67 %. The basic trading partners among the countries out of the CIS are Poland, Lithuania, Latvia and Germany. Last years the share of the countries out of the CIS was a little reduced in the foreign trade turnover. In 2000 their share was 40.0 %, in 2006 – 36 %, but in 2007 - 33 %. However the share of import of these countries is about 50 %, and export - within 15-17 %.

The analysis shows increase in import of final (processed) agricultural production and various food additives concerns the negative phenomena of Belarus economy in realisation of export-import transactions.

The foreign trade turnover of agricultural production and foodstuff in 2007 has increased in 2.5 times in comparison with 2000, export - in 3.6 and import accordingly in 2.0 times. Export of meat and food meat products, milk and dairy products has essentially increased. Specific weight of negative balance in the agroindustrial complex in the negative balance in the republic has decreased from 46 % in 2000 to 8.3 % in 2007 as a result of advancing increase of exports over import. At the same time the negative balance remains still high and in 2007 it was nearby 370 m dollars.

The negative part of balance in the agroindustrial complex was formed at the expense of increase of import of fish and fish products – in 3.2 times, fruit - in 3.3, food additives - in 9.3 times.

Including the considerable part of negative balance was formed also at the expense of import of ready foodstuff. These are crop plant products; production of vegetable processing; the rests and food-processing industry waste; tobacco and its substitutes.

The analysis of dynamics of export of Belarus agricultural production (in percentage terms each next year to previous) testifies that it has in whole no accurately traced tendencies. Only export of dairy products and meat products grows steadily.

In 2007-2008 the country had the positive balance in trade in agrcultural production. It has occurred at the expense of increase in export of fertilizers and agricultural cars and the equipment almost in 3 times.

Besides in 2005-2008 during realisation of the Government program of revival and village development for 2005-2010 it is put into operation over 900 agrosmall towns (table 5). In the republic during building of agrosmall towns it has been got more 7,7 trillion rbl. of investments.

The infrastructure of the agrosmall towns serves now more 2 million persons, and the size of agricultural lands of city-forming organisations is 4.8 million hectares. Their efficiency of economic activities rises. So specific weight of such enterprises with level of profitability over 10 % in 2008 was 74.2 % against 57.7 % in 2005.

At the same time for business development it is necessary to take measures on granting of wide independence to commodity producers, on transition of the agricultural enterprises to principles of self-determination and self-financing so that own problems of farms did not pass as the state. In is expedient to develop principles of self-managing on the basis of the economic right more widely.

Table 5. Dynamics of creation of agrosmall towns and development of social and industrial infrastructure of rural territories in Belarus in 2005-2008

Region	It is entered agros-mall towns, unit	It is got investments, bn rbl.	Maintainable popula-tion, thousand people	The size of farmland, thousand hectares	It is made products, bn rbl.
Brest	147	1,422,6	476,4	738,9	175,3
Vitebsk	149	926,0	277,5	756,7	156,3
Gomel	146	958,8	339,6	662,4	135,7
Grodno	137	1,538,2	345,6	832,4	206,0
Minsk	192	1,253,7	448,1	856,0	227,3
Mogilyov	150	1,613,7	286,0	958,1	195,4
The Republic of Belarus	921	7,712,9	2,173,2	4,804,5	1,095,9

Source: It is calculated on the basis of data of the Ministry of Agriculture and Foodstuff of the Republic of Belarus.

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Rural Development in Serbia, regional dissimilarities and problems[1]

Abstract

Serbia is a country in which rural areas occupy its major territory, with significant part of total population in them. The territory relies on great natural wealth, starting from agricultural land, forests, water resources, mineral wealth and biodiversity. The significant factor is a human potential, with its general characteristic of population decreasing and deterioration of the age structure. These areas have rich local tradition, essentially being preserved. Basicly, the level of their environment preservation is significantly higher than in urban areas.

According to numerous characteristics, rural areas in Serbia differ significantly. There are great dissimilarities in natural conditions for development, especially between mountainous and lowland regions, as well as between frontier and rural areas. Dissimilarities exist also in productive capacities, employment, infrastructure, income level and life standard.

Within its possibilities, the state tries to decelerate and lessen some unfavourable tendencies in these areas development, to obviate instability which is more conceived, and to improve conditions for work and life of the population. In that sense, there are certain developmental documents, and some of them are preparatory, based on a concept of Cooperative Agrarian Policy of EU (CAP), like as measures of support to agriculture and rural economy improvement.

The paper is dedicated to regional dissimilarities of rural areas of RS, certain number of more conceived problems and some of concrete measures being applied in order to improve total rural development.

Key words

Rural areas, rural development, multifunctionality of rural economy, incentive measures, IPA instrument.

Introduction

Every country, thus Serbia too, takes care of every aspect of development, while it has to take care also of its rural areas development. Primarily, while ru-

[1] The paper represents a part of research on project "Multifunctional agriculture and rural development in function of including Republic of Serbia in EU", financed by the Ministry of Science of RS.

ral areas cover major territory of Serbia and its numerous population[2]. The agriculture is a basic and traditional activity, which by the population of Serbian rural areas deals with. However, according to this activity, no matter how it is developed and supported, neither it is not possible to expect, nor to plan their total development. Such development is possible to realize by complex and numerous measures and activities based on clear developmental strategy. This strategy must be based on complexity of rural economy development, as well as their whole economic development, always taking care of sustainability and preservation of autochthonous values of each environment.

Developmental possibilities among particular rural areas are dependable on natural potentials (altitude, climate, land, forests, biodiversity, water resources, mineral wealth), than built estates – infrastructure condition, economic capacities condition, human potentials – number and competence of labour, like as condition of public services, cultural characteristics, relation toward tradition, modernization, size and morphology of settlements and similar. Naturally, developmental possibilities of an environment depend on surroundings they are in. The areas closer to urban settlements, crucial traffic arteries and their important crossroads, important productive capacities, within major population deal with non-agricultural activities, too, to which the market is more accessible, as for placement of their products, as well as for inputs purchase, also have their developmental advantages. However, they have certain - major obstacles, while they have been ecologically jeopardized. How those possibilities differ mutually, it is every concrete environment's (and state's) priority to use them in the best possible way.

Those conditions are especially unfavourable in mountainous areas of the republic. Here, the role of state must be significantly more important and its incentive assets more generous. While Serbia is poor country (especially impoverished due to extremely unfavourable circumstances from the recent past), additionally hit by world economic crisis, its possibilities for intervention are very limited.

Serbia tends to membership in EU, and its current status is – potential candidate. Therefore it is not able to use assets from pre-accessible funds of EU, meant for West Balkan countries. That right has countries with status – candidate for membership in EU[3]. After all, it counts on certain support from those resources, like as it counts on getting soon also status of candidate for EU. According to previous, it prepares legislation and developmental documents, ad-

[2] According to traditional approach, these areas imply 70% of total territory with 43% of total population (OECD definition – local authorities units with population under 150 inhabitants/km^2), rural areas imply 85% of territory and 55,5% of population, with average population of 63 inhabitants per km^2.
[3] Macedonia, Turkey, Croatia.

justed to EU documents. It also accedes to agriculture and rural development as much as it can, in a way Cooperative Agrarian Policy of EU (CAP) dictates, applying the multifunctionality concept.

Actually, multifunctional agriculture in past ten years has characterized the European Agriculture Model. It provides preservation of nature and rural ambience, contributes to vitality of rural areas and fulfills requirements of consumers regarding quality and food safety, environment protection, as well as animal well-being. European model of rural development is based on a concept of rural multifunctionality, which includes spatial and systematic approach to rural development, along with its sustainability. Diversification of economic activities in rural environment and initiative of local communities represent basic elements of strategy for its realization.

Serbia, in almost every rural area, has all preconditions for promotion and successful application of multifunctional agriculture's concept and total rural development.

The state supports financially rural development by concrete measures, within its financial possibilities, tending to provide in a short term institutional and legal frame of rural development policy, adjusted to EU, and therefore creates crucial conditions also for utilization of assets of pre-accession support to EU.

Institutional frame and categorization

Serbia still does not have integral and modern document on rural development like, for example, Strategy of Rural Development. However, rural development can not be adrift, while it means significant part of territory and still numerous populations. This problem was encircled in other specific documents of national significance[4]. We mention following:

Spatial plan of Republic of Serbia[5], brought in 1996, which significantly gave also basis of rural development concept, with remarks that rural development and life quality improvement must value motto of multifunctionality of those areas, in combination of agriculture development and other economic activities, like as: processing capacities, various handicrafts, different serviceable and mediatory activities, trade, financial services, tourism. It all should contribute to better employment of rural population, like as unemployed in urban areas, left jobless during great crisis and transition. Therefore is provided significant role of the state, firstly regarding relation toward agriculture and village[6]. There should direct concrete measures toward development of rural infra-

[4] In few national and other strategies quoted in literature list.

[5] Law on Spatial Plan of RS (Official Gazzete 13/1996). However, there is ongoing creation of Strategy of Spatial Plan of RS for next 10 years, which will replace Spatial Plan.

structure, public services, which have been more accessible, improvement of professional support to agricultural producers and other rural population. Various conditions, in which some rural areas are, like as various other circumstances, have influenced isolation of 10 types of rural areas in this document:

- Vital villages in developed areas (characterized by faster development, good infrastructure, favourable natural and other conditions for agriculture development, population stability),
- Stabile rural areas (favourable natural conditions for agriculture development, average level of economic development, stagnate social-economic tendencies),
- Areas with low efficiency of agriculture (weak fertility of land, inadequate use of natural conditions),
- Areas of poverty (life standard under average one, i.e. under social minimum),
- Areas of village depopulation (negative demographic indexes in long period),
- Areas of violated ecological balance (pollution or devastation of one component, low pollution level of more environment components),
- Areas with special health problems of population (frequency of sickness, low level of health service development),
- Marginal areas of industrial complexes and towns (forms of spatial-functional disorders),
- Mountainous, frontier and other peripheral areas (poor natural conditions for agriculture development, potential for tourism development), and
- Villages in Kosovo and Metohija[7], as multi-problematic area (low efficiency of economy, ecological endangerment, irrational use of natural resources, demographic pressure on agricultural land).

It is certain that this partition is not complete, while some of the characteristics overlap. Such typology provided concrete goals, tasks and activities in developmental and other plans for specific areas, as well as financial resources for their realization. Unfortunately, just some of it was done. Problems and distinctive differences in development level have been still present, most often even more interpretative.

Strategy of agriculture development of Serbia[8] in 2005 is second valid document, significantly designed on creation of new productive structure in agriculture, by development of competitive and profitable agricultural husbandries and appliance of incentive measures like those used by EU within its agrarian policy (CAP). In one of its part, **it encircles also elements of rural development**, especially having in mind deep correlation among agriculture and rural economy.

[7] After 1999, i.e. NATO's intervention on Serbia (FRY, as Federation of Serbia and Montenegro), this area is under UN supervision, so Serbia practically has no governmental authority in its province.
[8] "Official Gazzete RS"

Rural development is very complex issue, as a group of overall activities and needs of population in specific rural area, along with the need for preservation and improvement of environment. Agricultural development contributes to improvement of rural development, so in accordance to available resources there should improve agriculture, but at the same time, there should know how it contributes to activities diversification, as in agriculture, as well as in total rural economy. Therefore should act in that course, expecting: population is stimulated to stay in rural areas, decrease pressure on urban areas, support traditional and cultural values of rural areas etc. It is familiar that second pillar of EU Cooperative Agricultural Policy (CAP) refers to policy of rural development, where many activities which improve those areas support.

Investments in rural development do not have to be motivated always by economic effects only, but often had social character. Conducting concrete programs of rural development should be realized by lower organizational level, i.e. local authorities and local action groups (LAG). It is necessary to make appropriate network, which would have a role of connecting interested parties on higher and lower level (state organs with local authorities, like as interested subjects) in realizing mutual goals. Developing such network in Serbia is still at the beginning.

Memorandum on economic and fiscal policy for 2009 with projection for 2010 and 2011[9] emanates also next task: "there should define basis of rural development policy, along with previous definition of rural areas and criterion for performance of categorization by EU model about less favourable areas for production. Strategy of agriculture and rural development, national program of rural development for period until 2013, law on agriculture and rural development is going to be brought."

Two significant documents are in preparation:

Proposal of Law on agriculture and rural development[10] would be a base for managing agrarian policy and policy of rural development. Those policies encircle measures and activities initiated by the authorities, aiming at: strengthening competitiveness of agricultural products on the market, providing qualitative and healthy food, providing support to life standard for agricultural producers which can not provide economic survival by them selves, **providing support to a rural development,** environment protection out of negative influences of agricultural production. They implement by realization of Strategy of

[9] "Official Gazette RS", No. 113/2008.

[10] www.minpolj.sr.gov.yu.

agriculture and rural development of Republic of Serbia[11], which means that it is about one document, not separate for agriculture and rural development. At the same time, National program for agriculture[12] and National program for rural development[13] (as separate documents) should be brought.

Proposal arranges supportive system, which can be: direct (support for production, regressions and support to non-commercial agricultural husbandries), market (export support, costs of storage, credit support) and structural (measures of rural development[14], improvement of protection and quality of agricultural land and measures of institutional support).

There are defined **areas with heavy working conditions in agriculture**, as areas where there are no conditions for intensive development of agricultural production, due to natural, social and legal limitations. Minister for agriculture is authorized to formalize those areas on three-years term. These areas are called **marginal** until now, and had better support within specific incentive measures[15].

Directory for agrarian payments forms and has many tasks, and relates to managing register of agricultural households, taking care of incentives, starting on reception of requirements and call competition, registering allocated incentives, payment of funds on the basis of evidence and assigned incentives.

Plan of Strategy of rural development, 2009-2013[16] was out at the beginning of this year (February 2009), while previous roject was Support to program of rural development and payment system in Serbia (www.minpolj.sr.gov.yu). Its significance was in:

- Representing a precondition for using IPA support to candidates and potential candidates for membership in EU. One of the components from this program relates to support to village and agriculture development, aiming at:
- **Improving efficiency of market and apply standards of EU, as a priority centerline 1,** accompanied by measures: investments in family households in order to improve production and adjust it to EU standards, support to association of agricultural producers, improvement of processing and placing agricultural products.

[11] Document that should bring and which determines long-term directions of agricultural and rural areas development. For period no less than 10 years.
[12] Here is determined middle-term and short-term goals of agricultural policy, way, timetable and terms for realization of quoted goals, expected results, as well as form, class, purpose and size of some incentives. For period not longer than 7 years.
[13] It contains measures and activities, as well as expected results, forms, purposes and size of some supportive measures. This document also refers to time period no longer than 10 years.
[14] These measures support the improvement of competitiveness in agriculture and forestry – investments in these fields, introduction of new standards in production and circulation of agricultural products, improvement of environment protection program, preservation of biodiversity and program of rural economy diversification etc.
[15] 49 municipalities in Serbia
[16] www.minpolj.sr.gov.yu

- **Do preparatory work for conducting agro-ecological measures and strategies of local rural development, as priority centerline 2,** along with: activities in order to improve environment and village condition, preparation and conduction of local rural development strategies,
- **Providing development of rural economy, as priority centerline 3,** along with: improvement and development of rural infrastructure, diversification and development of economic activities in rural areas, and improvement of training and professional development.
- Analyze state in rural areas in comparison with republic average and in relation to urban environment: in rural areas a level of depopulation has been very conceived, so the population in these areas in period between 2 census was decreased for 3,6% in relation of increase in urban areas of 2,4%, employment in primary sector here achieved one third of total employees number, while in urban areas around 11%, GDP per inhabitant was 74% of republic average, in urban areas 133% of that average, 248 telephone lines per 1000 inhabitants, 1 doctor per 512 inhabitants, while in urban areas that relation was 1:370. In agriculture is low productivity. Major households product for their own needs only, while small quantities of products place on the market (mostly raw milk, repurchased by dairies),
- **Doing categorization of rural areas according to dissimilarities among them.** Four types – regions of rural areas in Serbia have been determined, which can use as basis for making appropriate strategies, policies and measures for their development, like as for intervention from state level. Those regions are:

a) **Region 1 – High productive agriculture and integrated economy.** It is characterized by qualitative land, good structure of agricultural production with intensive use of capital, good processing capacities and professional staff. It occupies north part of the republic – AP Vojvodina and Macva.

b) Region 2 – Economy sectors typical for smaller urban areas with agriculture in which labour is used intensively. It occupies middle part of Central Serbia – surroundings of urban centers and big cities. It has higher productivity rate and more favourable economic structure than other regions in this part of Serbia and intensive production of fruit, vegetable and livestock products.

v) **Region 3 – Economic branches directed toward utilization of natural resources, mostly mountainous region.** This region is very heterogeneous. The activity is based on utilization of natural potentials in the field of mining industry and agriculture. This region has the higher rate of rural poverty and total unemployment. It occupies east and south parts of Central Serbia,

g) **Region 4 – Big tourist capacities and bad agricultural structure.** It is area with the best tourist potential and the higher rate of participation of tertiary sector in economic structure. The agriculture is based on livestock production and livestock predominantly feed on natural meadows and pastures. This region encircles west – mountainous part of the republic.

Very impressive dissimilarities of these regions can be better perceived in table 1. (data prepared on basis of mentioned project – Support to programming rural development in payment system in Serbia).

- it points out: richness of biodiversity and endanger of plant and animal species, as well as protected areas, which enclose 5,6% of whole territory, water resources, sufficient for fulfillment of own needs, along with rational utilization, but also an endanger level of water potential, inadequate management of soil in the process of its utilization and influence of erosion, which harms the most to soil quality,
- determines visions (for agriculture and food industry sector and vision for rural Serbia), strategies and measures which is anticipated within each of priority centerlines. **The vision for rural Serbia** is a vision of rural economy and a society in which:
- exist sustainable and strong communities, with demographic balance, satisfying income and sufficient possibilities for employment, in which inhabitants adjust easily to economic, social, political and ecological changes ("live" village),
- exist life standard and life quality worth modern, democratic and developed Serbia (progressive village)
- major husbandries and family households stay in the country (sector of agriculture in rural economy),
- exist equal possibilities for all inhabitants of rural areas, especially women and children, who will have accession to education, professional qualification and life-time learning (socially-rightful village),
- rural communities participate actively in work of authorities which make decisions, in the society based on equality and social justice principles (democratic village),
- cultural identity of rural communities and their principles, customs, tradition and togetherness, preserved and strengthened (village with cultural identity),
- natural environment which represents the most significant value and wealth for rural areas population is mostly protected and respected; the growth of rural economy is based on the sustainability principles (sustainable village), and

- Strong social connection and special policy measures which contribute to decrease of poverty and social elimination (social component of village).
- Anticipates indicative assets for realization of National program for rural development, which is going to be brought, i.e. 437,5 million euros till 2013, out of which from the budget of Republic of Serbia 205 million and from IPA(RD) support around 187,5 million euros.

This is still a draft plan and its finishing and some specifications will probably follow in future period. Although it encircles also agricultural activity, it is directed to rural development. There is a doubt if it is a document anticipated in mentioned Memorandum, i.e. Proposal of Law on Agriculture and Rural Development, as Development Strategy of Agriculture and Rural Development. It should be applied in 2009-2013, but neither the document was not yet adopted, nor National Program for Rural Development. The anticipated assets, which would be supportively directed to rural development, are pretty uncertain, while there is a question when will Serbia become a candidate for EU membership, so it could use this component of IPA support, but also a question of economic crisis duration, which would hinder setting aside the anticipated assets from the budget. All of this shows that there are many uncertainties for forthcoming improvement in numerous rural areas of Serbia.

Some of concrete measures in 2009

Serbia, as almost every country in the world, according to significance the agriculture has in spatial, economic, ecological and social sense, manages certain agrarian policy, as well as policy of rural development. Preparatory documents are directed toward their improvement and adjustment to the one in EU countries. In order to achieve that policy, certain concrete measures are taken. As we saw, the base of current agrarian policy and measures for its realization is still valid document Strategy of Agriculture Development of Serbia. Since 2004, economic policy of the country has been arranged by Memorandum on budget and economic and fiscal policy for current year, with projections on two following years. These documents pay attention to agriculture and rural development as well. The Memorandum on budget and economic and fiscal policy for 2009, with projections on 2010 and 2011[17], points out that, certain supportive measures to ongoing activities in agricultural and rural development, is going to be instigated, than improvement of regulatory rules, adjusted to EU regulatory rules etc.

[17] (Official Gazette RS, 113/2008)

Table 1. Basic characteristics of rural regions in Serbia

	Ruralna područja Srbije Rural areas of Serbia	Ruralni region I Rural region I	Ruralni region II Rural region II	Ruralni region III Rural region III	Ruralni region IV Rural region IV
Geografski i demografski pokazatelji Geographic and demographic indexes					
Ukupna površina (bez KiM), km^2 Total surface (without KM), km^2	65952	20229	12642	22278	10803
Broj stanovnika 2002 (bez KiM) Number of inhabitants 2002 (without KM)	4161660	1554209	1086278	966770	554403
Gustina naseljenosti, 2002 Population density, 2002	63	77	86	43	51
Stanovništvo 2002/1991, u % Population 2002/1991, in %	96,35	100,00	97,34	90,69	95,04
Stanovništvo ispod 15 godina st., % Population under 15 years of age, %	16,17	15,91	15,70	15,91	18,30
Stanovništvo preko 65 godina st., % Population over 65 years of age, %	17,49	16,29	18,33	20,33	14,28
Zaposlenost Employment					
Zaposleni u primarnom sektoru, % Employees in primary sector, %	32,98	30,75	32,68	36,30	34,20
Zaposleni u sekundarnom sektoru, % Employees in secondary sector, %	30,69	31,20	30,79	29,11	31,72
Zaposleni u tercijalnom sektoru, % Employees in tertiary sector, %	33,44	35,85	33,50	30,43	31,74
Nezaposlenost, u % Unemployment, in %	21,32	22,40	19,69	20,33	23,22
Ruralna ekonomija Rural economy					
BDP/stanovniku, Srbija=100 GDP/inhabitant, Serbia=100	73,69	96,72	70,32	51,43	54,57
% BDP - Primarni sektor % GDP – Primary sector	32,48	33,24	30,25	38,63	24,24
% BDP - Sekundarni sektor % GDP – Secondary sector	41,12	42,36	39,71	38,16	43,36
% BDP - Tercijarni, uklj. javni sektor % GDP – Tertiary, public sector	26,40	24,41	30,03	23,21	32,40
Produktivnost - primarni sektor, Srbija=100 Productivity – primary sector, Serbia=100	87	128	74	69	n,p,
Produktivnost - sekundarni sektor, Srbija=100 Productivity – secondary sector, Serbia=100	75	102	65	53	n,p,
Produktivnost - tercijalni sektor, Srbija=100 Productivity – tertiary sector, Serbia=100	62	71	61	48	59,68

Took over from: Prof. Drago Cvijanovic, Ph.D. and associates:"Multifunctional agriculture and rural development in AP Vojvodina", Institute of Agricultural Economics, Belgarde, 2007, page 33.

The Memo determines basic courses of economic policy, so those ones managed in agriculture too, while the budget[18] provides, among assets for financing the realization of governmental functions and other needs, also assets

[18] Law on the budget of the Republic of Serbia for 2009. year - Official Gazette of RS, Nº 120/2008.)

for realization of supportive measures in the field of agriculture and rural development.

Due to economic crisis, which strongly reflects also on economic tendencies in Serbia (getting recession character), this year budget is more modest than in previous years, especially regarding assets meant for agriculture[19]. The assets meant for subventions, in a form of specific supportive measures for improving agricultural activities and rural development for 2009, amount 17,9 milliard dinars (around 188 million euros), which is for 22% less than in last year. That means that state support will be much more modest. It will also reflect on effects in agricultural production and rural economy development[20.]

According to Program of allocation and use of subventions in the field of agriculture, forestry and water management for 2009[21], those assets direct to following purposes:

- regression of agricultural production, where assets for settlement of part of costs for purchasing mineral fertilizers, qualitative seeds and fuel are assigned to agricultural husbandries (physical persons),
- improvement of livestock breeding by allocating incentive assets per qualitative breeding animal in the field of livestock breeding, sheep breeding, goat breeding and bee keeping (direct payments per hive) and by conducting selection measures in livestock breeding,
- preservation of plant and animal genetic potential (to breeders of autochthonous jeopardized species allocates specific compensation/award),
- Support to insurance in agriculture (livestock, crops and yields), by financing partly costs for insurance,
- paying off bonuses for milk (has decreasing tendency, along with higher bonus for “E” milk quality),
- support to non-commercial husbandries by paying off the amount per household (husbandry) member, but without right to use other incentives (except bonus for milk and renting land out),
- support of agri-food products export, in a way to pay off certain assets, calculated by appliance of set rates, on the amount of export of specific products with domestic origin,
- Improvement of information system, significant for conducting agrarian and rural policy,

[19] Total resources in budget of this year for the Ministry of Agriculture, in 2009. the nominal, are lower than any in the last three years. The expenses in the total budget in 2009. year amounted to only 3.42%, according to the example of 5.87% in 2006.

[20] For example, the crisis is largely hold producers of milk, and milk. Due to low purchase and redemption prices low risk that the number of milk throat quickly decreases, with severe long-term consequences for the cattle.

[21] (www.minpolj.sr.gov.yu),

- supporting work of professional agricultural services/departments.

Along with mentioned measures of support to agriculture, which surely have direct reflection on rural development too, we can separate several measures directed to rural economy development, as entirety.

- **Support to rural development through investments support in agriculture**[22] (support to building objects for livestock breeding – for animal location, animal food location and смештај стајског ђубрива (incentives can be used by **physical persons** – bearers of agricultural husbandry), or building cold storages, silos, purchasing equipment for sorting, cleaning, калибрирање, polishing, washing , packing, vacuuming and similar, along with fulfilling the HACCP requirements (incentives can be used by cooperatives). The amount of incentives is 40% or 50% of total investment, for marginal regions, while the rest must be ensured by the user,
- **support to development of village through competitiveness growth**[23]**,** agricultural husbandries **– physical persons,** by purchasing the agricultural mechanization, equipment and qualitative breeding animals and **entrepreneurs and small enterprises** in agri-food activity for purchasing equipment for production of wine and rakia (brandy). Non-repayable assets allocate, in amount of 40% or 50% of purchased equipment or breeding animals, to users in marginal areas.
- **support to rural development by strengthening human capacities in agricultural cooperatives**[24]**,** in a way to stimulate training of cooperative's representative (director, members of administrative board or president of the cooperative's assembly – only one candidate from the cooperative), in the field of management, trade, marketing, basic accounting. The training implies also research trips, in order to acquaint with practical examples.
- **support to rural development through diversification of activities in rural economy**[25]**,** by approving incentive assets for improvement and development of rural tourism, maintaining old handicrafts, promoting traditional and cultural values in the village, performing appropriate manifestations. The users are physical persons, entrepreneurs, cooperatives, churches, monasteries and citizen associations. The amount of incentives is 50% (for users in marginal areas 60%), but the activities of citizen associations (maintaining traditional handi-

[22] Regulation on use of assets for support to rural development through support to investments in agriculture, in 2009. (Official Gazette RS, 14/2009)

[23] Regulation on use of assets for rural development support through the increment of agriculture competitiveness, for 2009. (Official Gazette RS 14/2009)

[24] Regulation on allocation and utilization of incentives for rural development support through strenghtening the human capacities of cooperatives in 2009. (Official Gazette RS 14/2009)

[25] Regulation on use of incentives for rural development support through investing in extension and improvement of rural population economic activities, for 2009. (Official Gazette RS 17/2009)

crafts and skills, promotion of rural tourism, activities linked to employing women in rural areas etc.) have been financed 100% by budget resources.

- **support to strengthening the capacity network for rural development[26],** aiming at: providing professional support in rural areas development (educational and consultative activities, seminars, lectures, promoting the example of good agricultural practice, local products, rural tourism, tradition and culture of specific region); publishing competent publication of interest for rural development and agriculture; improving cooperation with local partners, public and other sectors, donors in the field of rural development; improving definition of the projects, follow their realization and providing as efficient as possible the use of available resources. The right to use those assets, have all legal entities, which have deal with rural development in last three years, citizen associations and public organizations, if they have fulfilled legitimate conditions. The assets are allocated through announced competition.

It implies that all incentive assets for mentioned purposes, as in agriculture, as well as in rural development, can be used for fulfilling regulated conditions. Marginal areas have more favourable status in their utilization. The incentives are inefficient, so the main issue is up to a what point are going to contribute to improvement of agriculture and rural development. The incentive assets are meager, and economic power of husbandries and population in these regions is pretty weak, also aggravated by economic crisis.

Conclusion

Rural areas in Serbia are characterized by extremely great dissimilarities regarding many characteristics. Government, within its developmental documents, adopted policy and financial possibilities, provides support to improvement of agriculture, rural economy and life conditions in rural areas. So, there are tendencies for applying models present in Cooperative Agricultural Policy of EU – multifunctionality of agriculture and rural development. Numerous legal proposals and developmental documents are in preparation, like as Strategy of agricultural and rural development, National program for agriculture and National program for rural development. It is a condition to use (IPA)RD EU support. Basic problems are limited financial possibilities which are in great disproportion with needs of serious improvement of RS rural areas development. Current economic crisis, which duration is still unintrospected, is going to influence unfavourable on tendency and intensity of rural development, as well as total development.

[26] Regulation on allocation and use of incentive assets for organizing and strenghtening the capacity of rural development network, for 2009. (Official Gazette RS 18/2009).

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Development considerations of socio-economic rural activation in Tarnopol disrict.

Introduction

Development of rural agricultural areas in Ukraine in the context of the future integration with European Union to great extent depends on socio-economic factors. Economic and non-economic considerations which are more and more apparent in the time of progressing globalisation and unification of economies indicate the degree of agricultural development and determine its competiveness. Presently, socio-economic development of rural areas in Ukraine requires essential infrastructure from the State, but also stimulation of local communities to stronger activation for the purpose of the improvement of their own situation on the regional labour market.

Many renowned scholars working on that subject such as *inter alia* W. Bojka, O. Bulejka, O. Krysalnogo, I. Prokopy, M. Malika, P. Sabluka, M. Fedorova, W. Yurchyshyna devoted their dissertations to the analysis of socio-economic premises of rural development in Ukraine. The authors point out to the barriers of the sustainable rural economic development in Ukraine Among the most common limitations prevail ineffectiveness of the politics and agrarian production, and what is emphasised is the fact of low socio-professional activation of the people living on rural areas on which depends its future economic development.

It seems that in the context of the abovementioned problem carrying out an analysis related to the considerations of socio-economic rural activation in Ukraine may be of great help during an objective evaluation of the level of agricultural development. To this end in the present dissertation the focus will be put on the characteristics of demographical factors as well as the factors of professional activation of the people living on rural areas exemplified by the tarnopolski region.

The analysis will be based on the empirical data obtained from the Statistical Office in Tarnopol concerning the years 2002-2007, and it will be enriched with the results of research self-conducted among people living on Tarnopol rural areas.

Economic activity of rural population from tarnopolski region.

Making an attempt to study economic activity of the people living in tarnopolski region, a characteristics of the entire region in the context of basic demographic and economic indicators should be made.

Among all 26 regions in Ukraine, tarnopolski region is characterised by moderate degree of socio-economic development. In 2007 it covered 2.2% of the total area and its share in generating GDP amounted to1.2%. Moreover, the region was inhabited by 2.4% of the Ukrainian society at large. It should be mentioned here, that Ukrainian region in that time on the average covered 3.9% of the total area, and generated 3.2% GDP and was inhabited by 3.7% of the society at large. It is worth mentioning that tarnopolski region had one of the lowest incomes per capita. In 2007 GDP per capita amounted to $5900 with the average monthly income amounting to $6700. That kind of result has contributed to the fact, that tarnopolski among other regions took second place right behind zakarpacki region in respect of the lowest income per one person living on rural area in Ukraine.

Unfavourable considerations of socio-economic development of the analysed region were also reflected in the situation of agriculture development. In 2007 the share of agricultural production of tarnopolski region in national production in total amounted to 3% compared to the average 4% for all regions. The highest share in agricultural production had kijowski region (6.7%) and dniepropietrowski region (6.3%), whereas the lowest zakarpacki region (2.2%) and (iwano-frankiwski region (2.6%). Low indicators related to agricultural production in separate regions, including also tarnopolski region is the evidence of the significant break-up of the production in Ukraine.

Apart from general measures determining the socio-economic situation of tarnopolski rural area, bearing in mind realisation of the aim of this dissertation it is worth carrying out a detailed analysis of professional activation considerations of rural population.

One of the factors influencing the degree of professional activation is a demographic factor. Taking into consideration the number of people inhabiting rural areas it should be pointed out that tarnopolski region is characterised by the significant share of rural population in the number of inhabitants in total. In 2007 the rural areas in tarnopolski region were inhabited by 56.98% of population, whereas in the city it was 43.2%. Detailed data is presented in Table 1.

Table 1. The number of rural population in tarnopolski region in comparison with urban population

Years	Total number of persons (thousand)	including		% in comparison with total number	
		urban	rural	urban	rural
2002	1142.4	485.6	656.8	42.51	57.49
2003	1134.2	483.6	650.6	42.64	57.36
2004	1126.6	481.6	645	42.75	57.25
2005	1119.6	478.5	641.1	42.74	57.26
2006	1112.1	476.9	635.2	42.88	57.12
2007	1105.4	475.5	629.9	43.02	56.98

Source: Author's own elaboration based on: Data Bank of the District Statistical Office in Tarnopol.

According to the above-mentioned table it can be stated that from 2002 to 2007 the share of rural population of the examined region in the total number did not undergo significant changes. Within the space of the analysed period of time, inconsiderable decrease of the share of the number of people inhabiting rural areas from 57.49% in 2002 to 56.98 % in 2007 can be observed. At the same time, this situation was accompanied by the increase of city dwellers share from 42.51% in 2002 to 43.02% in 2007. Moreover, it is interesting that with reference to national data the analysed region is characterised by significantly higher than national average share of rural population in a total number, because in the end of 2007 in Ukraine 32.02% of people lived on rural areas, whereas 67.98% lived in the city.

Carrying out a detailed analysis of the structure of the population inhabiting tarnopolski region separated according to age (Table 2) it should be noticed that between 2002 and 2007 the number of people in working age increased from 628.4 thousand to 644.8 thousand (+2.6%), whereas the number of people in pre-working and post-working age decreased by 19.9% and 6.5% respectively. In relation to the lack of data concerning the structure of rural population according to the age in tarnopolski region it should be assumed that this tendency was also reflected on rural areas.

Table 2. The number of population according to age* in tarnopolski region between 2002 and 2007

Years	Number of people in (thousand)		
	pre-productive age	**productive age**	**post-productive age**
2002	222	637.5	271.5
2003	214.5	640.7	268.1
2004	207.8	641.4	267.1
2005	201.9	643.5	263.5
2006	196.7	644.8	260.6
2007	191.6	644.8	259

**productive age for women: 15-55 years, for men: 15-60 years.*
Source: Author's own elaboration based on: Data Bank of the District Statistical Office in Tarnopol.

Previous data concerning the number of rural population in tarnopolski region shows that the degree of economic development for the examined region to large extend depends on the economic activity of rural population, which constitutes over half of the total number of the region's inhabitants. Therefore it is worth analysing indicators of economic activity of the rural population from the examined region (Table 3).

Table 3. Economic activity of the rural population in comparison with urban population in tarnopolski region in 2007

Specification	In total	City	Rural area
	thousand		
professionally active	463.3	187.4	275.9
professionally active, working people	423.5	171.6	251.9
professionally active, unemployed people	39.8	15.8	24
professionally passive	340	179.6	160.4

Source: Author's own elaboration based on: Data Bank of the District Statistical Office in Tarnopol.

According to statistical data presented in Table 3 in 2007 the majority of people among the professionally active group lived on rural areas (275.9 thousand). At the same time the city was inhabited by 47% less people than rural areas. Similar tendency occurred also in the case of the number of professionally

active and working people as well as the unemployed. In both cases rural areas were inhabited by 50% more working, professionally active and unemployed people than urban areas. Additionally, examining the number of professionally passive people it should be stated that on rural areas lived over 10% lower number of people than in the case of urban population.

Carrying out a detailed analysis of economic activity of rural population in tarnopolski region it should be taken into consideration that the degree of professional activity as well as employment and unemployment indicator is the evidence of the true involvement of the people in the labour market According to data presented in Table 4 it should be stated that in tarnopolski region rural population is characterised by the higher indicator of professional activity (63.2%) than urban population (51.1%). Moreover, activity indicator of rural population is higher by 5 percentage points than the average indicator for the entire region. In comparison to 2002 upward tendency of the analysed index could be observed, because the indicator of professional activity for the rural population amounted to 59.9%, for urban population - to 48.4% whereas for the region in total was at the level of 53.7%.

Table 4. Professional activity indicator of the rural population in comparison with urban population in tarnopolski region between 2002 and 2007

Specification	**In total**	**City**	**Rural area**
2002			
professional activity indicator (%)	53.7	48.4	59.9
employment indicator (%)	46.6	45.3	48.8
unemployment rate (%)	13.1	12.8	13.2
2007			
professional activity indicator (%)	57.7	51.1	63.2
employment indicator (%)	52.7	49.8	54.7
unemployment rate (%)	8.6	8.4	8.7

Source: Author's own elaboration based on: Data Bank of the District Statistical Office in Tarnopol.

In the case of the employment indicator, similarly as it appeared during the analysis of professional activity indicator it can be observed that its value in 2007 is higher on rural areas (57,7%) than in the city (46.8%).

Analysing the value of this index within the space of research period it should be noticed that on rural and urban areas and in the entire region the upward tendency was noted (increase by approx. 2 percentage points).

Taking into consideration another significant indicator of activation of people on the labour market i.e. the unemployment rate it can be observed that in 2007 rural areas were characterised by the higher unemployment rate (8.7%) than urban areas (8.4 %). To large extend it was conditioned by the fact that more people in working age lived on rural than urban areas of the examined region. It should be taken into account that the differences between the unemployment rate on rural areas and on urban areas as well as in the entire region were very little.

Comparing the unemployment rate in 2007 with the year 2002 it should be noted that it decreased radically both among rural population (decrease by 4.5 percentage points) and urban population (decrease by 4.4 percentage points). This result was influenced not only by progressing process of market facilitation and economic transformation in Ukraine [Czerewko, Iwanicka, 2003] but also the changes occurring in individual sectors of economy. It was reflected in the number of unemployed people employed in individual sectors of economy in tarnopolski region (Table 5).

Table 5. Employment of the unemployed in the sectors of national economy in tarnopolski region between 2002 and 2007.

Sectors	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2007/2002 (in %)**
In total	*23651*	*28573*	*30441*	*34899*	*36697*	*37429*	*+ 58.26*
agriculture	5574	7200	9516	13035	12422	11728	+ 110.41
industry	6864	8063	6811	7981	8795	9423	+37.28
building industry	1149	1225	1166	1179	1383	1562	+35.94
trade	3642	5224	5821	5316	5941	6050	+66.12
hotels, restaurants	244	407	361	444	586	623	+155.33
transportation	1092	1036	934	972	1131	1506	+37.91
finances, banking	221	243	229	224	187	227	+2.71
real estate	301	520	467	459	531	533	+77.08
state institutions	831	786	1223	1333	1710	1590	+91.34
education	1377	1336	1510	1901	1900	2024	+46.99
health protection	1304	1280	1039	1048	1118	1257	-3.60

Source: Author's own elaboration based on: Data Bank of the District Statistical Office in Tarnopol.

Data presented in the table shows that between 2002 and 2007 the majority of unemployed people living in tarnopolski region were employed in the en-

terprises from the following sector: *hotels and restaurants* (+155.33%), *agriculture* (+110.41%), and the *state institutions* (91.34%). The smallest number of people was employed in *health protection*, where the employment decrease by 3.60%was noted and in *finances and banking* where the increase of employment amounted to 2.71%. Moreover, it should be added that decreasing unemployment rate was also reflected in decreasing indicator of the duration of unemployment. In the end of 2002 in the examined region the indicator amounted to 11 months whereas in 2007 to 5 months.

Apart from the indicators concerning the situation of rural population on the labour market as well as demographic factors, another significant consideration affecting the development of socio-economic activation of rural population is the development of SME sector.

The significance of small and medium sized enterprises in stimulation of economic growth is noticed by many scholars working on this subject, however Mr Drucker defined it the most accurately. According to him these enterprises constitute the foundation of democratic socio-economic order (Safin 2008, Drucker 1992).

Nowadays SME are the source of innovation and technical progress, the chance for finding employment for those looking for a job, as well as the measure of the economic development degree in a given region. Moreover, in the case of the countries which have been undergoing transformation, such as Ukraine, SME sector neutralises negative outcomes of the reforms and supports new, emerging values and new strategies of market behaviour. It also contributes to the development of entrepreneurship understood not only as establishing business activity but also reflected in the features of character of the individual especially, in their creativity, innovativeness of actions and responsibility for their own actions and fate. Moreover, it creates service and cooperative infrastructure for inflowing foreign capitals and regulates organisational and legal changes in macro-economic environment.

All of the above-mentioned SME features in the context of economic growth make it become one of the key considerations of both economic and social situation of the given country. Analysing the condition of development of SME sector on the rural areas in tarnopolski region first of all it should be noticed that available statistical data does not allow for carrying out the analysis separately for rural and urban areas. Hover, demonstration of general regional tendencies seems to be intentional, despite the diversity of the conditions of companies development on rural and urban areas.

Table 6. Main indicators of SME sector development in tarnopolski region between 2002 and 2007

Specification	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Number in general	3645	4147	4292	4403	4516	4759
Number of people employed in SME	37059	39791	38316	35852	34679	31966
% of employment in SME sector to % in general	25.3	28.6	29.4	29.3	29.6	29.3
share in generating GDP	15.6	16.1	12.8	13.1	12.3	11.2

Source: Author's own elaboration based on: Data Bank of the District Statistical Office in Tarnopol.

Examining the number of enterprises in SME sector between 2002 and 2007 development of companies by 30% in 2007 in relation to the base period of time should be observed. It was accompanied by the decrease of employment of people in small and medium sized enterprises. In 2002 the number of employed people amounted to 37.059 whereas in 2007 it reached 31.966 (decrease by 14%). Moreover, in the same time the increase of SME sector share in employment of the inhabitants of tarnopolski region in general was noted, with concurrent decrease of SME share in generating GDP in the region.

The above-mentioned data explicitly indicate a declining role of SME sector in socio-economic development in the examined region. In spite of the increase of the general number of the enterprises, the number of people working there decreased, as well as the sector's share in generating GDP, which may be the evidence of the need for intensifying the actions for the development of the examined sector, especially in the context of the future activation of the rural population.

We have to be aware here, that still on the Ukrainian labour market it will not be possible to provide employment for all inhabitants of the rural areas only in agricultural sector, because in this field less than half of the rural population may be involved. (M.Parchomets). For this reason the subject of the state policy in agricultural sector should be establishing workplaces on rural areas outside of the agricultural field, in order not to allow for the intensification of the internal migration of the people from rural to urban areas. Mainly for this purpose the mechanisms should be created, to allow for obtaining external investment capital, serving for the development of entrepreneurship through: providing investors with proper technical and social infrastructure, creation of the programmes stimulating establishing enterprises on the rural areas, implementation of the programmes directed to rising qualifications of the rural population as well as

the implementation of the programmes related to consulting assistance for the present enterprises' owners (M. (Kłodziński, 2006). The degree of activation of rural community can be increased only by these means, and *ipso facto* negative results of political system transformation can be eased.

Summing up previous premises related to the economic and social activity of rural community in tarnopolski region it should be noticed that the agrarian areas in comparison with the whole region are characterised by the higher degree of the professional activity, employment and unemployment indicators. The tendency is additionally determined by the fact that 60% of the total number of regions' inhabitants live on rural areas, which at the same time makes the dynamics of socio-economic development in the examined region dependant from the economic development of rural areas. The question arises about the directions of the development of socio-economic development of the inhabitants of rural areas in tarnopolski region. In order to analyse the abovementioned subject matter it was decided to conduct questionnaire survey among the mentioned community.

Directions of socio-economic activation of rural population in tarnopolski region in the respondents' opinion.

Taking up the analysis of the problems related to labour market and unemployment on rural areas, the factors which in a significant manner differentiate the situation of people living on rural and urban areas should be referred to. The position of the rural areas inhabitants on the labour market is influenced by: quality of education, professional qualifications, financial situation, income sources, possibilities of creating alternative form of employment.. Proper diagnosis will allow for undertaking actions, which will in an effective manner contribute to professional activation of rural population.

204 vocational schools students from Tarnopolski region (mainly from rural areas) constitute the target group. The aim of the scientific research is the study of professional activity of people from rural areas (particularly young people) in the area of employment and self-employment, raising the level of knowledge and skills within taking advantage of the chances related to establishing new workplaces and infrastructure of service sector on rural areas.

The aim of the research was also the evaluation of the situation of the rural labour market in particular taking young people into account.

Analysis and evaluation was also carried out on previously applied instruments of the problem solving politicy on local labour markets, their effectiveness and the factors influencing young people's employment on rural areas were defined.

Vocational schools functioning on rural areas earlier educated mainly in the field of agricultural professions. Nowadays, in order to compete with other vocational schools from the nearest surroundings they attempt to switch to a different profile of education. However, the possibilities of introducing changes are limited. Teachers employed in the school and educational basis are decisive.

Educational profiles offered are not adjusted to the requirements of the labour market, but to the skills and qualifications of the teachers. These factors significantly affect the quality of education in those schools, which is directly reflected in professional possibilities of the graduates on the local and supra-local labour market.

Different forms of support at the level of vocational schools (in cooperation with the Regional Labour Chamber and state institutions) are organised such as:

- workshops on employment and self-employment on the labour market;
- training on the computer operation;
- trainings on selling techniques and cash register operation;
- individual profession consulting.

The above-mentioned initiatives contribute to professional activation of the people living on rural areas, improvement of employment capability and development of activation services, support of local IT, training and consulting initiatives, which promote professional activation at local level, development of dialogue, public and social partnership and cooperation for human resources development at local level.

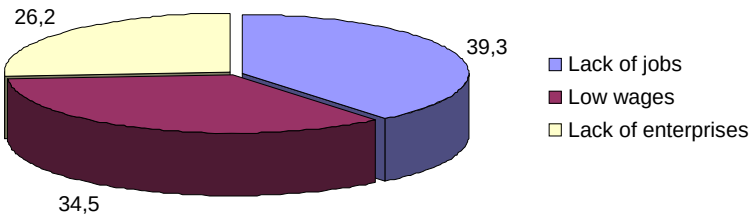
During diagnosing current situation on the labour market on rural areas among young people, the analysis of conducted in 2008 questionnaire survey may be helpful

As an answer to the question on the main problems of rural areas in the field of employment, according to expectations the majority of respondents indicated lack of sufficient number of workplaces (39.9%) and low wages (34.5%).

It is worth mentioning that the third indicated problem in the labour market is the lack of enterprises- 26.2% (Fig. 1).

What seems to be significant here is the number of people, attributing the feature of the biggest problem of rural areas in the field of employment to this particular occurrence. As opposed to previously indicated lack of work places and low wages – just the perception of statistical entrepreneurs market as a factor negatively affecting the employment determines developing awareness in the scope of the causes of the problems with employment among surveyed young people.

Figure 1. How would you define the main problems of rural areas related to employment?

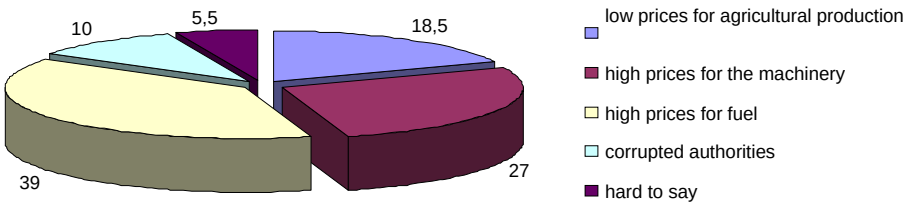


Source: Author's own elaboration based on the questionnaire survey.

High prices of the fuel and agricultural machinery (39 and 27%), with concurrent low prices for agricultural production(18%) in respondents' opinion seem to be the main obstacles in the development of agricultural farms (Fig. 2). However, the respondents' answers indicating that the cause of the above-mentioned problems lies in corruption, cannot go unnoticed.

The corruption among the authorities, directly influencing the development of individual economic units according to 10% of the respondents constitutes the greatest trouble of the developing agricultural enterprise.

Figure 2. What are in your opinion the main obstacles in the development of agricultural farms?



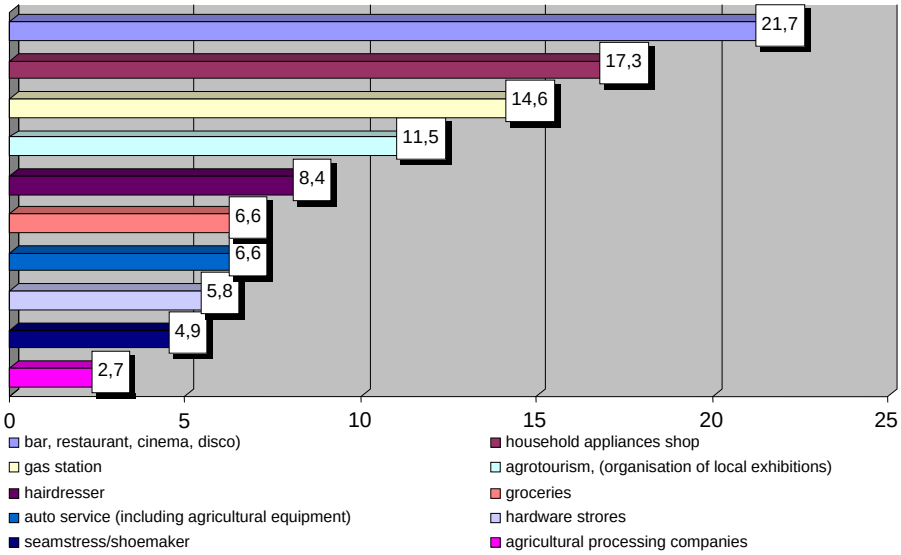
Source: Author's own elaboration based on the questionnaire survey.

Certainly, because of the average age of the surveyed people (it should be reminded that the target group of the research constituted young people) pointing out on the services, unavailable in the towns inhabited by young respondents, first of all they indicate the insufficient number of bars, restaurants, cinemas or clubs (21.7%). Further on the list, there are: electronic shops (17.3%),

gas stations (14.6%) agrotourism and organisation of local trips (11.5%), car and agricultural machinery services (6.6%), hairdresser services (8.4%), groceries (6.6%), industry shops (5.8%) shoes/clothes repair (4.9%) and on the last position processing plants of agricultural production -2.7% (Fig. 3).

What is worth mentioning is the characteristic for the surveyed group (in relation to age) lack of the connection between the noticed problems (even indicated in the first question stability of entrepreneurs market) and the necessity to undertake actions leading to the change of the current situation.

Figure 3. What services does your town lack?



Source: Author's own elaboration based on the questionnaire survey.

Probably for this reason in the evaluation of respondents, establishing bars/restaurants/cinemas is at the moment incomparably more desirable than e.g. extending offers of processing enterprises of agricultural production.

One of the main challenges of the present Ukrainian economy is technical modernisation. The costs of implementation of technological progress connected with more effective methods of work directly influence the level of employment. The occurrence of redundancy affects in particular groups such as young people, who are just gaining professional experience. 29.4% of surveyed men and 40.8% of surveyed women declare that they don't have any professional experience (Table 7).

The analyses of the employment of young people particularly shows that the highest number of students from agricultural specialisation (17.9%) has been so far employed in the enterprises unrelated to agriculture or processing. At the same time in the abovementioned enterprises, some experience was gained by

relatively smaller number (11.1%) of the students from agricultural specialisation. This some sort of paradox is the evidence of a poor dependency between the profile of education and the real situation on labour market.

Table 7. What kind of profession/enterprise have you gained professional experience in?

Specification	**Specialisation (%)**		**Sex (%)**	
	agricultural	Supra-agricultural	man	woman
former state agricultural holdings	10.4	11.1	13.2	8.2
Cooperative farm	6.0	11.1	4.4	8.2
agricultural farm	11.9	-	8.8	12.2
farm homestead	7.5	-	10.3	10.2
Enterprise unrelated to agriculture and processing	17.9	11.1	17.6	4.1
plant/enterprise abroad	10.4	11.1	10.3	6.1
agrotourism	6.0	22.2	4.4	8.2
I am not experienced	26.9	33.3	29.4	40.8
other	3.0	-	1.5	2.0

Source: Author's own elaboration based on the questionnaire survey.

Despite wide awareness of the young people within the problems related to running activity on the rural areas 61.1% of the students from agricultural specialisation and 60% from other specialities declare interest in undertaking such initiative in the near future (Table 7). What is interesting, the conducted survey shows that at the stage of gaining education 12% of students from other than agricultural specialisation run their own activity on rural areas. Among the people educating themselves towards agriculture, this kind of initiative was undertaken so far by only 3.7%.

The obstacle in starting their own activity, indicated by the respondents irrespective of education is the lack of initial capital (Fig. 4). Lack of sufficient financial possibilities seems to rise the majority of concerns among young people who want to undertake their own initiative within the activity on rural areas.

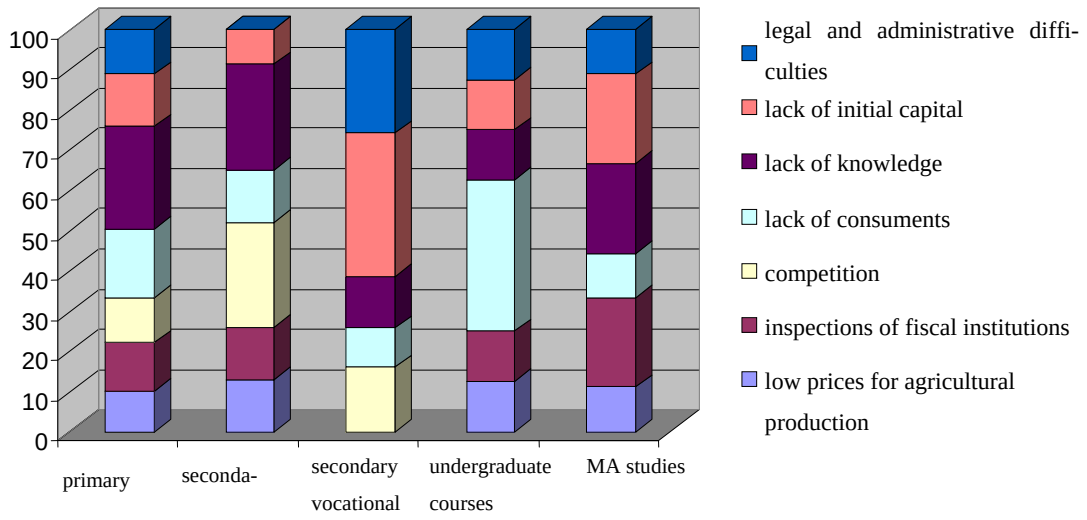
Table 8. Are you interested in running your own activity on rural areas?

	Specialisation (%)		**Sex (%)**	
	agricul-tural	Supra-agricul-tural	man	woman
Yes	61.1	60.0	76.4	40.5
No	14.8	12.0	7.3	26.2
Hard to say	16.7	16.0	9.1	26.2
Presently I run activity	3.7	12.0	5.5	4.8
I have tried, but did not succeed	3.7	-	1.8	2.4

Source: Author's own elaboration based on the questionnaire survey.

Lack of proper knowledge seems to be the factor which makes it difficult for young people to undertake their own initiative. It should be emphasised that this kind of concerns do not significantly differ among people with different education. Moreover, lack of the knowledge as a problem which has an impact on effective start of own activity is noticed by the higher number of MA studies graduates than the graduates of vocational secondary schools, or undergraduate courses.

Figure 4. What makes it difficult to start such activity? (depending on acquired education)

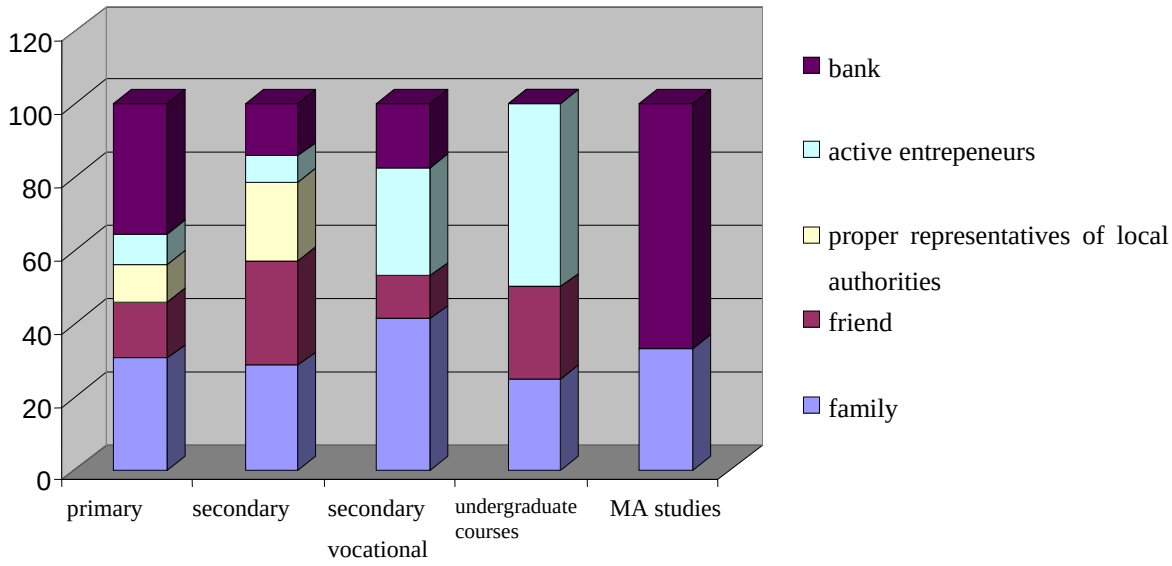


Source: Author's own elaboration based on the questionnaire survey.

Deciding on starting their own activity the respondents- regardless of the acquired education- are ready to ask their families for help. Along with acquired

education (from primary school to undergraduate courses) the number of young people noticing the possibilities of obtaining aid from active entrepreneurs is raising (Fig. 5).

Figure 5. Who will you ask in the first place for aid while starting your own activity? (depending on acquired education)



Source: Author's own elaboration based on the questionnaire survey.

What draws attention in particular is the fact that the effectiveness of this kind of support is entirely undermined by the people with education at MA studies level. Respondents with MA title indicate only two possibilities of obtaining aid while starting their own activity. Apart from above-mentioned family, they would turn for aid only to the bank.

Women tend to search for a job near their place of residence more often than men (Table 9). 14% of women would search for a job in their town, whereas such persons among surveyed men constituted 10.3%. Similar percentage of people was noted among the groups looking for a job on the region's area , whereas significant differences occurred between the groups looking for a job in the city – 50% of surveyed men and 72.1% of women. Women more rarely than men were looking for a job abroad (9.3% of surveyed women and 31% of men).

Table 9. Are you willing to leave your previous place of residence in order to find a job?

	Specialisation (%)		**Sex (%)**	
	agricul-tural	Supra-agricul-tural	man	woman
Yes, I am planning on search-ing in a different village/town	3.7	-	8.6	4.7
Yes, I am planning on search-ing in the city	57.4	57.1	50.0	72.1
Yes, I am planning on search-ing abroad	31.5	28.6	31.0	9.3
No, I am not planning	7.4	14.3	10.3	14.0

Source: Author's own elaboration based on the questionnaire survey.

For the young people at the stage of acquiring education, the perspective of undertaking a job which is uninteresting, physically onerous, below the acquired qualifications, or requires improvement of qualifications- is not problematic (table 10). Indicating the most characteristic conclusions resulting from the research first of all it should be noticed that the readiness for undertaking employment which is physically onerous is declared by definitely smaller number of students from agricultural specialisation (29.2%) than from supra-agricultural specialisation (8.7%).

Table 10. Are you willing to take a job?*

	Specialisation (%)		**Sex (%)**	
	agricul-tural	Supra-agricul-tural	man	woman
uninteresting	17.0	28.6	20.8	28.2
Physically onerous	29.2	8.7	26.9	15.8
Below acquired qualifications	27.7	28.6	40.8	12.8
Requiring improvement of the qualifications	72.9	57.1	43.2	70.0

The respondent could give more than one answer.
Source: Author's own elaboration based on the questionnaire survey.

What is also worth emphasising is the fact that more men (40.8%) would agree to work below the acquired professional qualifications than women (12.8%) Similarly, surveyed women to a larger extend then men are ready to work in a place where the improvement of qualifications is required. (respectively- 70% and 43.2%). From all proposed to the respondents hypothetical work conditions, the necessity to improve qualifications appears to be the less onerous.

Conclusions

Conducted analysis concerning socio-economic activation of people living on rural areas in tarnopolski region shows that this population despite all problems resulting from economic transformation is willing to establish their own business activity. The majority of respondents acknowledged that running the enterprise may contribute to evening out the problems of regional labour market, especially may determinate the decrease of the unemployment degree and poverty. However, the main problem in the development of own entrepreneurship is the lack of capital.

Apart from establishing own enterprise another alternative stimulating socio-economic activation is according to the respondents taking up paid job. The surveyed persons are willing to take up a job unrelated to agriculture and requiring improvement of their qualifications. It is worth mentioning that surveyed population is willing to leave their previous place of residence in order to find a job and move to the city or go abroad.

The above-mentioned results are the evidence of the necessity of professional activation of the community from the rural tarnopolski region but also show the necessity
of creating and introducing by the state modern economically effective management "system" in the sphere of employment of the rural population. Therefore, it seems to be essential to apply proper model of professional activation and information systems and data bases on the labour markets, which allow for a flexible adjusting to the changes introduced by the environment.

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Czech rural and urban households – differences in incomes and living conditions

Summary

The paper deals with the main aspects of living conditions of Czech households in rural and urban municipalities. The analysis is based on the survey "Living conditions 2007" of about 10 000 households, provided by the Czech Statistical Office. The classification for rural and urban households is based on Czech criteria, enabling comparisons with the report "First European Quality of Life Survey: Urban – Rural Differences", published by the European Foundation for the Improvement of Living and Working Conditions[1]. A specific attention in the paper is given to the position of agricultural households in the Czech rural areas.

Key words

rural households, urban households, farm households, municipalities, incomes, living conditions, heads of households, housing characteristics.

Introduction

Sustainability of rural households is the main condition for a sustainable development of rural areas. The present approaches to the definition of rural areas differ depending both on views of individual research fields related to rural development and on practical views related to targeting of various development programmes.

Basically, rural areas are marked by a lower population density, lesser settlements, higher agricultural employment, tighter links of local population with nature and landscape, special architecture and housing and also by a special livestyle. However and particularly in more developed countries, some of the original specific features of rural areas are now significantly repressed. Also from this reason, the perception of rural areas as a concept differs across countries and across international institutions as well.

This fact is underlined in the paper. Its first part contains main conclusions from the report "European Foundation for the Improvement of Living and Working Conditions", comparing the conditions in rural and urban areas in 28

[1] First European Quality of Life Survey: Urban - rural differences. Office for Official Publications for the European Commission. Luxembourg, 2006.

European countries. The report is based on survey of households provided in the first half of the present decade. Rural areas are defined by villages (or by municipalities without a town status, respectively) and by lesser towns in rural areas. However, data on the share of rural population in the total population in the individual countries included in the survey are significantly different compared with the analogical Eurostat and UN Official Statistics Board data from the same period. For example according to the report, the share of rural population in Austria is about 55 %, whilst according to the Eurostat and the UN statistics only 33 %. The similar differences for Poland are 47 % compared with 37 % (38 % for the UN statistics).

As for the Czech Republic, the share of rural population according to the report amounts to about 46 %, compared with 25 % or 26 % according to the other mentioned data sources. At the same time, the share of 46 % corresponds with the share of population in the municipalities under 10 000 of their population. Approximately the 25 % share comes to the municipalities under 2 000 of their population. The municipalities of this category are usually classified as rural ones in the Czech Republic. It is in accordance with the recommendation of the European Economic Commission, accepted in connection with the World Programme 2000/2001 for the census of population and houses. In this recommendation, the municipalities up to 1 999 of population are defined as rural ones and other municipalities as towns. Nevertheless, individual countries had the possibility to classify their municipalities differently, considering national specificities.

The second part of the paper utilises the data for the survey, provided on the Czech households by the Czech Statistical Office in 2007, trying to substantiate results from the part 1 with more detail focus on the differences and similarities between rural and urban households in the Czech Republic.

1. First European Quality of Life Survey: Urban-rural differences (EQLS)

The report relates to 28 European countries classified to 4 categories (groups) according to their economic development (measures by the Gross Domestic Product per capita).

- The first group (EU-12 High) is represented by the most developed countries (Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, the Netherlands, Sweden and the United Kingdom).
- The second group (EU-7 Int) consists of 3 countries from the EU-15 (Greece, Portugal, Spain) and of Cyprus, Czech Republic, Malta and Slovenia.

- The third group (EU-6 Low) consists of the EU-10 countries, not included in the second group and with a lower economic level (Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia).
- The lat fourth group (ACC3) is represented by Bulgaria and Romania (as acceding countries in the time of the survey) and Turkey as the candidate country.

The initial goal of the EQLS report was to compare the results of the survey with the following hypotheses gained from the literature:

- In late modernity, there are no essential differences between urban and rural areas; urban – rural differences will therefore emerge to a greater degree in poorer countries where the process of modernisation is more uneven.
- Urban – rural differences in income and levels of deprivation are greater in poorer countries.
- Household self-provision is greater in rural areas and in poorer countries.
- Housing problems are more severe in urban areas, with no gender differences.
- Education levels are higher in urban areas, with no gender differences.
- Internet usage is higher in urban areas.
- Unemployment is higher in rural areas and in poorer countries.
- Rural areas have witnessed a general shift to a service-based economy.
- Quality of employment is higher in urban areas, especially for women.
- Work-life balance is more favourable in rural areas and in richer countries.
- Access to work, school, family, friends and services is more difficult in rural areas.
- Rural areas are perceived as offering a better quality of life.
- People living in urban areas are more optimistic about their future.

The majority of the above mentioned hypotheses have been substantiated by the EQLS report. This is particularly a fact, that differences between rural areas and towns in many comparative indicators are not considerably marked in rich countries, to the contrary in countries on a lower economic level. It is especially evident in the case of the income disparity (see the next part and Table 1).

1.1. Differences in incomes

The highest level of incomes was found in the first group of countries (EU-12 High). The average monthly income per household member amounted to nearly 1 300 € in towns and almost 1 200 € in rural areas. It represents about 91 % of incomes in urban households. In the second group of countries (EU-7 Int) the same ratio was about 82 %, in the EU-6 Low group 69 % and in the last poorest countries only 46 %. In this group of countries, the average income in

towns was almost double compared with rural areas. At the same time and in the absolute terms, the average income in urban households in the last group reached to about 16 % and in rural households to about 8 % incomes in the richest group of countries. It witnesses about deep social differences between the compared groups of countries.

To a certain extent the differences issue from the fact, how the households assessed their inability/ability to cover necessary expenditures from their current monthly incomes. For EU-25 on average, the share of households not to be able to cover expenditures from incomes was approximately the same in urban areas (38 %) and in rural areas (37 %). However, in the individual group of countries the situation was quite different. In conformity with expectations, this difference was lowest in the richest EU-12 High group and was significantly increasing going down to the group of poorest countries. Nevertheless it is interesting, that in the first two groups of countries with the highest standard of living (EU-12 High, EU-7 Int) tensions between incomes and expenditures were felt more in urban households than in rural ones. It is in spite of the reality, that the average income per household member was higher in towns. In the last two groups of countries on a lower economic level the inability was found more in rural households. This is particularly evident in the ACC3 group, where 82 % of rural households and 75 % of urban households felt a tension in the connection with their incomes. However, this difference was lower than the corresponding difference in the level of incomes of the compared households.

1.2. Self-supplying of households by food and feeling of a material indigence

Whereas urban households show higher average money incomes than rural households, in the case of self-supplying in food the situation is quite contrary. Keeping livestock and growing vegetables and fruits for the self-supplying is particularly developed in rural households in countries on a lower economic level. According to the survey in the groups of EU-6 Low and ACC3 it concerned 74 % (or 63 %, respectively) of rural households and 20 % (or 11 %, respectively) of urban households. In the groups of EU-12 High and EU-7 Int the share was substantially lower – 16 % (or 26 %, respectively) of rural households and 5 % (or 6 %, respectively) of urban households.

To a certain extent it is linked with the different share of agricultural workers (farmers) in the total number of employment in the groups of countries: in EU-12 High 2 % on average in rural areas and 0 % in towns, analogically in EU-7 Int 4 % and 1 %, in EU-6 Low 11 % and 1 % and in ACC3 15 % and 1 %. However, the main factor is a different pressure of indigence in countries with a dif-

ferent economic level and a greater opportunity for self-supplying activities in rural areas.

The higher share of the self-supplying contributes to a mitigation of consequences stemming from lower money incomes. That is why the difference between rural areas and towns in the subjective assessment of the indigence less outstanding than we could expect from the differences in average incomes. By the indigence is understood the inavailability of specific household items due to the missing opportunity to finance them, e. g. heating, annual holiday, new furniture, eating meat (every other day at least), new clothes, to guest relatives or friends (once a month at least).

The EU-12 High group is characteristic by the fact, that the share of households in indigence is relatively low, at the same time a bit higher in towns compared with rural areas. This situation differs in the other groups of countries. In the ACC3 group the share of such households was in rural areas 6 times higher and in urban areas 4 times higher compared with the situation in the EU--12 High group.

1.3. Life satisfaction and optimism for the future

The life satisfaction was assessed by households in the survey according to the decimal scaling (1 = very unsatisfied; 10 = very satisfied). Other indicator to express a subjective feeling is the optimism for the future. The respondents were asked, if agree with the statement “I am optimistic for the future” with the possibility to agree totally or partly, or not to agree partly or totally.

The differences among the groups of countries with the respect of the life satisfaction in rural and urban areas are not significant. Partly more significant differences concern the question about the optimism for the future. The share of respondents with optimistic expectations was altogether higher in urban than in rural areas. It concerns also the EU-12 High group, but where – to the contrary from other groups – was found a lower level of the life satisfaction in towns than in rural areas. On EU-25 average, people in rural areas were less optimistic (61 %) than people in towns (61 %). Analogical results were gained in the remaining 3 countries on the lowest economic level.

Based on the results of the survey, the EQLS report goes to an arguing conclusion, pointing to the incorrectness of the initial supposition that the quality of life in rural areas is higher than in urban areas. The rural population does not feel allegedly any substantial advantages balancing material disadvantages of living in rural areas.

In the EQLS report is also declared that Czech Republic is ranged to the group of 4 countries (from 28 surveyed countries), which leave the general conclusions

of the survey about a better quality of life in towns. The majority of respondents in the Czech Republic, Germany, Cyprus and Greece had the different view and gave priority for the living in rural areas. However, the report does not reveal further details about it.

2. Incomes and living conditions rural and urban households in the Czech Republic

The following comparison of the Czech rural and urban households[2] is based on the survey 2007, provided by the Czech Statistical Office (CZSO). The official published data do not differentiate between rural and urban households, so we applied the classification according to the size of municipalities: households in municipalities up to 1 999 inhabitants as rural ones and households in municipalities with more inhabitants as urban ones. To enable comparisons with the EQLS survey, we applied more detail classification for the urban households: in municipalities up to 9 999 inhabitants and in municipalities with more inhabitants. Further, a more detail analysis of differences between rural and urban households has been enabled by the separation of households in little rural municipalities under 500 inhabitants and households in larger towns with more than 100 000 inhabitants.

2.1. Level and structure of incomes

Data on the total incomes and on their individual items for the surveyed households are presented in Table 2. It is evident from the data that money incomes of households in lesser municipalities are significantly lower compared with the incomes of households in the higher size groups of municipalities. There is particularly question of the elementary indicator, gross money income per member of household, comparable with the income indicator in the EQLS report. These incomes of households in municipalities under 2 000 inhabitants represented (2006) only 87 % of the incomes of households in larger municipalities. In the case of municipalities under and above 10 000 inhabitants the same relation amounts to 85 %. The lag of rural households, defined comparably with the EQLS survey, is a bit (by 3 percentage points) lower than it is presented for the EU-7 Int group of countries, including the Czech Republic (see Part 1). However, the data are not related to the same year. In the Czech Republic the difference in the incomes is particularly considerable between households in towns with more than 100 000 inhabitants and households in municipalities under 500 inhabitants – more than 37 %.

[2] There is a question of the so-called economic active households with one or more members. The main characteristic of households with more members is their joint husbandry, it means the joint endowment of basic expenditures on food, housing and other operational expenditures.

Owing to the fact that income taxes plus health and social insurances are in households in lesser municipalities lower, the differences between rural and urban households based on the net money incomes are somewhat lower than in the case of the gross money incomes. The differences are reduced from about 15 % to fewer than 12 % between households in municipalities under and above 2 000 inhabitants, and from about 37 % to fewer than 30 % between households in municipalities under 500 and above 100 000 inhabitants[3].

For the Czech Republic it is possible also to compare differences among the presented household categories from the point of view of their share in various income groups according to net monthly money income per capita. The differences are marked by a lower share of rural households in the both extreme income groups (up to 4 000 CZK and above 20 000 CZK). There is a lower share of the "poorest" households, but in the same time a higher share of the "richest" households among rural households compared with urban ones. It is also expressed by the distribution of households according to the relations of their incomes to the subsistence minimum[4]. The share of households with their net incomes under the subsistence minimum (as the national measure of poverty) is somewhat lower in rural areas, but in the same time there is substantially lower share of households with the highest incomes (three times and more than the subsistence minimum).

Rural households have a bit higher level of incomes in kind, concerning especially consumed food and other product and services, the production from their own farming or small businesses (including meals from own restaurants, bakery from own bake-houses, etc.). These incomes consist also of the valuation of payments in kind to employees, who used company cars for private purposes. The higher average level of incomes in kind in rural households is also projected to a certain approximation of their net incomes to the level of those incomes in urban households. However, owing to a low weight of incomes in kind in the total incomes the approximation less significant, representing about 1 percentage point in the comparison of households in municipalities under and above 2 000 inhabitants.

From the presented broader definition of household incomes in kind it is evident, that the level of these incomes according to the CZSO survey is not comparable with the level of self-supplying in foods, presented in the EQLS report.

[3] The indicator of net money income is not applied in the EQLS report.

[4] The subsistence minimum was calculated for each independent household in the CZSO survey 2007, based on its structure and age of children and on the statutory subsistence minimum for 2006.

2.2 Occupation of heads of households

The income differences between rural and urban households are significantly influenced by the type of occupation of heads of households. In rural households, from the nine main categories of the Uniform Classification of Occupations the heads of households have the higher participation in 4 cases and the lower participation in 5 cases (see Table 3). The outstandingly lower participation concerns the two main categories of occupation: specialists and scientific workers; technical, health and pedagogical workers. Whilst e. g. in municipalities under 500 inhabitants these two categories represent 9,1 % of all heads of households including non working heads (and 13,8 % of all heads of households), in the case of urban households in towns with more than 100 000 inhabitants the analogical figure is 32,4 % (or 50,2 %, respectively).

To the contrary, a higher share of heads of rural households belongs to the occupation categories “artisans, craftsmen”. In this case, there is the highest difference between the two extreme size categories of municipalities. In municipalities under 500 inhabitants this kind of occupation concerns about 26 % of heads of households (and 39,5 % of all working heads of households), whilst in towns with more than 100 000 inhabitants the analogical figure is 10,4 % (or 16,1 %, respectively). These significant differences witness that a long-term global process leading to the increase of tertiary sphere and to the reduction of interests for handiwork has touched the Czech rural areas on a substantially lower level, than in the case of towns (especially big towns). In practice it results e. g. in the situation that to “pick-up an artisan” is much easier in lesser municipalities.

A higher share of agricultural workers is still symptomatic for rural municipalities. Comparing the both extreme size categories of municipalities, the share of head of households with this occupation is about 4,5 in municipalities under 500 inhabitants, whilst in towns with more than 100 000 inhabitants this share amounts to only 0,2 %.

2.3 Education of heads of households

The occupation of heads of households is closely related with their education (see Table 3). According to the 2007 survey, the educational structure of these persons in rural areas compared with urban areas is marked by a higher share of elementary (including unclosed) education and lower secondary education, by a lower share of secondary education and by a relatively very low share of university and higher education.

It concerns both to municipalities under and above 2 000 inhabitants and to municipalities and – with lower differences - to municipalities under and

above 10 000 inhabitants. The mentioned differences are again considerable between municipalities up to 500 inhabitants and towns with more than 100 000 inhabitants, particularly for elementary and university educations. For example, the university education has almost 8 times more heads in bigger towns than in municipalities up to 500 inhabitants.

2.4. Housing characteristics and equipment of households

2.4.1. Housing characteristics

According to the 2007 survey, private (one-family) houses totally prevail in rural areas, whilst blocks of flats prevail in town municipalities (see Table 4). Nearly 83 % of households occupy private houses in municipalities under 2 000 inhabitants, whilst more than 86 % of households in municipalities above 2 000 inhabitants occupy blocks of flats. Similar differences can be found from the point of view of the ownership of housing. Approximately one quarter of households occupying blocks of flats in municipalities above 2 000 inhabitants has the flats in the severalty. However, the share of rented and cooperative flats is relatively high in this category of municipalities.

Rural households have usually flats with more rooms. More than 43 % of households in municipalities under 2 000 inhabitants has four and more dwelling rooms (of which nearly 47 % in municipalities under 500 inhabitants), whilst in other municipalities it is only 23 % (of which less than 16 % in towns with more than 100 000 inhabitants). The share of households considering their flats as too small is increasing from lesser to bigger municipalities. For example, this share in municipalities under 500 inhabitants is less than 6 %, but more than 12 % in towns with more than 100 000 inhabitants. As regards technical equipments, it is no significant difference among municipalities. For example, 97 % of households has the water closet in municipalities under 2 000 inhabitants compared with 99 % of households in other municipalities. It is evident, that the standard of living of households in the Czech municipalities comes together.

The existing differences in housing are also reflected in the level and structure of the pertaining financial expenditures of households. The rents represent the highest expenditure for households in bigger municipalities (with a lower share of flats in own houses). Expenditures on electricity, heating including warm water and gas from distant supply have a relatively important weight, but only a low share in the total housing expenditures have heating and warm water. In households in lesser municipalities (with a high share of flats in own houses), expenditures related to electricity have the highest share in the total housing expenditures. They are from a distance followed by expenditures on gas from distant supply and on fuel. A relatively

low share belongs to heating and warm water. Own central or individual central heating in private (one-family) houses in rural households totally prevail.

2.4.2. Equipment of households by articles of long-term usage

The equipment of households by some articles of long-term usage in lesser municipalities, or in rural municipalities, respectively, does not very lag behind, or even overcome, the equipment of households in bigger municipalities, or in towns, respectively. According to the 2007 survey (see Table 5) the equipment of households by washing machine, coloured TV and telephone is very close ore on the same level. The equipment of rural households by personal computer is a bit lower. About 46 % of households in municipalities up to 2000 inhabitants are equipped by personal computer, compared with 53 % (that is difference by 7 percentage points) in other municipalities. The analogical difference, but almost 14 percentage points, is between municipalities under 500 inhabitants and towns with more than 100 000 inhabitants.

The gained generally high level of the equipment by water machine, coloured TV and telephone is also demonstrated by the fact that only a very low number of households in all categories of municipalities complain about the inability to buy the articles from financial reasons. However, the analogical financial limits in the case of personal computer and car are substantially higher, particularly in lesser municipalities.

The differences in the equipment of households by cars are influenced especially by the different size of municipalities. At the same time, the equipment does not show itself as isolated. Lesser distances in rural municipalities are on the other hand confronted with the commutation for work. Young rural generation attends schools outside its settlements, regardless of the necessity for rural population to commute to towns for health services, cultural events, purchases, etc. This situation together with lower transport services in rural areas is reflected in the higher share of rural households equipped by cars. The share of households in municipalities under 2 000 inhabitants is by 17 % higher than in other municipalities. If we use comparison between municipalities under 500 inhabitants and towns with more than 100 000 inhabitants, the analogical difference is much higher, reaching to nearly 26 %.

2.4.3. More positive evaluation of living in rural areas

According to the EQLS report, the Czech Republic belongs among the surveyed countries, where the majority of respondents consider the quality of life in rural areas higher than in towns. It can be supposed that people here (as in Germany, Greece and Cyprus) evaluates more specific advantages of rural living having non-material character, such as lower criminality or vandalism, less polluted and more quiet environment (more suitable for the upbringing of children),

higher confidence to the neighbourhood, feeling of higher appurtenance with local community, etc.

According to the Czech 2007 survey, the share of households afraid of criminality and vandalism in municipalities above 2 000 inhabitants is 3,6 times higher than in lesser municipalities. The analogical difference between municipalities between municipalities under 500 inhabitants and towns with more than 100 000 inhabitants is more dramatic (6 times).

The limited occurrence of the mentioned negatives in the Czech rural areas can be one of the reasons why the number of population in the areas has nor decreased during the last years (except small settlements under 200 inhabitants), but even partially has increased (e. g. during 2003 – 2008 by 2,5 % in municipalities up to 1 999 inhabitants).

Conclusions

Regardless limits for the comparisons of the results from the Czech 2007 survey and from the EQLS survey it is possible to state, that in the both cases some specific characteristics of rural households are revealed. In the comparison with urban households, there is a question not only of a lower level of incomes, the different structure of occupation of heads of households and a lower level of their education (as well as the education of all rural population), but also of the different situation in housing patterns and equipments. Owing to the heterogeneous size definition of rural and urban municipalities, the surveyed differences between rural and urban households have different parameters.

In spite of presented approximation of living conditions, rural and urban households in more economic developed countries preserve some of their specifics. It also concerns individual social groups of households, including those households, headed by persons economically active in farming. The so-called agricultural households in the Czech Republic, surveyed in the recent periods under the framework of the household account statistics, represented a heterogeneous social group, because covered both a small number of households headed by private farmers, and a relatively large number of households headed by employees of collective farms (coops, joint stock companies, etc.).

According to Eurostat recommendations it would be desirable to monitor households of private farms, as a combination of functionally, territorially and personally joint business and separate agricultural household (as a “firm”). However, the number of such households in the Czech Republic is very low. According to the last Census of Population 2001, the households of private farmers (including households of physical entities providing agricultural services) participated in the total number of households by 0,4 %, of which in mu-

nicipalities up to 2 000 inhabitants by 1,1 %. This situation has not basically changed during the last years. The share of private farmers in the total agricultural acreage has increased, but above all as a consequence of the growth in average size of the farms. A relatively low number of real (genuine) farm households in the Czech Republic is linked not only with a low (and still decreasing) share of agricultural employment, but also – and especially – with a specific farm structure (with the high share of farms as legal entities, whose workers have the same status as hired workers in other sectors).

Since 2005 agricultural households as a social group are not covered by the Czech Statistical Office. It also concerns the survey "Living Conditions 2007". The important source of information on the so-called other incomes of farms (that is except incomes from farm businesses) is missing. The information should be available particularly for the policy making in the field of agricultural incomes. It is a challenge for the Farm Accountancy Data Network (FADN). According to the Czech statistics on household accounts 2004, incomes from off-farm activities, various social payments, incomes from capital assets, incomes from sales of real property or from various kinds of insurance (except health and pensions insurance schemes) participated in the total gross money incomes of households of private farmers by 47,5 %.

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Tab. 1. Differences between rural and town households - selected indicators1)

Group of countries	Rural/ Urban	Average monthly income per household member (€)	Households not covering expenditures (%)	Self-supplied household (% yes)[2)]	Households in indigence (average index)[3)]	Optimism for future (% yes)[4)]
EU-12 High	R	1 177	27	16	0,6	60
	U	1 298	30	5	0,7	64
EU-7 Int	R	593	47	26	1,5	67
	U	721	51	6	1,1	74
EU-6 Low	R	256	73	74	2,7	57
	U	371	68	20	2,3	65
ACC3	R	97	82	63	3,8	60
	U	210	75	11	2,8	64
EU-25	R	707	37	26	1	61
	U	803	38	7	0,9	67

1) Differences significant at the 5 % level.
2) Self-supplying by vegetables or fruits, by keeping of poultry or livestock.
3) Average based on a six-point index of non-affordable specific items (e. g. heating, annual holiday, new furniture, meat/fish, new clothes, to guest relatives/friends).
4) The share of people agreeing with the statement "I am optimistic about the future".
Source: First European Quality of Life Survey: Urban - rural differences. Office for Official Publications for the EC. Luxembourg, 2006.

Tab. 2. Annual incomes per capita of the Czech households 2006 by size of municipalities

Indicator	Unit	Municipalities with the number of inhabitants					
		up to 1 999	2 000 and more	up to 9 999	10 000 and more	up to 499	100 000 and more
Gross money incomes	CZK	126 937	145 719	128 458	151 257	127 163	174 402
- incomes from working activity	%[1)]	72,5	75,4	72,4	76,4	73,4	79,7
. incomes from employment	%[1)]	57,3	60,6	58,0	61,1	54,7	62,7
. incomes from eneterprising	%[1)]	15,2	14,8	14,4	15,3	18,7	17,0
- social incomes	%[1)]	25,5	21,8	25,1	20,9	24,0	17,7
- pensions	%[1)]	20,1	17,3	19,9	16,5	18,7	14,7
- other incomes	%[1)]	2,1	2,8	2,6	2,6	2,6	2,5
Net money incomes	CZK	108 484	121 391	109 630	125 112	108 811	141 381
Incomes in kind	CZK	3 518	2 712	3 244	2 650	3 854	2 668
Total net incomes	CZK	112 002	124 103	112 874	127 762	112 665	144 049
The share of households in the extreme income groups according to the nett monthly money income per capita							
up to 4 000 CZK	%[2)]	2,7	4,4	3,5	4,4	2,4	3,1
20 000 CZK and more	%[2)]	2,3	6,7	2,6	8,0	2,7	12,9
Households with net incomes under subsistence minimum	%[2)]	1,7	2,5	2,1	2,5	1,7	2,6
Households with net incomes three times and more higher then subsistence minimum	%[2)]	26,0	34,0	26,5	36,4	26,5	45,4

1) % of gross money incomes.

2) % of households.

Source: own calculations based on the Czech Statistical Office - households survey "Living conditions 2007".

Tab. 3. Type of occupation and level of education of households heads 2007 (% of all heads)

Occupation, education	Municipalities with the number of inhabitants					
	up to 1 999	2 000 and more	up to 9 999	10 000 and more	up to 499	100 000 and more
Occupation						
Legislators, managers	3,0	4,2	3,2	4,5	3,3	4,7
Scientific workers, specialists	2,8	7,2	3,2	8,4	1,9	12,7
Technical, health, pedagogical workers	8,3	14,6	9,5	15,9	7,2	19,7
Lower administrative workers	2,5	3,2	2,5	3,4	2,2	3,7
Service and sale workers	4,4	5,7	4,5	6,1	3,4	5,8
Agricultural and forestry workers	3,5	0,7	2,7	0,4	4,5	0,2
Artisans, craftsmen	23,1	15,2	21,7	13,6	26,0	10,4
Machinery/equipments attendants	11,9	7,5	10,9	6,8	14,5	4,3
Auxiliary and unqualified workers	3,0	2,7	3,0	2,5	2,9	2,8
Non-sellers	37,6	38,9	38,7	38,4	34,2	35,5
Education						
Elementary (incl. unclosed)	13,8	10,0	12,8	9,4	14,7	6,4
Lower secondary, trained	58,3	41,6	55,9	37,7	58,3	30,8
Secondary	23,0	32,8	24,5	35,1	23,7	38,4
University and higher	4,9	15,6	6,8	17,8	3,3	24,4

Source: own calculations based on the Czech Statistical Office - households survey "Living conditions 2007".

Tab. 4. Selected indicators on housing by the size of municipalities (2007)

Indicator	Municipalities with the number of inhabitants					
	up to 1 999	2 000 and more	up to 9 999	10 000 and more	up to 499	100 000 and more
Kind of housing (% of households)						
Private (one-family) house	82,7	30,4	71,3	21,1	87,3	13,6
Block of flats	16,3	68,8	27,6	78,2	11,7	86,2
Other, unknown	1,0	0,8	1,1	0,6	1,1	0,3
Kind of flats (% of households)						
own house	75,8	27,7	64,5	19,8	80,8	13,0
private ownership	5,6	25,2	10,5	28,2	4,1	26,3
cooperative	2,0	15,6	5,3	17,7	2,2	19,6
rented	9,8	26,6	12,7	30,2	6,5	37,8
other	6,9	4,8	7,1	4,0	6,4	3,4
Households accroding to the number of rooms						
1	4,3	9,5	5,2	10,6	3,2	13,8
2	18,3	29,5	21,3	31,0	16,5	32,2
3	34,1	38,2	34,2	39,6	33,5	38,4
4 and more	43,2	22,8	39,3	18,9	46,8	15,6
Equipments (% of households)						
Bathroom	98,3	99,0	98,1	99,4	98,1	99,7
Water closet	96,7	98,9	96,8	99,5	96,6	99,8
Structure of housing expenditures (% of total expenditures = 100 %)						
rent	6,8	24,1	10,6	26,9	5,4	29,8
electricity	40,5	23,3	35,8	21,1	44,3	20,7
gas (distant supply)	20,9	17,0	22,1	15,0	16,2	12,6
fuel	15,3	2,5	11,0	1,4	19,1	0,8
heating, warm water	2,8	17,2	6,0	19,5	1,6	20,1

Source: own calculations based on the Czech Statistical Office - households survey "Living conditions 2007".

Tab. 5. Selected indicators on equipment of households by the size of municipalities (2007)

Indicator	Municipalities with the number of inhabitants					
	up to 1 999	2 000 and more	up to 9 999	10 000 and more	up to 499	100 000 and more
Share of households equipped by articles (%)						
Washing machine	97,3	95,8	96,7	95,6	96,8	94,6
Coloured TV	98,9	98,0	98,6	98,0	98,1	97,3
Telephone (incl. portable phone)	94,2	95,5	93,8	96,3	93,8	97,3
Personal computer	45,9	52,9	46,4	54,9	45,2	59,1
Car	70,8	60,4	67,7	59,2	75,0	59,6
Households would buy articles, but cannot afford it from financial reasons (% of households)						
Washing machine	0,3	0,8	0,4	1,0	0,2	0,9
Coloured TV	0,3	0,6	0,4	0,6	0,5	0,5
Telephone (incl. portable phone)	1,0	1,5	1,5	1,3	1,1	0,7
Personal computer	10,5	9,7	10,3	9,6	10,8	8,1
Car	8,5	13,9	10,4	14,3	7,0	12,5

Source: own calculations based on the Czech Statistical Office - households survey "Living conditions 2007".

Prague, 25. 3. 2009

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The peasant household – on the way from survival to capitalism

Between the Romanian agriculture and the agriculture of the European Union countries there is and still is manifesting obvious gaps, in the performances' plan, in the efficiency plan, but also at the farmers' living standard. These gaps are major concerns of agrarian policy, for the solving of which, a special attention is paid to the performances' growth, with reference to yields and labor productivity. The performances in production are claiming first a corresponding structural frame, which is agricultural units of rational sizes, which should facilitate the potentiation at maximum of the production factors.

But, the production structures in our country's agriculture do not permit the realization of these desiderates, of at least the following reasons:

- The very big numbers of the agricultural farms, over 4,2 millions, of which predominant are the subsistence peasant households, around 1,2 millions;
- The average size of one peasant household, of 2,4 ha;
- The high degree of agricultural lands' fragmentation, expressed by the parcels' number (over 15 millions), the average number of parcels per one farm (3.7 parcels) and the average size of one parcel (almost 6000 sq. m.) (table 1 and table 2);
- The low level of capitalization of agriculture in general, with special reference also to the peasant households;
- The deepening of the human factor crisis, generated by the aggressive depopulation of the villages, the reduction of the instruction degree, the growth of the age average, with finality in the old people and women preponderence at agricultural works.

Of all these negative aspects, fragmentation and the scattering of the parcels are the most eloquent expression of the oldness degree, characterizing the agrarian relationships in our country. Upon these aspects, G. Ionescu-Sisesti, was masking the following remark: "The peasant ownership is scattered into a big number of isolated parcels, impossible to be rationally exploited" (G. Ionescu- Sisesti- The Agrarian Policy with special regard to Romania, p.128).

The reasons for parceling are to be found, equally, in actions of agrarian policy, old or closer to our time, which are:

- The liveries resulted after the application of the first three agrarian reforms, respectively, 1864, 1921, 1945;

- The re-constitution and constitution of the ownership right, made, a rule, on the same placements , in conformity with the provisions of the Laws 18/1991 and 1/2000;
- The division of the land ownership through heritages, donations, servitude, usucapines, as effect of the provisions of the Civil Code in our country, inspired by the Roman one;
- The non-restriction for sale-purchase of agricultural lands in functionof the preemption right of the co-owners, neighbors or lessees.

As result, the agrarian policy, in an imperative formulation, must put into law and, at the same time, apply the **consolidation**, which should have as finality the solving of the parceling problem in the peasant households, in a reasonable time period.

In fact, the consolidation in conceptual, legislative and practical plan is presently approached in a diffuse manner, superficial, and, many times timidly and distortedly. That is why, through this study, even if it is synthetic, we are address to the professional readers, but mainly to the agrarian policy makers, with the intent to form up a favorable opinion current, to energize the actions for the coagulation of the land ownerships in our agriculture.

The scientific nature

The consolidation, through its objectives, is reasoning, firstly, in the abstract panel of the economic doctrines, as a field of knowledge and application of the agrarian policies. And secondly, in the sphere of comprising the land ownership organization, under its technical, concrete aspect.

In the agrarian policy, consolidation is thought of as an action in the national public authority responsibility, for the defeat and preservation of the ownerships, and also for the raise of the production capacities (Ioan Iacob, p.65). It is an action in the sphere of the national's comprising, as it implies mutations in the land ownership ratios, these ones being fundamental, guaranteed by the country's Constitution.

At the same time, consolidation is a technical work of organization, with the meaning to group the parcels , by bodies of ownerships or by lots, bigger ones, in the scope of reducing the fragmentation degree and scatter the farm lands.

Arguments

The precariousness, both quantitative and qualitative of the production factors in the peasant households, with reference, firstly, to those of material nature, carriers of technical progress (for example mechanization, chemical fertilizing, land melioration, certified seeds), and secondly, to those of human nature, was manifested on a constantly rising scale, during the whole period from the communism fall, which generated the emergence and manifest of some chronically drawbacks, as: labor productivity, extremely law (for example the ratio between Romania and countries as Great Britain, Germany and France, as regards the average what production per hectare, being of over 2,5:1) the abandoning of some big areas of land (the statistical estimations are rising these areas to over 3 million hectares of arable land in 2008, that is to over 30% of the total country's arable area); the maintaining into production of some old technologies, based on the human energetic consumption and of the animals to work, almost identical to those at the start of the XX-th. century.

Obviously, all these drawbacks, cannot last forever, and their solving must be understood as an obligatory claimed requirement, before anything, by the bigger and bigger role of agriculture, for the solving up of the crisis of food raw materials, but especially of those on the market of energetical resources.

As result, in the equation, which is placing face to face the drawbacks in agriculture with the requirements of the national economy, consolidation is accepted by the strategy makers in agrarian policy, as an imminent solution for consolidating the land ownership, and performing this way the reduced sizes agricultural farms.

The historical experience reveals that in the periods following the agrarian reforms, which could last for some decades, characterized by the healing of wounds made by the mutations in the ownership ratios and through consolidation, respectively capitalization of the household who received land, there follows, obligatorily, the parcels' consolidation. But, from the two last agrarian reforms in Romania's agriculture, there passed almost two decades (the Reform in 1991 and that in 2000).

In conclusion, the historical argument also is showing that it is the time to launch and support the consolidation of land parcels.

The fragmentation and scattering of parcels is affecting, in a negative way, both ownership as it is, and the level of production and that of the economic efficiency, through:

- the set aside from the agricultural circuit, temporarily or definitively,

of important land areas, following the border lines, respectively the borders between parcels, in many cases they are marked by grass bands, ditches, roads, fences of any kind, etc;

- the instability in the ownership regime due to the still confused character of manifesting the cadastre and land registration, with direct reference to the placement and parcel size. In this case, there are generated supplementary costs, as a rule for the representing before the judging instances, costs which are affecting, in a direct way, the budgets of the farmers` families. There is also the danger of the diminution of the yield, determined by the conflictual states, which are manifested between the owners with neighboring lands;
- the decrease of the economic value, and by extension, of the patrimony one, for the ownerships made of more parcels and with a higher degree of scattering;
- the diminution of chances for adoption of the intensive agricultural systems, for the application of which, according to the agronomical sciences, it is necessary the configuration of the agricultural space on big size parcel and of a more regular geometrical shape, to permit the obtaining of some maximum effects following the application of the factors of technical progress, as are: mechanization, land melioration, chemical fertilization; in contrast there are emerging, and augmenting, as it is at present, that is, practices and technologies non-performant, which are almost similar to those from the beginning and middle of the last century;
- increase of expenses as result of the supplementary consumptions of time, the depreciation of devices, losses or depreciations of harvest, resulted from the passings towards each parcel.
- the control upon the agricultural works, crops and harvests, as well the velocity to remedy the damages, because of the action of some factors of natural risks (hail, frost, floods, fires, attacks of some wild animals), but also from human causes (for example: agricultural works, wrongly executed, thefts, harvest destroy, etc), they all are hardened especially when the parcels are situated at distances, bigger, to the production centers or to the peasant household. The harvest losses can reach ratios of hundred percents of the foreseen production, if the control and remedy of losses are not made in optimum time and with maximum operativity.

Stages

From organizational point of view, consolidation is going on two distinct stages:

1. The grouping of parcels or fractions of parcels, neighboring, by compact lots, of bigger sizes, by scientific criteria, of agronomic nature, in the scope of potentiate the production capacity of the land fund, agricultural or forestry one.

2. The repartition of the lots resulted, the lands owner, by juridical criteria and by natural and value equivalency. There could be accounted also the performance criteria, of economic and social nature, under conditions when, the farm sector registries big gaps and drawbacks as facing economy's rest.

Beneficiaries

The repartition of the lots resulted from the grouping of the parcels presupposes, objectively, the respecting of the ownership rights, and also of the criteria of natural and value equivalence. But the repartition of lots is claiming first of all the identification and establishing of beneficiaries, considered to be complicated actions, with multiple implications of economic, social, but especially political nature. If the repartition kept the account only of the juridical aspect, then the identification and the establishing of the new owners, are relatively simple, as the giving of the enlarged lots is done also to the same owners, who, in majority lack the performant means of production. But, if there are respected the performance principles, in conformity with the requirements of economic liberalism, then the identification of the beneficiaries of the enlarged lots is done following the assessment of their capacity of good farmers, which could create the guarantee for the obtaining of some high yields and at the same time efficient.

Such an approach, which obviously would meet, at least in the first stage of application, a resistance with multiple faces of manifestation from many owners, it would increase in a reasonable time panel the chances for the action to get success. The unrecognizing of the farmers' quality does not mean the loss of the ownership also, because it would overlap the constitutional provisions, essential provisions in the legislative body of a democratic state.

The non performant farmers can confront themselves with three decisional variants regarding the farm's future within the consolidation process: i) they estrange by selling, either the whole farm, made of land areas, constructions and devices, or only the field areas, case in which they loose , both the quality of owner of land areas, and that of a farmer; ii) they are giving lands for exploitation, on basis of contractual relationships, specific of the land market, in partnership either with the state, under the form of the annuity, or with the agents in the private sector, through leasing, renting, association, or cooperation.

In this variant there is disappearing the quality of a farmer, but it is maintained that of the owner; iii) They refuse the previous variants, keeping under ownership and exploitation the whole land area. If there is taken as landmark the resistence of the peasants to the collectivization in the communist period (1949-1962), which in the view of many specialists, with high university titles and even academic ones, presupposed in essence the land consolidation too, but on very big lots, then we could estimate, without the risk to be mistaken, that this last variant will be the most accepted, especially by the farmers in the older age categories, in the mind of whom there are still alive the wounds made by the totalitarian regime.

But the consolidation in this period meant only the first stage, respectively the grouping of the parcels, not the second one too, that is their repartition, which would produce itself outside any performance criterion, after almost half a century as to the first one, together with the fall of communism, in the process of de-collectivization and de-statalization of the economy and implicitly of agriculture.

Scenarios and variants

Its way of manifestation is dictated by the ideological load of the doctrines which are fundamenting the decisions of political and economic nature, in the society and economy. . From this reason, consolidation, through the engagements it presupposes, but also through the effects pt generates, is over exceeding the strict agriculture's boundaries, or of the rural. It is a complex work, risky to be promoted and hard to be managed by the public decident.

That is why we need, at least in the segment of the economic theory, respectively of the agrarian policy, that this subject should be approached with maximum seriousness and with professionalism and also with scientific discern.

Its double positioning from scientific point of view, respectively, in the sphere of agrarian policies and that of the territorial management, has its repercussions also as regards the role and its meaning in the actions implying the transfer of the land ownership, and with finality in agriculture performing. Thus, if the consolidation is started from public initiative and has an obligatory character, either it accepts or not the compensation of the owners on basis of value equivalence, this is an extra economic work that is it is performed outside the area of comprehension of the land market. The same frame is for the agrarian reforms, with the mention that these had as finality, in five of the six taken place in Romania, since 1986 up to the present, effects contrary to the consolidation, respectively the fragmentation of ownerships and not their coagulation. In exchange, if the consolidation is an act of will, facultative one of the owners, and it

presupposes not only the grouping of the parcels but also the repartition of the lots resulted, in basis of some performance criteria, which could manifest within a local land stock market, towards the best farmers, then it is an economic action for translating the land ownership and enters in the sphere of land market comprehension.

Starting from these theoretical foundations, in the practical actions of agrarian policy, there were identified, according to the experiences in the domain, and also to the degree of implication of the public power and the act of will on behalf of the owner, two scenarios regarding the way of management and development of the consolidation, the contents of which is given below:

Table 1. Scenarios and variants for parcels, consolidation

Variants/Scenarios	I. Optional	II. Obligatory
	1. Through actions on the land market: sale- purchase, rent, cooperation and association. 2. Through a local stock exchange for the grouping of the land parcels by bigger lots and the exchange, respectively, their repartition towards the rightful owners or performant farmers.	1. Specific to the command economies, of communist type, when the grouping actions of the territory have a dictatorial character. 2. Specific to the free market economies, when they can be: a) public interest works, b) completing to the consolidation of optional type, when taking place through the local stock exchange.

Source: Own.

I. Optional

II. <u>Through the actions of the land market, respectively, sale purchase, cooperation, association, leasing and renting.</u>

The transmission of the ownership right upon land areas, is realized, either under all four attributes, that are possession, disposition, fruct and usufruct, but obligatory, in value equivalent, specific to each of the market action, by formula: price of lands in case of sale purchase, dividends for cooperation and association, or the lease or rent for leasing or renting. It means only the first

stage for the consolidation manifestation that is the grouping of parcels, which starts from private initiative, without programs or plans established before.

At present, it is the only variant in the virtue of which consolidation is made, but not through an own law, but in function of the legislative package, which is norming the actions on the land market. We mention that all these laws do not impose obligatory rules for the organization and placement in the territory of the parcels. From this reason, the results have a random character and are with minimum effects, both in the direction of increase of parcels size, and in the performances in agriculture.

As result, it is necessary the re-formulation in shortest time of the legislative package on the land market, to answer, obligatorily to the requirements, which the consolidation works are imposing, in scientific way.

1. Through a local, own stock exchange in the scope of grouping the parcels of lands by bigger lots and the exchange, respectively, their repartition to the rightful owners or to the performant farmers.

In view of application of this variant, there are necessary, first, the existence of a special law for the working of the local consolidation stock exchanges, with clear references to the two sides of it, respectively, the grouping and exchange, and, secondly, the obtaining of some decisions of the judging instances, made on basis of the will agreements of at least 2/3 of the land owners, who expressed their availability to give into consolidation all, or only a part of the parcels owned.

To these first conditions with obligatory character, we could add some responsibilities of the public power, which, in essence can focus on the following segments of agrarian policy.

Doctrinary, according to which, due to its extra economic side, consolidation, must be inscribed in the category of public interest works, with a regime seeming to the big works of land meliorations, which could create the premises for the increase of the degree of the public power responsibility in this field, with special reference to the elaboration of programs, plans, strategies, methodologies, procedures and allocations of funds from the public budget.

Legislative, through the adoption of some norms with juridical character, in the virtue of which, consolidation gets legal basis for manifestation, seeming to the other actions on the land market.

Institutional, fact which needs the creation of a specialized body under the form of agencies, directories, or services in the competence area of the Ministry of Agriculture , with working centers by regions or counties. Their competences are of technical nature and not at all decisional, with reference to the elaboration of plans, strategies, working norms, etc.

Land registration, through cadastre measurements and the inscription in the Land Book, as obligatory actions, before and post consolidation.

The obligativity for the natural and economic assessment of the lands, respectively, of the parcels submitted to the grouping and exchange as well the recognition of these assessments.

Plans for territory management, by respecting the agro-technical norms in this field.

Body of independent specialists, with attributions in the cadastre segment, natural and economic assessment, land territory management, and others.

The promotion and support from the public authority of the equivalence principles, natural, and value, within the exchange of parcels, as well of the performance principle for the farmers following to receive the lots enlarged.

This variant, with small amendments, was applied with results, which in the plan of land management proved to have been positive in around 700 localities in Transylvania, in the period of the end of XIX th. century and beginning of XX th. century, until reunion to Romania, in 1918. For the present conditions in the Romanian agriculture, the optional consolidation is, in comparison to the other two variants, the most appropriate, with real chances of being achieved, because:

- It has a deep democratic character, being thus consonant to the essence of the rightful State:
- It is necessary but opportune, as it makes possible the promotion with great efficiency the technical, technological progress factors and not only.

III. Obligatory

This scenario claims, regardless the concrete way of manifestation, for the State's direct implication through the adoption of some consolidation decisions, becoming obligatory for the rightful agricultural lands owners.

Under obligatory aspect, consolidation could b made on two possible variants, both with concrete historical points, that arte:

1. <u>Specific to the command economies, of communist type, when the grouping actions of the territory have a dictatorship character, and they have taken place both in state and collective agricultural units.</u>

Through this variant they wished for the confiscation and grouping of the parcels, without the compensation for the owners, in lots or soles as big as possible, which at their turn were making an agricultural unit of impressing size. Such an action had ideological motivations, resulted from the belief which pro-

moted blindingly the advantages of the work in common, the very big lots, the use of the tractor instead of the animals, etc.

The owners' agreement was substituted to the power of law, which, in formulas which wished to have been the expression of the whole people's will, they annulled the rights to land ownership, and any form of compensation.

Under these conditions,, consolidation was a punitive instrument for the overtaking of the land from the private property and its passing under the control of the public power, which, finally was serving to the dictatorial interests of the communists.

2. Specific to the free market economies, of democratic type, situation when consolidation can be developed on the following formulas:

a. Either as public interest works, when they are submitted to grouping, regardless the owners, in a certain zone or locality, by granting compensations to the rightful owners, in kind, or in value equivalent:, the lots resulted after the parcels' grouping can remain in the service of agriculture, but as a rule, they take completely another destination, being used in industry, constructions, transports.

b. Or it is complementary to the consolidation of optional type, in the localities where the latter is made following the will agreement of the inhabitants through the stock exchange for lands. The principle by which this is drawn is simple: the minority who refused the consolidation will submit to the majority's will, will as shown before, makes the object of a judge decision. From this reason all aspects which give contents and personalize consolidation of optional type, are valid also in this case.

Instead conclusions

The economic theory acknowledges the necessity for the consolidation, as important action of agrarian policy, through which the consolidation of the land ownership in the peasant households be made, but, in legislative plan, there is no own disposition to norm it as it was done with the other actions which have in view the movement of the land ownership, as are the sale purchase, leasing, association and cooperation.

From this reason, all the efforts in the last period, for the parcels' consolidation were made by the farmers exclusively, and they were made through the actions mentioned before.

The implication of the public power was minimum, an as a rule, to another direction than it was needed.

All the legislative points, from 1990 up to present, are subscribing consolidation to the actions of territory organization and re-organization, which

is positioning the administrative decision on a superior plan to the free circulation (which many times it excludes), based on the natural and economic value of lands.

Worryingly, after the integration of Romania into the EU, as effect of the application of the mechanisms and instruments for sustaining the agricultural market, mainly of the direct payments scheme, it is estimated that the process of consolidating the agricultural lands will slow own or even stop. The granting of direct payments will lead both to the increase of land prices in agriculture, and to the growth of the leasing quantum, and the Romanian farmers, mainly the old ones, will not be anymore interested to le their farmlands by sale purchase or lease to some younger farmers, capable to develop performant farm activities.

Without any doubt,, performance in agriculture, claims for the correction of errors and the entering into normality, which for the consolidation of parcels means: own law, public support funds, strategies and plans taking into account the organization and re-organization of the territory, local stock exchanges to intermediate the exchange of parcels between owners, the respecting of the democratic principle of the free will, the natural and economic assessment of parcels, the making of cadastral works and the inscription in the Land Books.

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Two Characteristics of Hungarian Development*

In our lecture we attempt to explore and to monitor two major characteristics of the Hungarian development. Our investigation is mainly focussed on the period between 1996 and 2008, but occasionally we are forced to make slight compromises.

The Hungarian economic growth is examined on a national level in international comparison. In this way we are trying to find the country's place in the Central-Eastern European region. Thereafter, economic growth is assessed with a view to sustainability, and an attempt is made to answer the question of strategic importance: whether this growth satisfies the criteria of sustainability.

The Hungarian economic growth and development is also examined on a regional level. The country has 7 regions (NUTS2) and 19 counties. The important question to be answered, among others, is whether the economic growth and development in the given period was accompanied with the reduction of regional differences or with their intensification?

Processes of regional growth and development in Hungary are accompanied by several forms of differentiation phenomena, among which the most prominent and possibly the most significant is the centre-periphery relationship between Budapest and the other parts of the country.

Budapest, as the capital and as the only major centre for industrial and economic control and management, has a significant economic and innovation potential. One-third of the country's GDP was produced here already in 1995, and this figure reached 36.1 % in 2002. The economic dominance of the capital is also indicated by the fact that the per capita investment value in the region of Central Hungary considerably exceeds that of the other 6 regions.

Moreover, it is important to point out that Budapest is also the centre of our transport network (air, water, road and railway). As far as the qualifications of the population (irrespective of the level of qualification) is concerned, it exceeds the national indices, and it is particularly remarkable that the proportion of the population aged 25 and over with a higher education degree is 38.4 %, while this figure is 13.6 % nationally (Hungarian Central Statistical Office (HCSO), 2003). 42.9 % of the R+D places, to be considered as the basis of innovation,

can be found here, in addition to which 65.9 % of R+D expenditure is also concentrated here.

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Our lecture is going to discuss the development of the 7 statistical regions on the basis of five statistical indices. These are the following: unemployment rate (%), gross average earnings (HUF/person/month), per capita GDP (thousand HUF/person), per capita value of investment (HUF/person) and number of registered enterprises (number/1,000 persons). The values of the allocation ratio are also going to be presented.

It is clear from the foregoing that we are not trying to give a complex analysis as it would have been much beyond our capacities and the limitations of length.

Economic growth in international comparison

The period between 1996-2006 was marked with intensive events in the history of the CEE countries. One characteristic of this was the high rate of growth (see Table 1).

Table 1. GDP-at current market prices (EUR 1.000 million)

	1996	2006	2006/1996 %	Annual growth rate 1996/2006 %
EU-27	7353	11583	157,5	4,6
Bulgaria	8	25	312,5	12,2
Czech Republic	49	114	232,7	8,8
Estomia	4	13	325	12,5
Latvia	4	16	400	14,9
Lithunia	6	24	400	14,9
Hungary	36	90	250	9,6
Poland	123	272	221,1	8,3
Slovenia	16	30	187,5	6,5
Slovenia	17	45	264,7	10,2

Source: Europe in figures. Eurostat yearbook 2008.

The annual growth in the EU-27 countries was 4.6% at current market prices. The rate of growth was much faster than that in the new EU Member States. An indisputable problem involved in comparative analysis is that the annual average rates of growth are distorted by inflation.

The most important question in connection with economic growth is probably whether it can be regarded as sustainable development or growth. A look at the indicators of convergence will help us to answer this question. (See Table 2)

Table 2. Overview table Economic indicators of convergence

		Price stability	Government budgetary position		Long-term interest rate
		HICP inflation [1)]	General government surplus (+) or deficit(-) [3)]	General government gross debt [3)]	Long-term interest rate [1)]
Bulgaria	2006	7,4	3,0	22,7	4,2
	2007	7,6	3,4	18,2	4,5
	2008	9,4[1)]	3,2	14,1	4,7[1)]
Czech Republic	2006	2,1	-2,7	29,4	3,8
	2007	3,0	-1,6	28,7	4,3
	2008	4,4[1)]	-1,4	28,1	4,5[1)]
Estonia	2006	4,4	3,4	4,2	…[7)]
	2007	6,7	2,8	3,4	…[7)]
	2008	8,3[1)]	0,4	3,4	.[7)]
Latvia	2006	6,6	-0,2	10,7	4,1
	2007	10,1	0,0	9,7	5,3
	2008	12,3[1)]	-1,1	10,0	5,4[1)]
Lithuanis	2006	3,8	-0,5	18,2	4,1
	2007	5,8	-1,2	17,3	4,5
	2008	7,4[1)]	-1,7	17,0	4,6[1)]
Hungary	2006	4,0	-9,2	65,6	7,1
	2007	7,9	-5,5	66,0	6,7
	2008	7,5[1)]	-4,0	66,5	6,9[1)]
Poland	2006	1,3	-3,8	47,6	5,2
	2007	2,6	-2,0	45,2	5,5
	2008	3,2[1)]	-2,5	44,5	5,7[1)]
Romania	2006	6,6	-2,2	12,4	7,2
	2007	4,9	-2,5	13,0	7,1
	2008	5,9[1)]	-2,9	13,6	7,1[1)]
Slovakia	2006	4,3	-3,6	30,4	4,4
	2007	1,9	-2,2	29,4	4,5
	2008	2,2[1)]	-2,0	29,2	4,5[1)]

Sources: European Commission (Eurostat) and ECB.

1) Average annual percentage 2008 data refer to the pericd April 2007 to March 2008.

3) As a percentage of GDP. European Commission spring 2008 forecast for 2008

7) For Estonia ne long-term interest rate is available

Only Slovakia and Poland could comply with the reference value concerning inflation, while the other seven EU countries in the table, including Hungary, could not.

Hungary is in the worst position in terms of the government budgetary position. As concerns internal balance, the budget deficit of the country amounted to 4% of the GDP in 2008, which is over the reference value of 3%. This deficit is the highest among the 9 new EU Member States. However, a positive fact is that a decreasing tendency can be observed, thus there is a realistic hope to reach the 3% reference value. The situation is even worse concerning external imbalance. Once again, Hungary is the last among the 9 EU Member States. Between 2006 and 2008, the gross outstanding debt of the country ranged between 60-70% of the GDP, while this figure was only 40-50% for Poland, the country in the second place. It seems that the most problematic and most difficult medium- and long-term task of Hungary is to normalize its foreign debt.
(See Table 3.)

Table 3. Current account, balance by components, 2006 (% of GDP)

	Current account	Goods	Services	Income	Current Transfers
Bulgaria	-15,7	-22,2	3,9	0	2,6
Czech Republic	-3,3	1,9	1,1	-5,7	-0,6
Estonia	-15,5	-17,7	6,1	-4,5	-0,7
Latvia	-22,3	-25,4	3,3	-2,6	-2,4
Lithuania	-10,8	-14,1	3,6	-2,8	-2,4
Hungary	-6,6	-1	1,4	-7,4	0,4
Poland	-3,2	-2	0,6	-4,2	2,4
Slovenia	-2,8	-3,8	2,8	-1,3	-0,6
Slovákia	-8,3	-5,6	1,2	-3,8	-0,1

Source: Eurostat

The figures included in the table show the aggregate characteristics of the current balance of payment in year 2006. The current balance of payment shows

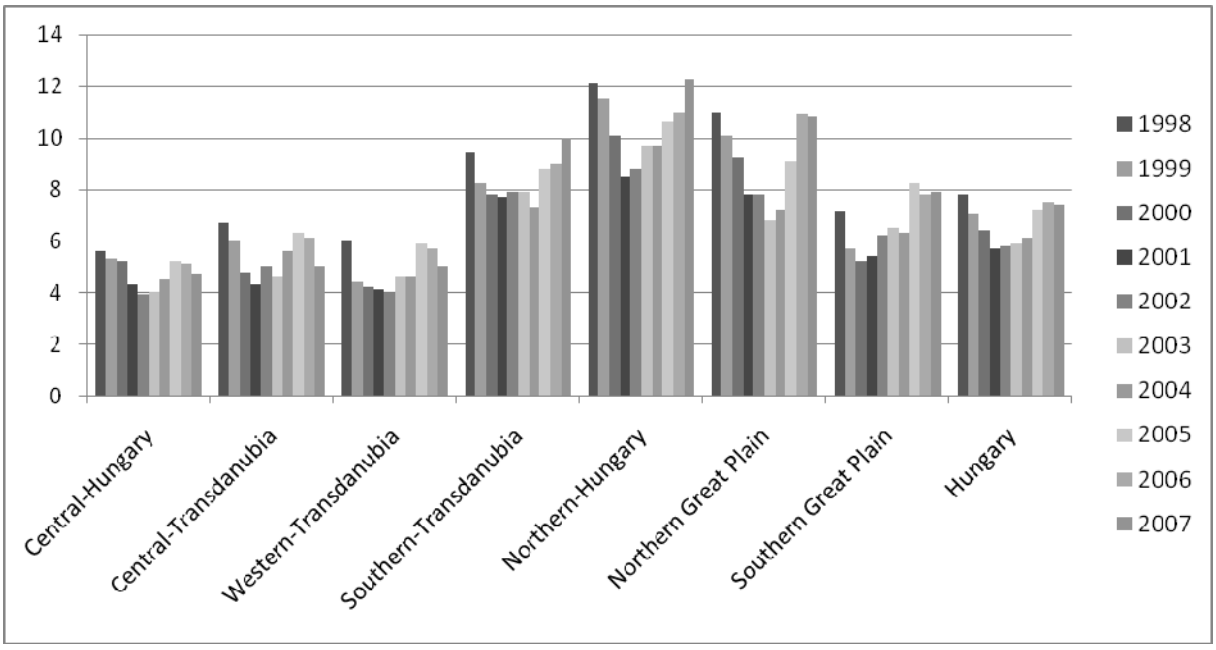
a deficit in each EU Member State. In the case of Hungary the specific problem is posed by the already mentioned external debt of 60-70%. Under such conditions the country cannot afford a balance of foreign trade with a deficit. The competitiveness of the country's industry needs to be improved considerably.

As far as the economic growth of Hungary is concerned, we can say that it is neither slow nor sustainable.

Regional aspects of economic growth

Although until 2001 the unemployment rate showed a continuously decreasing tendency both nationally and in each region of the country, since then it has risen and has reached, and even exceeded, 10% in the regions of Northern Hungary and the Northern Great Plain (Figure 1). In certain areas of these regions a rate of 12-13% can be observed on county-level. For the sake of comparison, these figures for the regions with a higher economic potential were the following (2007): 4.9% in Budapest and 5% both in Western Transdanubia and in Central Transdanubia.

Figure 1. Unemployment rates (%) on regional and national levels (1998-2007)

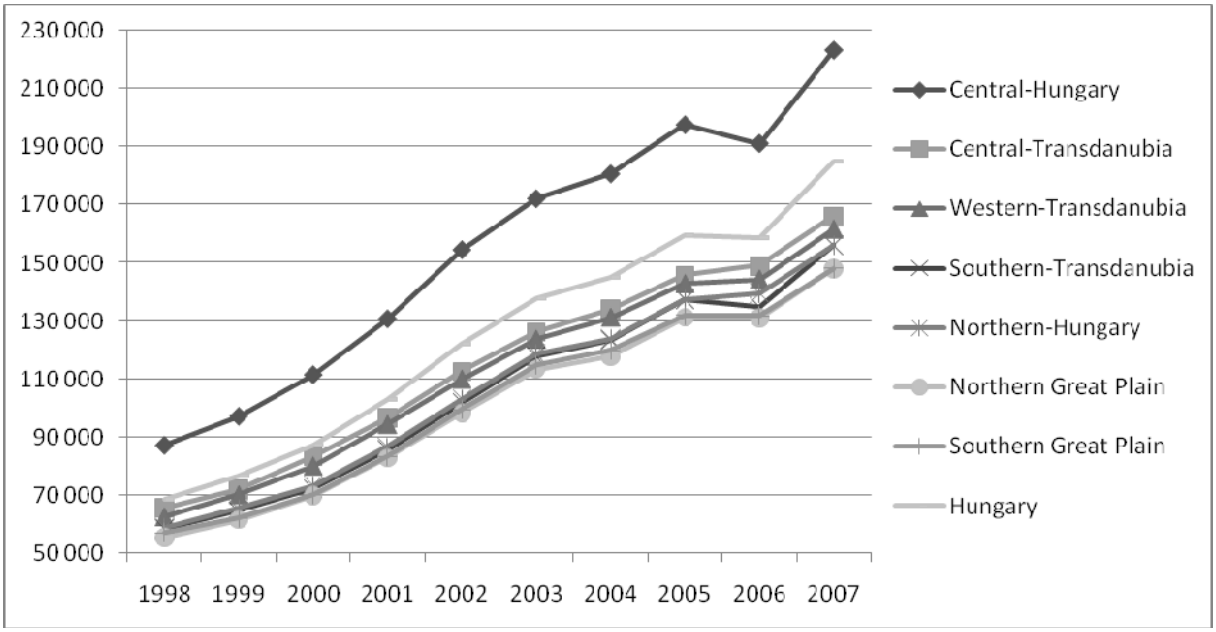


Source: HCSO, 1998-2007 (compiled by the authors).

The changes in gross earnings are presented for the period between 1998 and 2007 both on national and regional levels (Figure 2). The national average is exceeded only by Central Hungary, possibly as a result of the income concentration in the capital and in its agglomeration.

The regions of the Northern and Southern Great Plain came last both on the basis of the 10-year average of the monthly gross earnings and the data of year 2007.

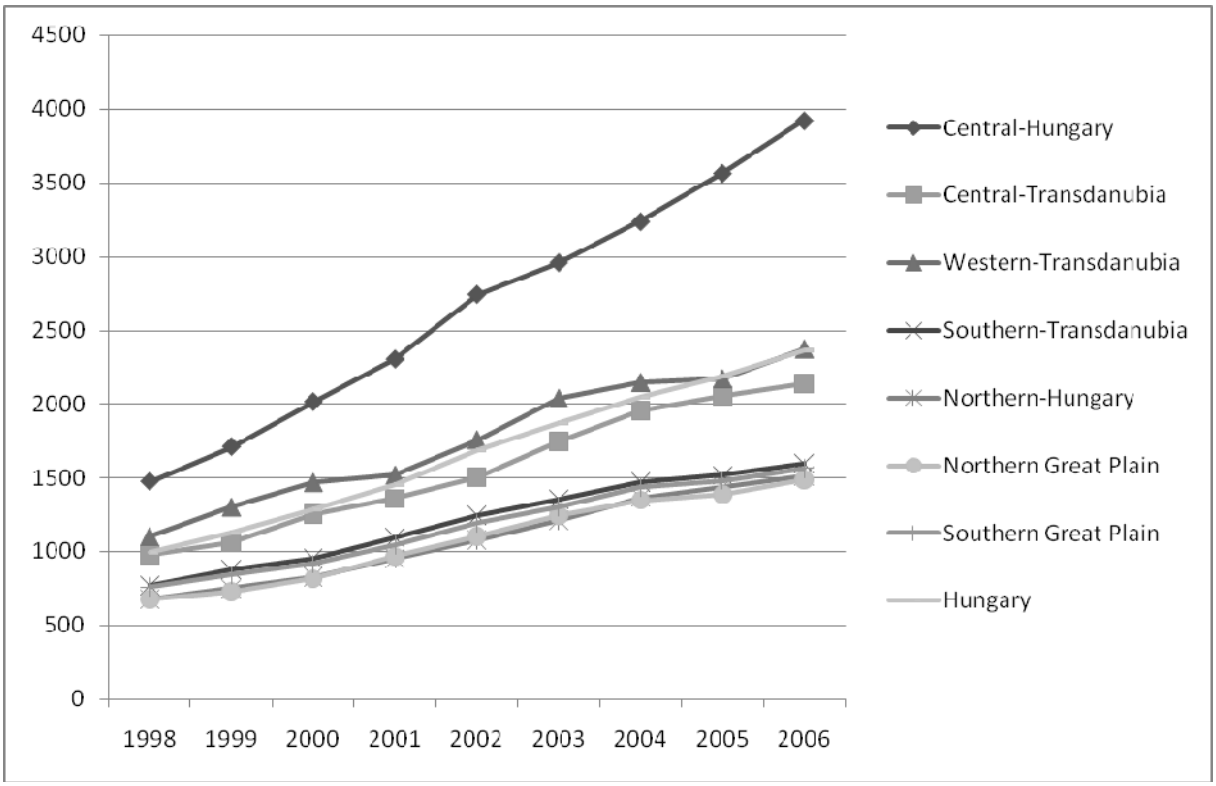
Figure 2. Gross earnings (HUF/person/month) on regional and national levels (1998-2007)



Source: HCSO, 1998-2007 (compiled by the authors).

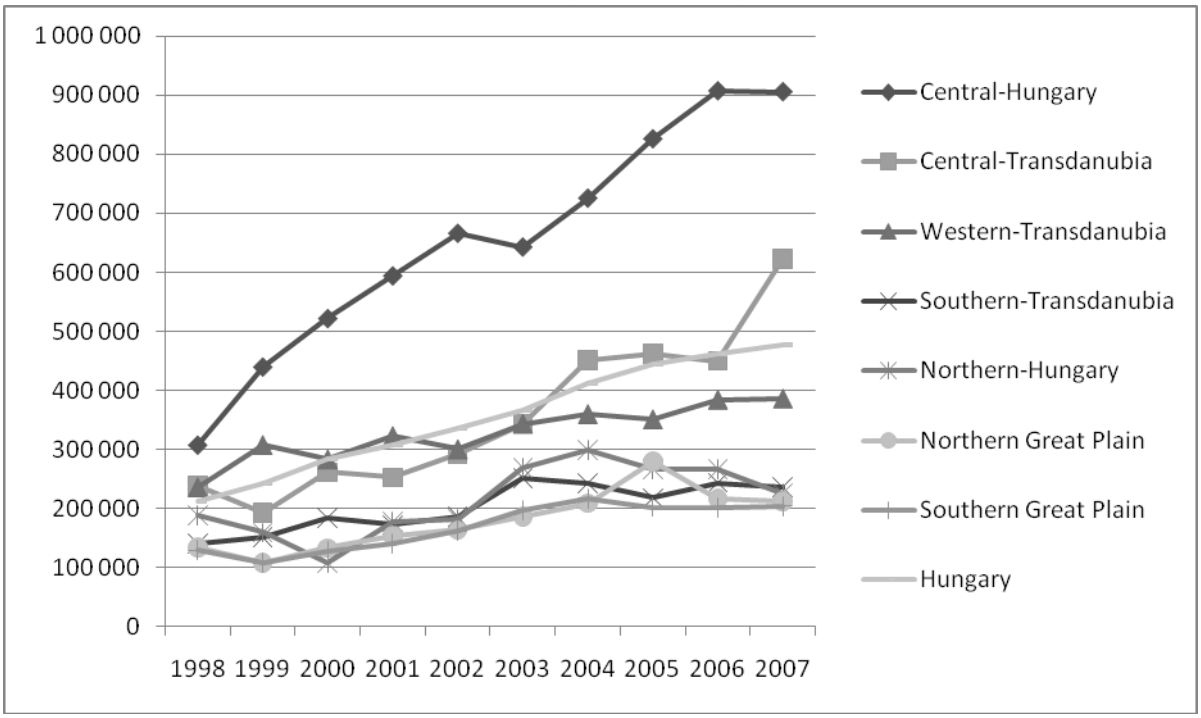
When the regional distribution of incomes is considered, it is not surprising that the per capita gross domestic product and the per capita value of investment are the highest in the regions where the income level is also higher. The reason for this is that in the long run a high and increasing income can be attained only where a significant economic activity (GDP) is realized in the background, and the latter one is dependent, among others, on investment. Once again, the regions of the Southern Great Plain and Northern Hungary are the ones which show relatively modest values in terms of both per capita gross domestic product (Figure 3) and per capita national economy investment (Figure 4).

Figure 3. Per capita GDP (thousand HUF/person) on regional and national levels (1998-2006)



Source: HCSO, 1998-2007 (compiled by the authors).

Figure 4. National economy investment (HUF/person) on regional and national levels (1998-2007)

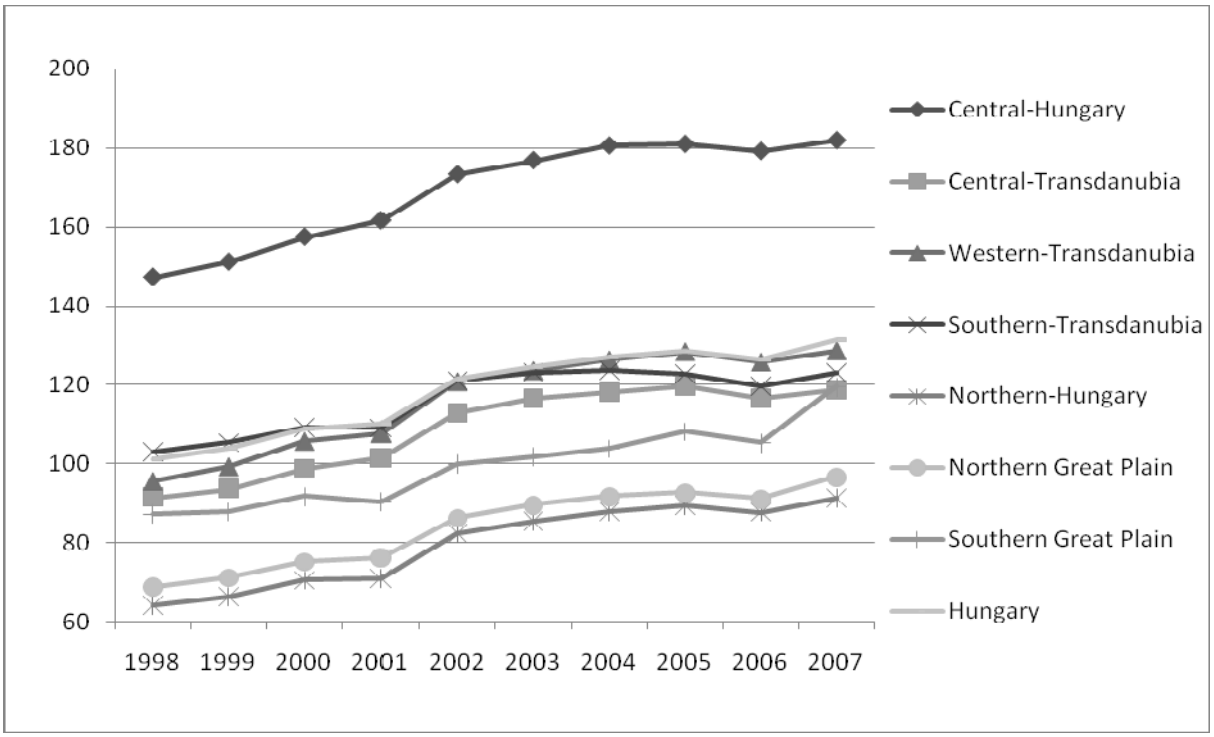


Source: HCSO, 1998-2007 (compiled by the authors).

The above-described system of relations between investments, gross domestic product and earnings can further be extended by entrepreneurial activity

(the number of enterprises). The number of registered enterprises per thousand inhabitants shows a significant difference between the region of Central Hungary and the other regions, as the number of enterprises per thousand inhabitants is almost 1.5 times more in Central Hungary even when compared to the region of Western Transdanubia (Figure 5).

Figure 5. Number of registered enterprises per thousand inhabitants on regional and national levels (1998-2007)



Source: HCSO, 1998-2007 (compiled by the authors).

The comparison of the regional values of the above five indices illustrates the differentiation clearly, which is further confirmed by the allocation ratios calculated for the period between 1998 and 2007 with respect to GDP and investment.

The allocation ratio shows the regional distribution of two given criteria compared to each other. During the measurement of regional differences, the regional proportion of economic characteristics such as GDP, investment or income is usually compared to the regional population ratio.

This clearly reveals which are the regions where the GDP and investment values exceed the population ratio, or to put it more simply, which are “stronger” or “weaker” on the basis of their economic potential.

The allocation ratio of the GDP%/population% also shows the dominance of the capital as it is the only regional unit with an average value of over 2 (2.03) in the interval of 10 years. From among the regions (NUTS 2), Central Hungary (1.58) and Western Transdanubia have a value over 1.00, while Central Transdanubia with

a value of 0.94 can be considered satisfactory. The indices of all the other regions fall behind considerably, with special respect to the regions of the Northern Great Plain and Northern Hungary, which have the lowest values (0.65) (Table 6).

Table 4. Regional values of the allocation ratio calculated for GDP (average, 1998-2006)

Regional unit	Average	SD
Budapest	2.03	0.1122
Central Hungary	1.58	0.0608
Central Transdanubia	0.94	0.0293
Western Transdanubia	1.07	0.0565
Southern Transdanubia	0.73	0.0344
Northern Hungary	0.65	0.0134
Northern Great Plain	0.65	0.0160
Southern Great Plain	0.71	0.0314

Source: calculated by the authors, 2009.

The allocation ratio calculated for investment reveals that besides the capital and the region of Central Hungary, only the regions of Central Transdanubia and Western Transdanubia attracted investments during the past ten years. Their allocation ratios are close to 1.00.

Table 5. Regional values of the allocation ratio calculated for investment (average, 1998-2007)

Regional unit	Average	SD
Budapest	2.48	0.3134
Central Hungary	1.83	0.1518
Central Transdanubia	0.98	0.1547
Western Transdanubia	0.96	0.1537
Southern Transdanubia	0.59	0.0673
Northern Hungary	0.64	0.1159
Northern Great Plain	0.51	0.0732
Southern Great Plain	0.49	0.0542

Source: calculated by the authors, 2009.

The ratio of the region of Central Hungary is 3.7 times greater than that of the region of the Southern Great Plain.

*

As a summary it can be stated that the development, growth of Hungary in the decade between 1996 and 2006 cannot be regarded as bad or low. However, when the annual average rate of growth of about 10 % is considered, it should be borne in mind that the data are expressed in Euros in current prices. The basic question to be answered when assessing a high rate of growth is whether it is sustainable. In our opinion this question duly arises for several countries. As far as Hungary is concerned, we hold the view that this growth cannot be regarded as sustainable. Unfortunately, this is a fundamental problem. Hungary is far from the introduction of the Euro. The indicators of convergence (2006-2008) show us that Hungary's position is maybe the worst among the nine Central and Eastern European countries. The most problematic character is the general government gross debt, which is between 60-70% of the GDP. The deficit of the central budget exceeds the 3% of the GDP limit but the tendency is positive. To sum it up, the Hungarian development is contradictory.

The Hungarian development is contradictory from regional argument too. It was already mentioned in the Introduction that Hungary is a Budapest-centred country. Our analysis leads to the statement that the economic development and growth experienced from the second half of the 1990s until 2007 affected primarily Budapest and its region, the region of Central Hungary. A partly similar statement can be made about the regions of Western Transdanubia and Central Transdanubia, while the development of the other 5 regions is much behind. In the light of this one can question the efficiency of the Hungarian policy of regional development. What is more, it is also questionable whether the aim of the regional policy of the European Union to remove regional disparities has been realized.

Our charts and calculations clearly reveal that the differentiation between the regions and the counties has increased. Finally, it must be mentioned that with respect to per capita GDP on a regional level the standard deviation was HUF 292 thousand in 1998 and HUF 880 thousand in 2006, respectively, while the same figure on a county level was HUF 299 thousand in 1998 and HUF 872 thousand in 2006, respectively. This means that the differences have increased markedly.

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Some Issues of CAP Implementation in Latvia: Regional Inequality AspectsIntroduction

Ever since its inception, the Common Agricultural Policy (CAP) has been one of the most important and dynamic policy areas in the European Union (EU). Nowadays the CAP has set more broad aims and tasks, because in addition to the food supplies to the Community it maintains and promotes also rural development as a policy instrument by applying the diversification. Today's CAP is demand-driven and its main priority is the needs of consumers. Therefore it supports production of high quality food, which is harmless to the environment (European Commission Directorate-General for Agriculture and Rural Development, 2007). The CAP is fundamental to the strength and competitiveness of EU farming and the agri-food sector as a whole and supplements farm income to ensure that farmers make a decent living. However, assistance is linked to compliance with broader objectives in the areas of farm hygiene and food safety, animal health and welfare, preservation of traditional rural landscapes, and bird and wildlife conservation (EUROPA, 2007).

The diverse social and economic structure and production structure in the rural areas of the Member States (MS) determines the selection of the applied policy within the framework of the direct support schemes established by the EU legislation. The new MS can employ the transition period support system at least until 2009, one of advantages of which is a flexibly applicable assignment of additional national funding from the national budget.

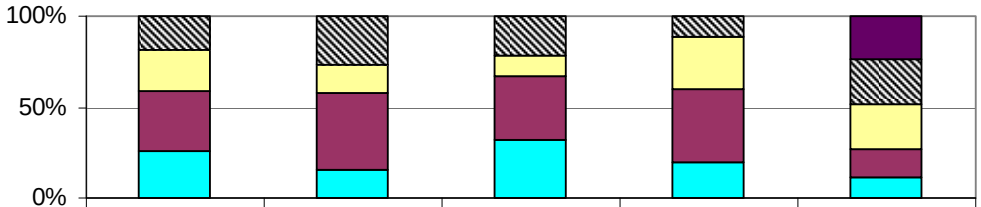
In order to reach the objectives of the CAP, two European agricultural funds have been created: the European Agricultural Guarantee Fund (EAGF), for financing market measures; and the European Agricultural Fund for Rural Development (EAFRD) for financing rural development programmes. The EAFRD finance the Community's financial contribution to rural development programmes implemented in accordance with the Community legislation on support for rural development by the EAFRD.

1. Measures and subsidies of CAP

Latvia's agriculture receives financial support both from the EU budget, and from the national budget. Since Latvia receives the EU funding from its accession to the EU in 2004, the time period from 2004 to 2008 has been analyzed.

Regardless of the fact that the financial support for Latvia's agriculture from different sources since 2004 has constantly increased as seen in Figure 1 and induced by authors (Melece, Romanova, 2008). In 2008 the amount of national subsidies and EAAGF diminished. If in 2004 total amount allocated for Latvia's farmers and enterprises was 73.1 mln. LVL, than in 2008 this amount almost quadrupled and was 269 mln. LVL. The structure of sources financing the various CAP measures in 2008 is following: 25% of total support came from EAGF, 24% - from complementary national direct payments (CNDP), 24% - from EAFRD, 15% - from EAGGF and 11% - from national budget.

Figure 1. Financial support for Latvia's agriculture within the scope of CAP (mln. LVL), 2004 – 2008



	2004	2005	2006	2007	2008
EAFRD					63.7
CNDP	13.9	41.3	39.2	18.7	66.0
EAGF	16.0	25.2	19.3	48.0	67.9
EAGGF	24.2	65.7	61.9	66.7	41.5

Source: Authors' calculations based on data from RSS[1]

According to information provided by the Rural Support Service, the following support measures have been financed from EAGF: Single area payment[2] (SAP); Export refunds; Market interventions; Separate sugar payment and measures undertaken in accordance with EU.

Each new MS has an opportunity to disburse complementary payments in addition to the SAPS in sectors significant for each particular MS, taking into account that the EU has identified which sectors should be supported. In Latvia complementary national direct payments are available for: areas of arable crops; fodder areas; slaughtered or exported bovines; suckler cows; ewes; milk quota; potato starch; and grass and flax seeds. Starting from 2007, farmers can receive the following decoupled CNDP: area payment; slaughtered or exported bovine animals and special cases for young farmers. All Latvia's support measures, financed by different EU and national funds, are summarized in Table 1.

[1] Rural Support Service.
[2] Under Single Area Payment Scheme –SAPS.

Table 1. Support measures, their source and disbursed amount in Latvia (mln. LVL), 2004 - 2008

Source	Support measures	2004	2005	2006	2007	2008
EAGGF	Less favoured areas	24.17	34.70	26.26	14.67	0.00
	Areas with environmental restrictions	0.00	1.17	1.14	0.67	0.00
	Developing organic farming	0.00	7.57	6.43	10.06	11.28
	Maintaining biodiversity in grasslands	0.00	2.05	0.61	2.62	2.95
	Establishment of buffer belts	0.00	0.00	0.03	0.04	0.03
	Preserving livestock genetic resources of farming animals	0.00	0.16	0.20	0.23	0.18
	Reduction of erosion	0.00	0.00	0.00	10.09	9.54
	Support for restructuring of semi-subsistence farms	0.00	10.38	10.92	9.98	9.44
	Meeting EU standaRSS	0.00	8.92	15.34	15.32	5.35
	Early retirement	0.00	0.00	0.31	2.29	2.07
	Support to producer groups	0.00	0.79	0.68	0.76	0.63
EAGF	Single area payment	15.93	24.34	17.52	41.46	37.61
	Export refunds	0.10	0.63	1.36	1.93	0.36
	Market interventions	0.00	0.09	0.16	0.27	0.46
	Separate sugar payment	0.00	0.00	0.00	4.10	2.41
	Other support measures	0.00	0.19	0.29	0.27	27.04
CNDP	CNDP for arable crops	7.63	30.66	16.10	11.45	17.26
	CNDP for fodder areas	1.12	5.95	2.63	2.68	3.52
	CNDP for seeds of grass and flax	0.00	0.09	0.14	0.14	0.00
	CNDP for potato starch	0.00	0.21	0.19	0.11	0.17
	CNDP for ewes	0.09	0.10	0.13	0.21	0.00
	CNDP for suckler cows	0.13	0.13	0.52	0.86	1.11
	CNDP for slaughtered or exported bovine animals	2.83	4.18	4.49	3.17	1.71
	Milk quotas	2.08	0.01	14.98	0.09	28.54
	Decoupled CNDP for areas	0.00	0.00	0.00	0.00	10.01
	Decoupled CNDP for slaughtered or exported bovine animals	0.00	0.00	0.00	0.00	3.58
	Decoupled CNDP in special cases for young farmers	0.00	0.00	0.00	0.00	0.08

Source: Authors' calculations based on data from RSS.

As of 2007, support to rural development, based on Latvian Rural Development Programme 2007 – 2013, is granted from EAFRD. Support measures financed from EAFRD in Latvia are shown in Table 2.

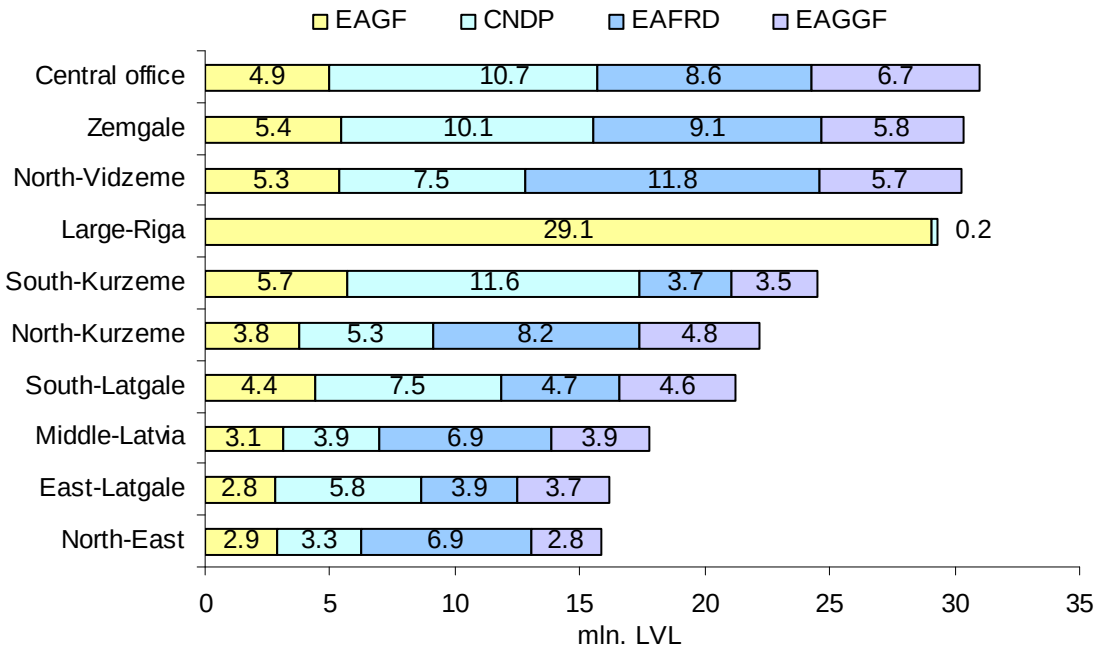
Table 2. The measures financed from EAFRD in 2008 (mln. LVL; %)

Measure	Mln. LVL	%
Less favoured areas	42292267	42.29
Modernization of agricultural holdings	18535007	18.54
NATURA	1300795	1.30
Early retirement	1113103	1.11
Support for business start-ups and development	320237	0.32
Support for restructuring of semi-subsistence farms	135257	0.14
Support to producer groups	23070	0.02

Source: Author's calculations based on data from RSS.

Despite the fact that Latvia's farms have been receiving more support and subsidies and their performance has increased, the differences between various Latvia's regions can still be observed. The received EU support differs between Latvia's regions (Figure 2).

Figure 2. Received EU support in Latvia's regions (mln. LVL), 2008



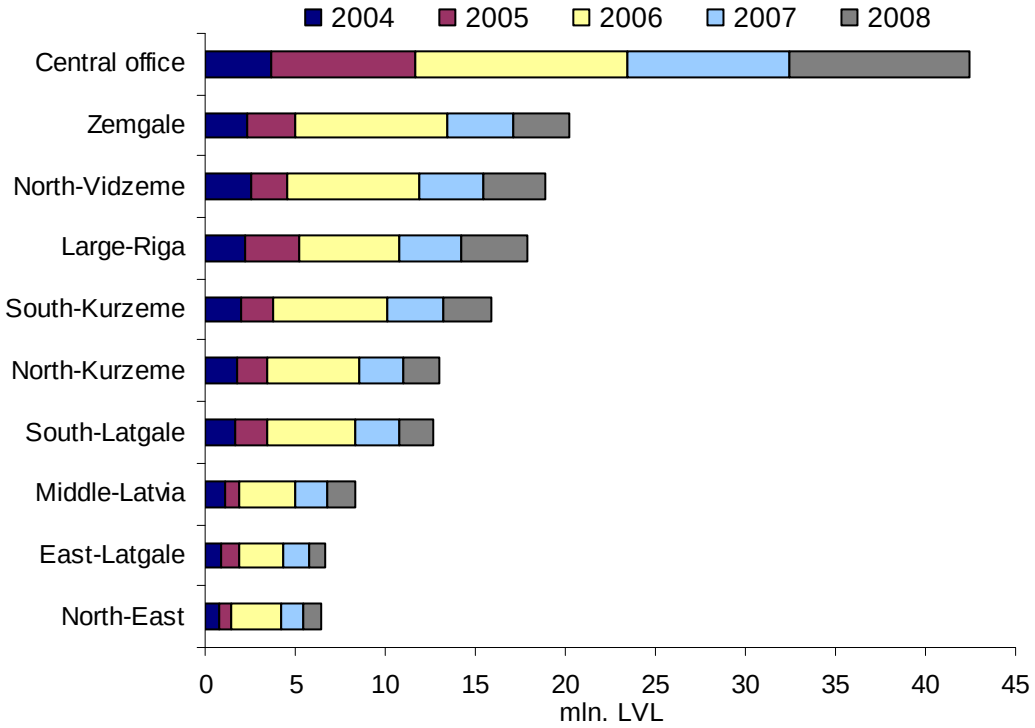
Source Authors' calculations based on data from RSS.

In 2008 the main support was received by following regions: Central office[3], Zemgale (Jelgava, Dobele and Bauska districts), North-Vidzeme (Valmiera, Cēsu, Limbažu and Valkas districts) and Large-Riga (Riga, Ogre and Aizkraukle districts), while regions located in southeast part of Latvia received least amount of EU support. These regional structural units were - North-East (Gulbene, Alūksne and Balvi districts), East-Latgale (Rēzekne and Ludza dis-

[3] Central Office manages horizontal programs, for instance, marketing activities, research etc.

tricts), Middle-Latvia (Jēkabpils and Madona districts) and South-Latgale (Preiļi, Krāslava and Daugavpils districts). Similar tendencies can be observed analysing distribution of national subsidies by Latvia's regions in period from 2004 to 2008 (Figure 3).

Figure 3. Received national subsidies (mln. LVL) in different Latvia's regions, 2004 - 2008



Source: Authors' calculations based on data from RSS.

From this we can conclude that Latvia has experienced uneven regional development, which manifests in substantial developmental differences between various regions, especially the capital city and other regions of the country. Taking into account that majority of financially supported agricultural farms and enterprises invest in further development and production capacity increase, we took up investigating regional development of food enterprises in Latvia.

Examining all support programs and, where possible, disaggregating data according to the 26 districts of Latvia, D.Saktiņa and W.Meyers (Saktiņa, Meyers, 2006) can gain insight into the territorial distribution of various program benefits. Authors conclude that the district level data are very revealing and indicate that support programs have often boosted economic polarization rather than reduced it. Despite some data consistency problems, it was possible to identify different activities of entrepreneurs or certain regions in the usage of the programs available in the country for the development of their businesses. Farmers in Rīga and Bauska districts were to most active to apply for support.

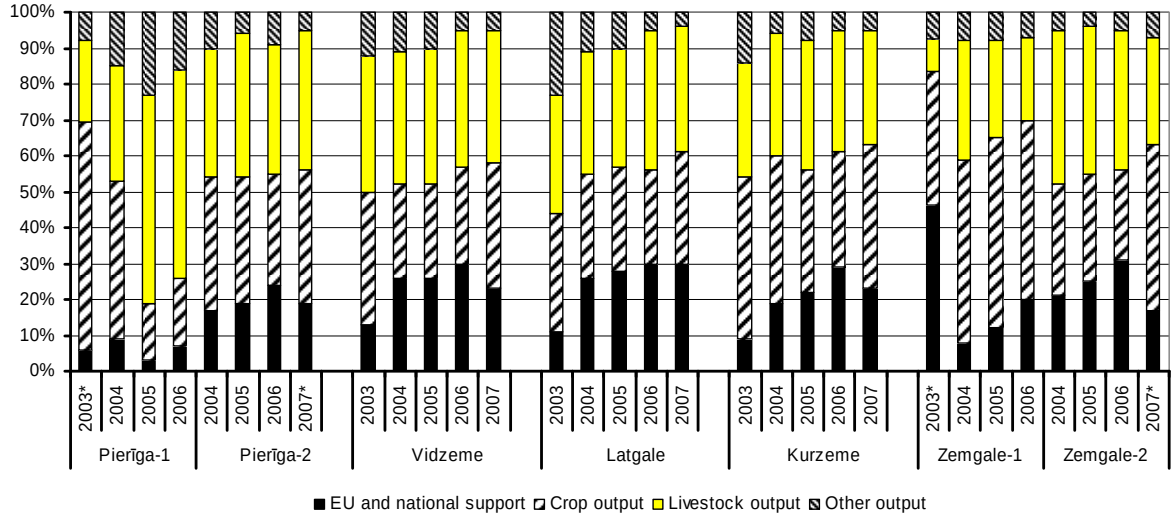
By contrast, the lowest activity was in the eastern regions, especially in the borderland, and in the western part – in Kuldīga and Ventspils districts.

The results of study show that in recent years the volume of support that was received by less developed regions was lower than more developed regions, while more competitive regions are increasing support to their businesses. This has had undesired effects, such as a notable drop in the effectiveness of regional support and irregular distribution of enterprises. In order to meet CAP objectives regarding the rural development, it is important that financial support should be deployed particularly in regions with a lower level of economic development or competitiveness.

2. Impact of subsidies on farm's performance

Latvia's accession to the EU influenced the volume of the support to the farms positively - its percentages had increased for all Latvia's farms' revenue structure (Figure 4).

Figure 4. Latvia's farms' revenue structure (%), 2003 - 20074



Source: Authors' calculations based on data from SUDAT[5].

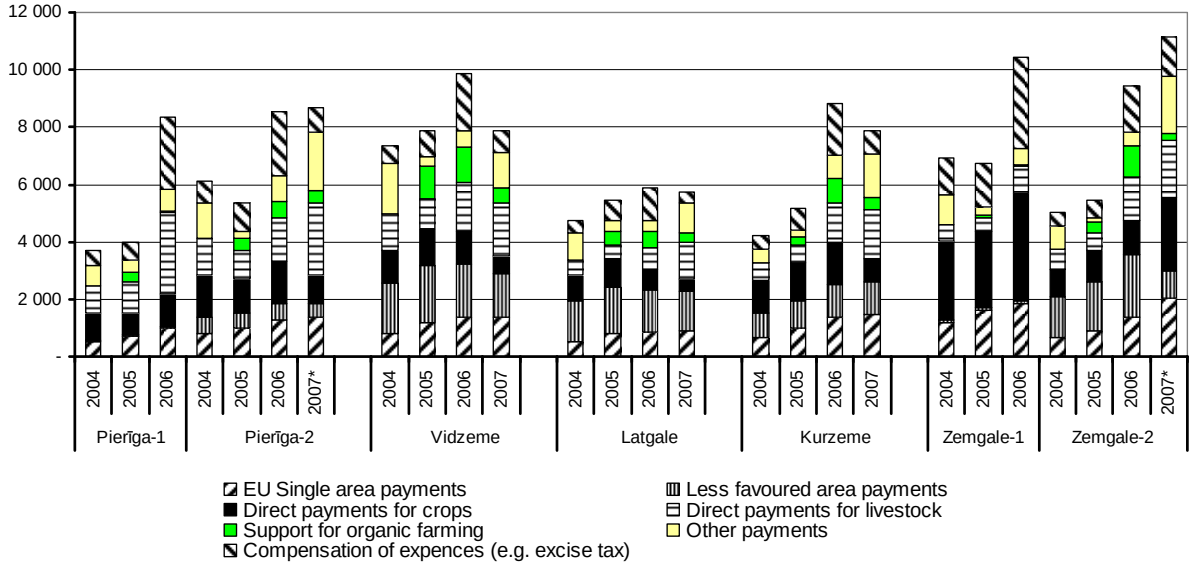
The support payments reached their peak in 2006, when in most regions (Vidzeme, Latgale, Kurzeme and Zemgale - 2) they formed around one third of agricultural holdings' revenue. The growing dependency of farms on support payments were noted also in other EU MS (Štolbová et. al., 2008). The structure

[4] During the 2004 to 2006 for statistical needs the Zemgale region was divided into subregion Zemgale – 1 (Bauskas, Dobeles and Jelgavas districts, more favourable for agricultural production) and Zemgale – 2 (Jēkabpils and Aizkraukles districts). Also, as a result to state territorial reform Pierīga region consisted by subregion Pierīga – 1 (Rīga, Rīga district and Jūrmala) and Pierīga – 2 (Limbažu, Ogres and Tukuma districts).

[5] SUDAT - Farm Accountancy Data Network (*Saimniecību uzskaites datu tīkls*) in Latvia

of received production subsidies (Figure 5) shows several aspects of the Latvian farm specialization by regions. For instance, in Zemgale – 1 region, where soil is especially favourable for agriculture, the farms received up to 40% of the subsidies for grain. Less favoured area payments formed a significant part of support in Vidzeme (around 25 %, but with a tendency to shrink), Latgale and Zemgale-2 (25-30 %), but in Zemgale-1 they were less than 2 %. Meanwhile, direct payments for livestock dominated in Pierīga-1, reaching one third or one fourth from all support payments.

Figure 5. Production subsidies (LVL) per farm in Latvia, 2004-2007



Source: Authors' calculations based on data from SUDAT.

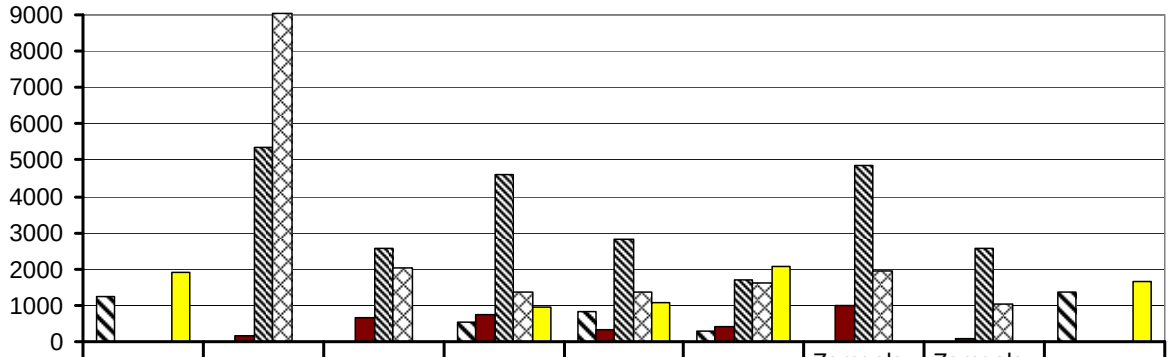
As previous studies show (Bratka et. al., 2008; Jakušonoka, 2007), in 2003 through 2006 the percentage of liabilities in the total assets of Latvian farms continued to grow and substantially exceeded that of similar economic size farms in neighbouring Baltic countries. The increase of percentage compensation of expenses, which includes loan interest compensation, is the indirect proof of the growing loans burden; it was within the 9 to 12% limits in the beginning of analysed period, and it had reached 20 to 30% at the end of the period.

One of the preconditions for successful development of agricultural production is expanded reproduction of farms' fixed assets funds. In addition to the depreciation and profit as the inner resources and loans as the external finance source an important role is played by investment subsidies, which form source of gratis financial support.

Unlike production subsidies, whose amount tended to grow, the investment subsidies amount has fluctuated over the years and in different Latvia's regions (Figure 6). This means that fixed assets restoration and production basis ex-

pansion processes were not simultaneous. They were most prominent in 2005 and 2006, and continued in Kurzeme region up until 2007.

Figure 6. Subsidies (LVL per farm) on investment in Latvia's farms, 2003-2007



	Pierīga	Pierīga-1	Pierīga-2	Vidzeme	Latgale	Kurzeme	Zemgale-1	Zemgale-2	Zemgale
2003	1228			527	825	271			1365
2004		172	679	766	344	435	1 005	78	
2005		5 363	2 566	4 587	2 809	1 718	4 870	2 582	
2006		9 023	2 034	1 363	1 366	1 615	1 969	1 055	
2007	1 897			939	1 065	2 088			1 667

Source: Authors' calculations based data from SUDAT.

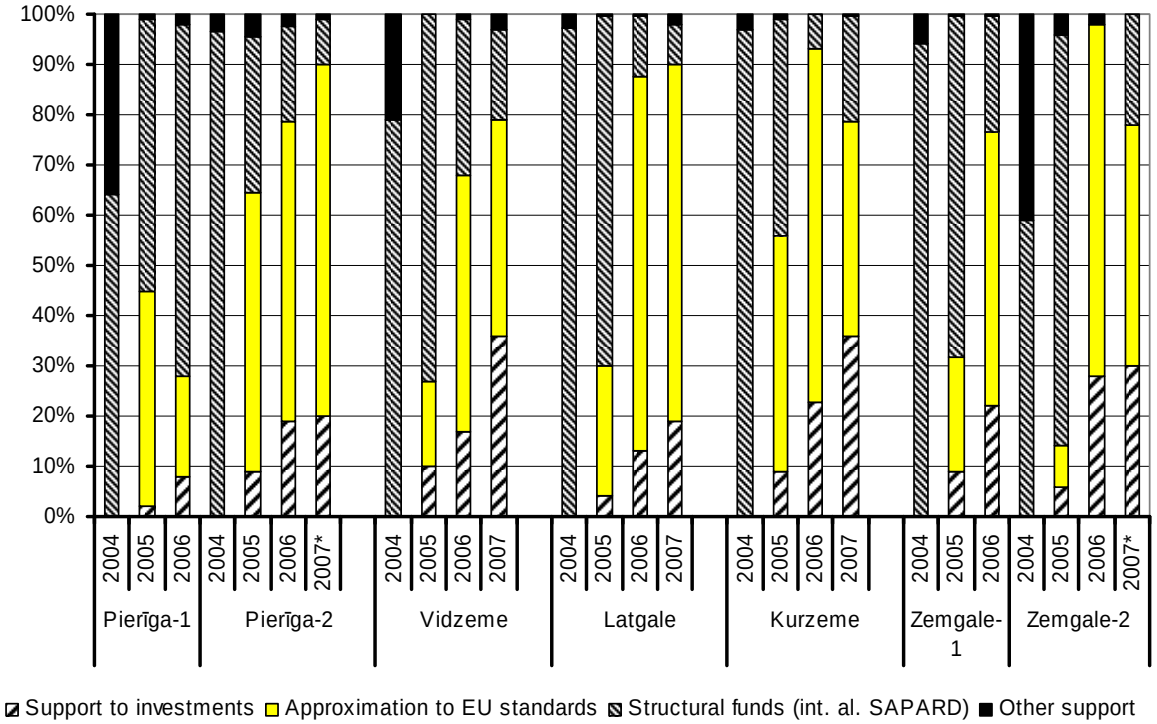
Results of investment subsidies structure analysis show (Figure 7) that absorption of resources allocated for agricultural support was not even, and the finances were distributed for different purposes. In some regions farms started using other support programmes in addition to structural funds already in 2004. For example, in Pierīga-1 and Vidzeme region there were the programmes that supported permanent crops (22% and 13%) and agricultural modernization (14% and 4%), but in Zemgale-2 it was mostly drainage systems construction (41%).

Starting with 2005 subsidies for approximation to EU standards was very important. If in Pierīga and Kurzeme regions their percentage was between 45 and 55% respectively, during the first year of absorbing these finances, then the rest of Latvia's regions were able to reach such level after two years. It should be noted that farms from Vidzeme and Zemgale-2 regions, which used other support programmes actively in 2004, began the large-scale absorption of approximation to EU standards later – only in 2006.

Several authors (Ferguson et al., 1991) recommend using net value added (NVA), which shows the newly created value in the firm, in evaluation of efficiency production process usage in agriculture. Its usage in farms economic analysis is supported also by *FADN* methodology (Definitions…).

NVA is a sum of output and production support, after subtracting specific costs and overheads, depreciation of fixed assets and production taxes.

Figure 7. Structure of subsidies (%) on investment in Latvia's farms, 2004-2007



Source: Authors' calculations based on data from SUDAT.

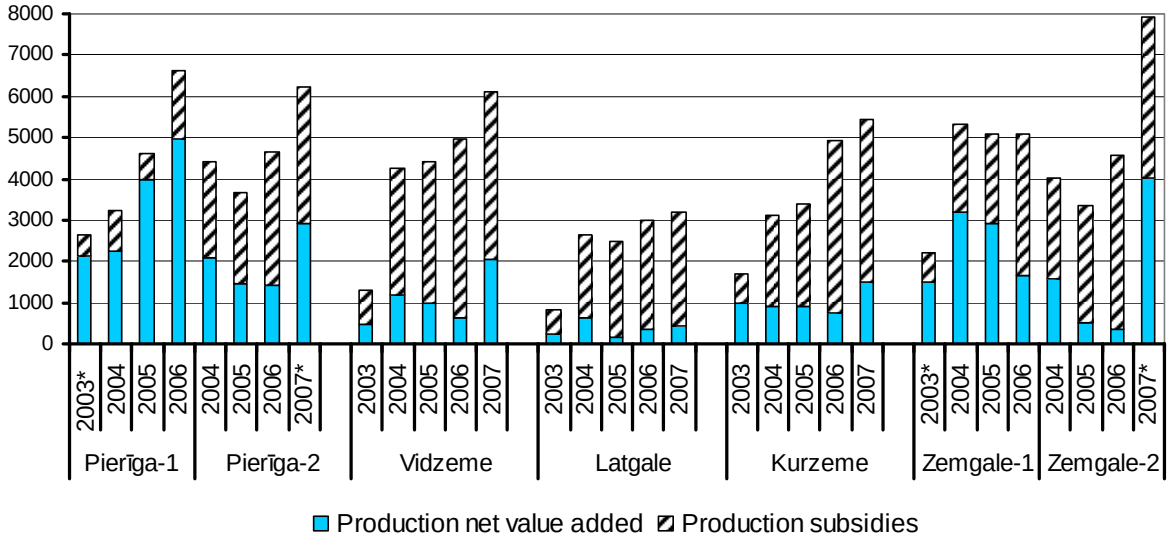
However, NVA fails to show the portion of newly created value which is formed by national and EU support to the agriculture. Therefore a modified indicator is used in the article - production NVA, which is equal to difference between NVA and production subsidies received. It shows NVA by the farm, if the farm is not supported by production subsidies. During the 2003 to 2007 the highest NVA and production NVA per AWU[6] (Figure 8) was in Pierīga and Zemgale region, but the largest share of subsidies was in Latgale and Zemgale-2 regions (reaching the peak of 88-93% in 2005 and 2006), the smallest was in Pierīga-2 (25-30%).

Regardless of substantial support payments, Latgale farms production efficiency was extremely low. At the same time, increase of support payment volume gave a chance for this region's farms to gain some ground on the leaders: if in 2003 Latgale farms NVA was one third of Pierīga and Zemgales regions level then in 2007 it was 52 % and 41 %, respectively. The production NVA was still low, for example, Latgale farms constituted only 11 to 15% of the leading regions production NVA. It means that during the research period the production process efficiency growth rate was lower than in other regions.

The results of studies show that in all Latvia's regions the highest NVA was produced in farms with economic size above 16 ESU (Table 3).

[6] Annual work unit (AWU) is full – time person equivalent (1800 working hours per year).

Figure 8. Production net value added and production subsidies (LVL per farm) in Latvia, 2003-2007



Source: Authors' calculations based on data from SUDAT.

Table 3. NVA per AWU and proportion of production subsidies in the NVA of Latvia's farms, grouped by ESU (LVL and %), 2004 and 2007

			Average	2-< 4	4 -< 8	8 -< 16	16 -< 40	40 -< 100	100 -< 250	>= 250
Pierīga	2004	NVA	4044	1553	3150	5656	12319	5383	3886	---
		Subsidies (%)	*47*	*61*	*52*	*52*	*39*	*39*	*58*	
	2007	NVA	6208	3788	2625	3620	7667	10396	10852	10469
		Subsidies (%)	*53*	*57*	*93*	*78*	*57*	*59*	*36*	*41*
Latgale	2004	NVA	2625	1152	3709	2416	7185	5089	---	---
		Subsidies (%)	*76*	*78*	*71*	*89*	*74*	*108*		
	2007	NVA	3204	1644	3393	4905	7447	9424	9034	4893
		Subsidies (%)	*86*	*106*	*76*	*90*	*82*	*80*	*75*	*62*
Kurzeme	2004	NVA	3109	1480	2578	4641	4868	7916	5056	---
		Subsidies (%)	*71*	*64*	*77*	*68*	*77*	*66*	*68*	
	2007	NVA	5 451	2 302	3 571	4 804	9 842	11 268	14 908	4 845
		Subsidies (%)	*73*	*67*	*74*	*82*	*80*	*66*	*64*	*79*
Vidzeme	2004	NVA	4 251	1 804	4 439	6 597	8 513	5 890	3 363	---
		Subsidies (%)	*72*	*78*	*70*	*74*	*74*	*76*	*63*	
	2007	NVA	6114	2588	4488	5874	9721	12564	7730	7957
		Subsidies (%)	*67*	*76*	*77*	*68*	*65*	*66*	*79*	*41*
Zemgale	2004	NVA	5009	1503	2913	4855	7716	10499	7692	6182
		Subsidies (%)	*44*	*77*	*60*	*38*	*68*	*51*	*42*	*23*
	2007	NVA	7907	2260	3600	3965	10544	14534	15760	13027
		Subsidies (%)	*49*	*70*	*68*	*79*	*59*	*59*	*49*	*32*
	2004	$V\sigma_{subsidies}$ (%)	25	12	15	31	24	39	20	---
	2007		23	25	12	10	17	13	30	38

Source: Authors' calculations based on data from SUDAT.

At the same time, percentage of production subsidies in these farms was lower as compared to small farms, therefore showing that with farms' economic

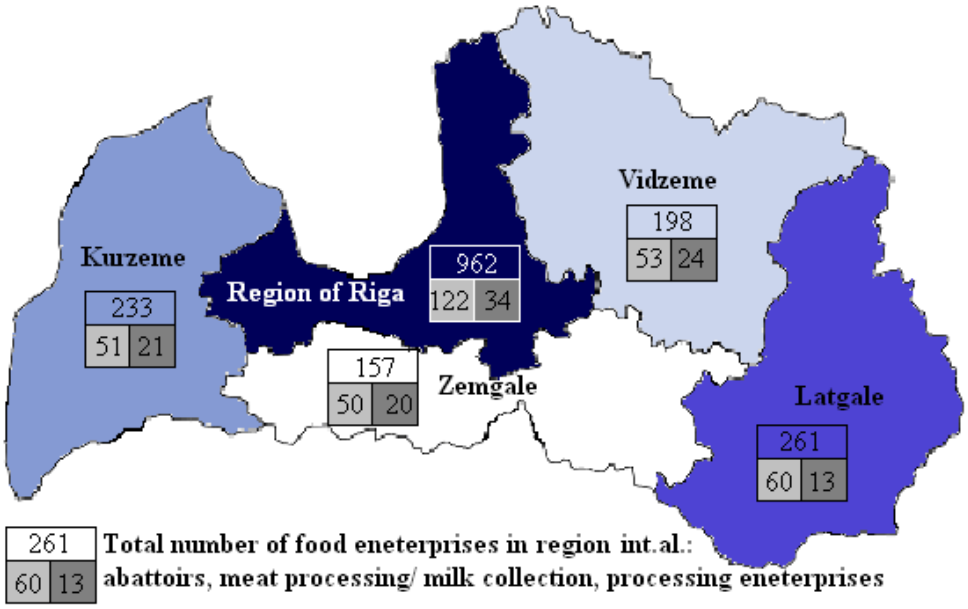
size growth the efficient usage of resources and competitiveness also increases. Similarly sized farms in the different regions in various groups showed substantially different percentage of production subsidies in NVA: if in 2004 they can be found in farm group from 8 to 100 ESU, then 2007 in the groups of the smallest (from 2 to 4 ESU) and the largest farms (above 100 ESU).

3. Development of food enterprises in Latvia's regions

The global and EU policy tends to improve and develop the food production on regional or local level, because farms involved in this food production have benefits for farm diversity and also benefit local economies since more of their income remains circulating within local economies.

Rural Development Plan 2007-2013 sets the rural development priorities and measures, broken down into four groups or axis according to their objectives, where the largest part of the axis financing will go to the modernisation of agricultural holdings. Within the framework of this first axis 10 measures will be implemented, where adding value to agricultural products int. al. food production/processing is one of these measures. In order to evaluate regional development and production possibilities of value added products, where the existing abattoirs and processing facilities is very important, we have analysed distribution of approved and registered food enterprises in Latvia's regions and districts (Figure 9).

Figure 9. Distribution of food enterprises in Latvia's regions, 2008



Source: Author's calculation and construction based on data from FVS[7].

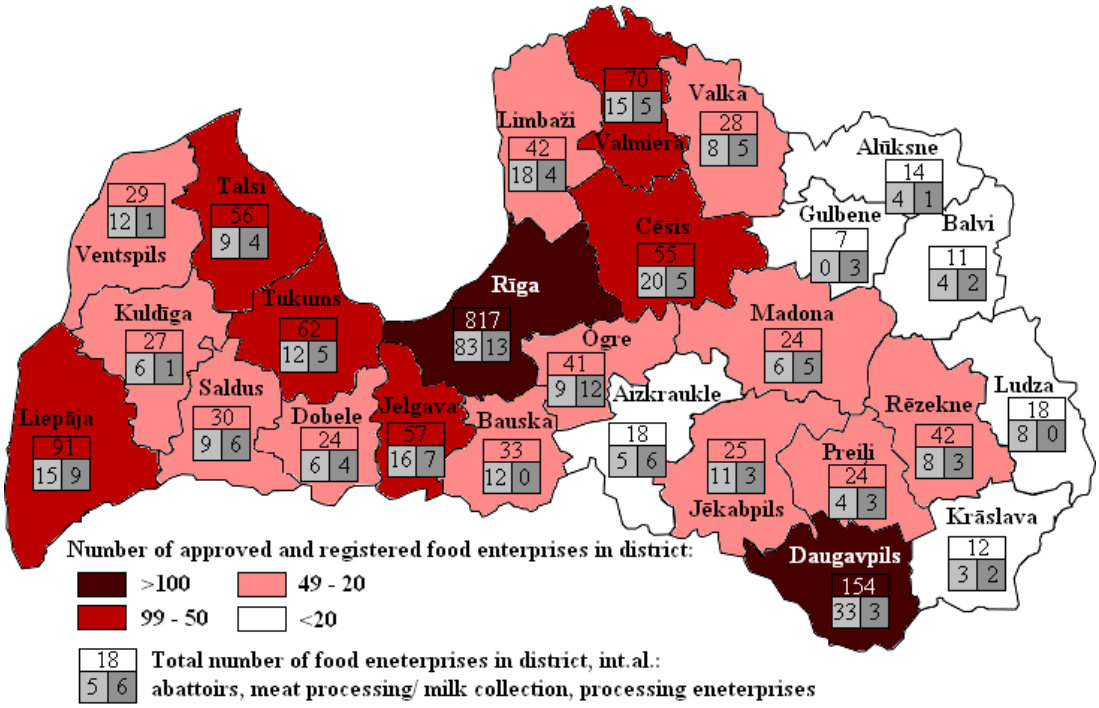
[7] Food and Veterinary Service

As it can be seen in the Figure 9, the largest number of food enterprises in concentrated in region of Riga, while in other regions (Kurzeme, Zemgale, Vidzeme, Latgale) the number of food enterprises is 4 to 6 times smaller. Analysing division of abattoirs and meat processing enterprises, which constitutes 19% from total number of all food enterprises, by regions, we can see that the largest number of these enterprises are located in region of Riga, particularly in the state capital - Riga. Latgale ranks second, with 60 abattoirs and meat processing enterprises. Meanwhile, Zemgale region has the least developed meat processing, where 50 abattoirs and meat processing enterprises are located.

In respect of milk collection and processing enterprises, the most saturated are regions of Riga and Vidzeme, where 30% and 21%, respectively, from total number of milk collection and processing enterprises are concentrated. The smallest number of milk collection and processing enterprises are in Zemgale and Latgale. Such uneven distribution of food enterprises can be explained by the unequal regional development and consequently distribution of EU pre-accession support (SAPARD) and structural funds; and national financial support.

Detailed distribution of approved and registered food enterprises by Latvia's districts is shown in Figure 10.

Figure 10. Distribution of approved and registered food enterprises in Latvia's districts, 2008



Source: Author's calculation and construction based on data from FVS.

The lack of processing facilities hinders the development of production of high value-added products such as organic and local food and deepening the region's inequality.

Main conclusions

1. The financial support for Latvia's agriculture from different sources or funds financing measures falling under CAP since 2004 has constantly increased and constituted 269 mln. LVL in 2008.
2. EU and national financial support or subsidies differs substantially between Latvia's regions, where in recent years, the volume of support received by less developed regions was less than by more developed regions, promoting inequality of the regions' development.
3. After Latvia joined the European Union, the highest net value added and production net value added per annual work unit was in Pierīga and Zemgale regions farms. The largest percentage of production subsidies in net value added can be seen in Latgale and Zemgale-2 regions (up to 88-93%), the smallest in Pierīga-2 (25-30 %). Latgale region farms net value added was the lowest in Latvia; its growth was at the expense of higher support payments.
4. Farms above 16 ESU in all Latvia's regions showed higher net value added and smaller (as compared to other economic size farm groups) percentage of production support, which shows that farms' economic size growth also stimulates efficient usage of resources and competitiveness of the agricultural holding.
5. The largest number of food processing enterprises (int al. abattoirs and milk collection centres) concentrates in Riga region (main in Rīga city), while in other regions (Kurzeme, Zemgale, Vidzeme, Latgale) number of food enterprises is 4 to 6 times lesser. The lack of processing facilities hinders the development of production of high value-added products such as organic and local food and deepening the region's inequality.

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Geographical Distribution and Rural Implications of Food Industry FDI in the New Member States of the EU

Introduction

The food industries in the Visegrad countries have been subjects to substantial reforms since the beginning of the 1990s. The earlier market structures of the food manufacturing branches were completely rearranged by company transformation and privatisation. The intensive inflow of foreign direct investments (FDI) has been a prominent shaping force largely determining the present status of food industries.

In most of the CEE countries large expectations were associated with foreign investment to the food industry. One of its important inputs, agricultural produce originates from the countryside, and food industry FDI was expected to alleviate the deep recession in rural areas by purchasing the raw material, resolving the severe employment crisis and bringing business relations to various local services.

Food industry FDI has often caused disappointment in the host countries, as investors have ignored local expectations concerning regional development objectives. Additionally, even if foreign investors did purchase food processing plants in remote districts, many of those factories were shut down due to the streamlining or rationalisation strategy of the new owners. A third and the most recent geographical aspect of the food industry FDI is a distinct realignment of existing foreign-owned processing capacity among the New Member States, which is a direct implication of the pan-European or regional strategies of the biggest multinational food manufacturers. This reallocation have created loser and winner districts or countries within Central and Eastern Europe.

Determinants of Regional Choices

The determinants, which are presumed to influence the regional distribution of food industry FDI, are divided into a strong and a weak or indifferent group in Table 1. These determinants are scanned and explained in detail in the current section.

As far as the regional distribution is concerned, Central and Eastern European experience indicates that *foreign investments in the food industry tend to*

primarily be driven by concentrated consumers' markets as opposed to concentrated supply of raw material and other inputs. This characteristic has largely contributed to a direction of uneven regional distribution in those countries where a considerable proportion of the national population is concentrated into the capital city and its surroundings. Besides the high concentration of demand, urban population is the ultimate target consumer group for food investors for two reasons:

1. It is typically the capital city that hosts an emerging group of well-to-do consumers, who generate demand also for high-quality, high-priced or culinary foodstuffs.
2. City dwellers are more exposed to the availability of a full range of foodstuffs as they have limited access to home-produced alternatives. On the other hand, in the rural areas of Central Eastern European countries the consumption of home-grown and locally purchased food is extraordinarily high.

The second most affecting factor is *the locations of the formerly existing food processing facilities*. The majority of food industry FDI arrived to the CEE countries through purchasing the privatisation objects, therefore these locations predetermined the regional choices of the investors. Many companies used to be established near to consumer markets also in the previous era, however, numerous locations indicate the deliberate decisions of past economic regimes to settle food processing plants into agriculture-intensive areas. Foreign investors were found to take over processing facilities of both location types, however the locations of green-field investments appeared to be determined more by the proximity of consumers.

Geographical distances from markets and the available infrastructure are definitely affecting the regional choices of food industry investments. The perishable nature of raw material and the end products, bulkiness, transportation and logistic issues are important factors in this respect. The significance of geographical distances is obviously less pronounced in the smaller countries than in the large ones.

The *level of processing* is also a determinant factor that eventually affects the choice of regional location. Investors involved in second-stage processing tend to be purely driven by the proximity of consumers, while first-stage processors are also forced to pay attention on the proximity of raw material access.

Food industry FDI has often caused disappointment in the host countries, as investors have ignored local expectations concerning *regional development objectives*. The regional choices of investments were not made on the basis of *rural needs* or acute *regional unemployment problems*.

Table 1. Determinants of the regional choices of food industry investors in the Central and Eastern European countries.

Strong determinants	**Weak or indifferent determinants**
♦ Consumers' market.	♦ Regional investment incentives.
♦ Existing locations of processing companies.	♦ Individual contracts with governments.
♦ Geographical distances and infrastructure.	♦ Rural social and unemployment issues.
♦ Type of processing activity (first-stage or second-stage).	♦ Regional development.

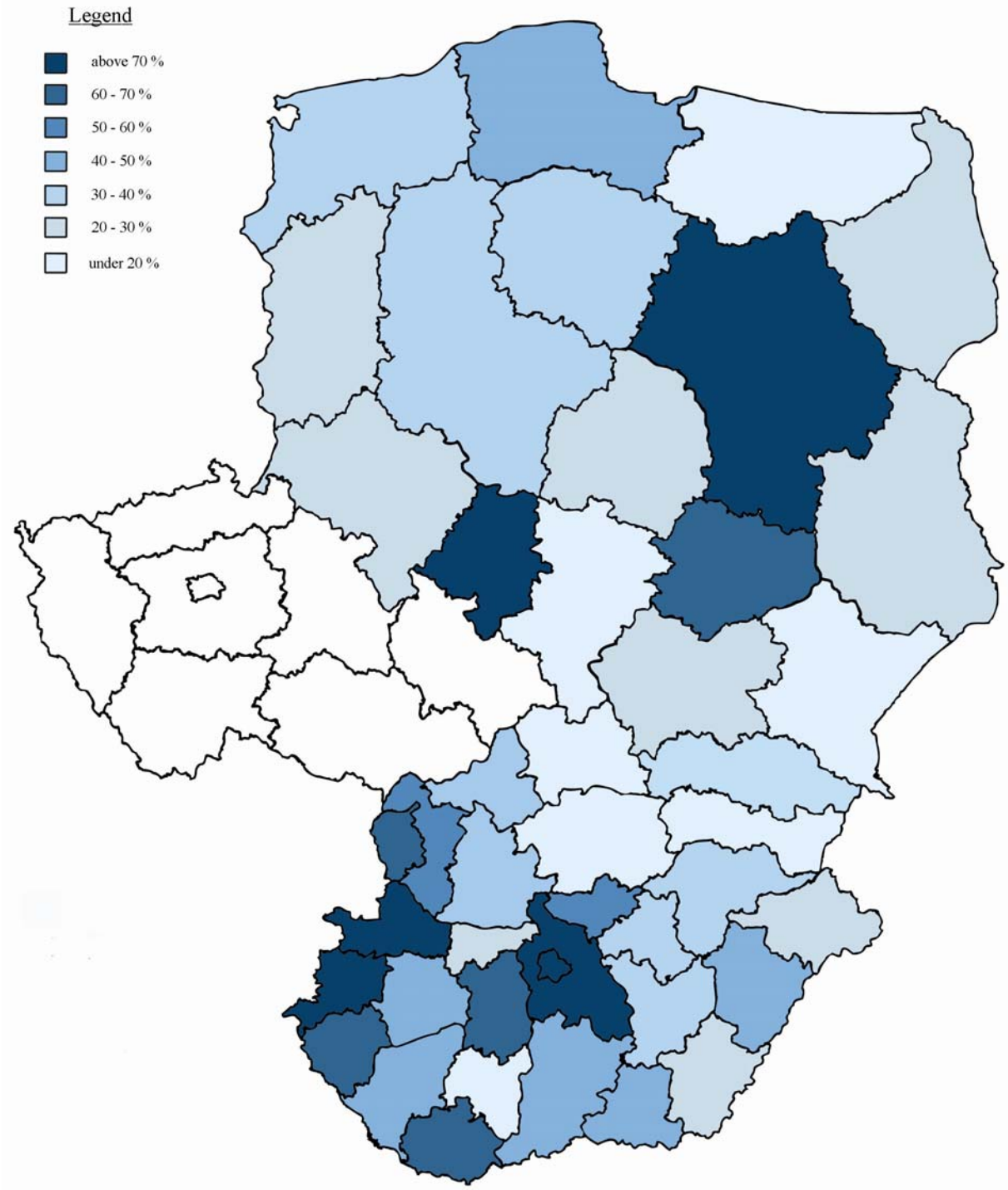
One option to make the investors more dedicated to a provincial approach is the introduction of *regional investment incentives*. Such a policy may include tax breaks, exemptions or employment-related benefits to attract investment projects into the designated underdeveloped rural areas. Despite the carefully designed incentives, regional FDI enhancement policies have not resulted in a breakthrough in the patterns of actual regional choices of investors in the Visegrad countries. Although they may have motivated the investing companies, their affecting power is rather weak compared to the primary determinants.

Regional distribution of food industry FDI in the Visegrad countries

Food industry FDI has been distributed among the regions in the Visegrad countries rather unevenly. Figure 2 illustrates the geographic distribution in Poland, Slovakia and Hungary by the share of food industry company capital in foreign ownership. Foreign investors have acquired high ownership share usually in the capital cities and the surrounding regions, their share is over 60 % in the Bratislava area, over 70 % in Warsaw and the surrounding Mazowieckie voivodship and over 80 % in Budapest and Pest county.

Another common pattern of the geographical distribution, which is particularly observable in Hungary and Slovakia, is the relatively higher foreign ownership in the western regions, while foreign investors attained typically under 40 % in the eastern parts of these countries. In the case of Poland, the central and north-western voivodships have clearly became the most popular regions for foreign investors, while the share of foreign ownership in the eastern and southern voivodships have usually stayed below 30 %.

Figure 1. Proportion of food industry company capital in foreign ownership by regions in the Visegrad countries.



Source: Statistical Institute of Poland, Statistical Office of Slovakia, Research Institute for Information and Agricultural Economics in Hungary. Notes: data on the Czech Republic were not available.

The share of foreign ownership in Figure 2 is a relative indicator demonstrating the penetration intensity of FDI in the particular regions. However, the

size of food industry may be very different in the individual regions, the total sum of food industry company capital varies across the regions just as well as food industry output does. Table 2 presents the percentage of the foreign owned company capital that has been absorbed by the capital city and the surrounding region in each country. While these metropolitan areas contribute 20 to 30 per cent to the national food industry output, they have received roughly half to three-quarters of the food industry FDI.[1] At the same time, certain remote regions, usually in the eastern provinces, have got less FDI than their contribution to the food industry output. These figures underline the fact that food industry FDI did not have a preference to penetrate into these remote rural areas.

Table 2. The capital region's share in foreign owned company capital and food industry output.

	Share of capital region in foreign owned company capital (%)	Share of capital region in food industry output (%)
Poland (Warsaw and Mazowieckie)	63.5	22.7
Czech Republic (Prague and Střední Čechy)	73.6	n.a.
Slovakia (Bratislavský kraj)	46.0	21.7
Hungary (Budapest and Pest county)	56.8	29.6

Sources: own calculations based on data of the Statistical Institute of Poland, Statistical Office of the Czech Republic, Statistical Office of Slovakia, and Research Institute for Information and Agricultural Economics in Hungary.

Foreign investments in the food industry are always driven by business opportunities and eventually by profit regardless of the concrete physical location of the plant. Food industry FDI has most often resulted in rationalisation and modernisation at the acquired companies. In many subsidiaries, spectacular productivity growth rates were accomplished through streamlining activities and dramatically downsizing workforce. This strategy was felt especially hard to approve in the recession-struck rural areas. Geographical rationalisation attempts of foreign investors owning more subsidiaries in the same country often presents threats to agricultural producers in the most badly hit regions that they may lose the large or the only buyers.

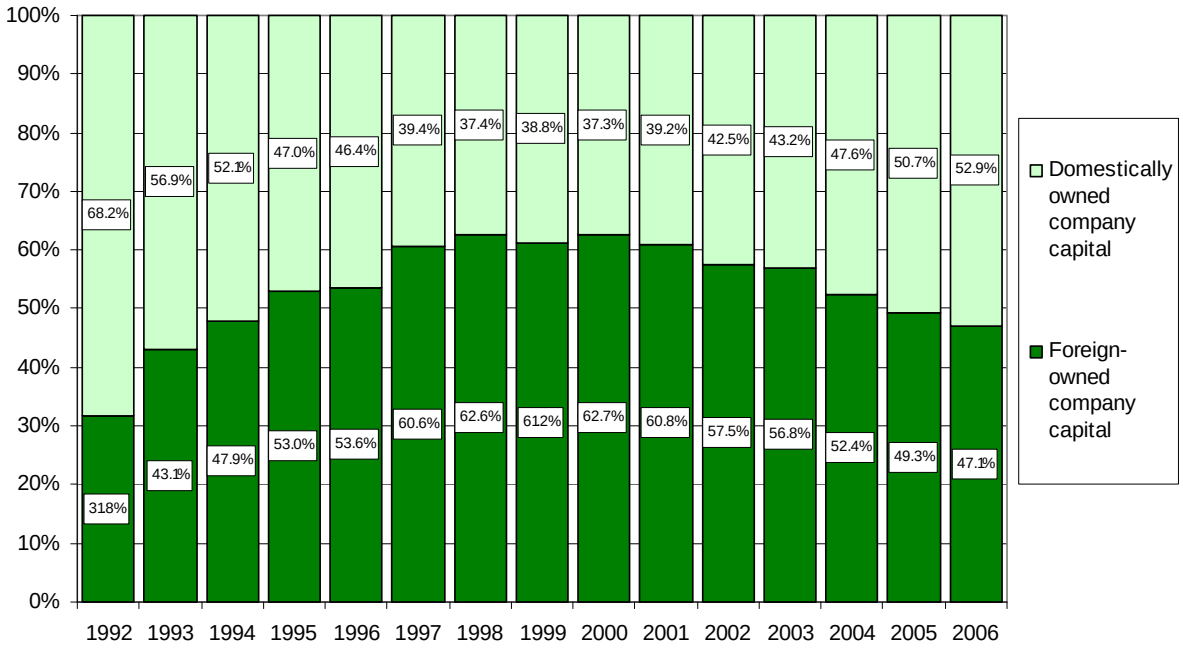
[1] The inequality of geographical allocation is, in fact, not as high as the figures in Table 2 suggest, since several food processing companies, which have facilities in the countryside, have their headquarters in the capital cities, therefore the investments have also been registered there. Although the magnitude of this inaccuracy is hard to identify on the basis of existing data, the tendency that the capital cities have absorbed notably more food industry FDI than their share in food industry output is definitely true.

Geographical reallocation of FDI

The spread of food industry FDI among the CEE countries constitutes a wider aspect of the general geographical distribution of economic benefits. Privatisation policy had a great effect on how fast a country's food processing industry was acquired by foreign capital. In some countries such as Hungary, the influx of FDI started in the early 1990s, while by the middle of the decade inflows had also intensified in Poland, the Baltic States and other countries. The real acceleration took place in the late 1990s, however, with the shift in the direction of privatisation and FDI policy towards a more encouraging environment, as was the case in the Czech and Slovak Republics, for instance.

Foreign ownership in the food industry is still on the increase in most CEE countries, although an interesting international realignment trend has been observed recently. The multinational food processing concerns which have established production subsidiaries in several CEE countries regard the overall market in Central and Eastern Europe as a single entity and pursue their strategy accordingly. In order to improve corporate productivity, these enterprises may shift production capacity from one country to another at very short notice, reducing or entirely ceasing production in one country and increasing it in another. The manufacture of some national brands has thus been shifted across borders to make use of foreign labour and raw materials.

Figure 3. Distribution of aggregate company capital in the Hungarian food industry between domestic and foreign ownership, 1992-2006.



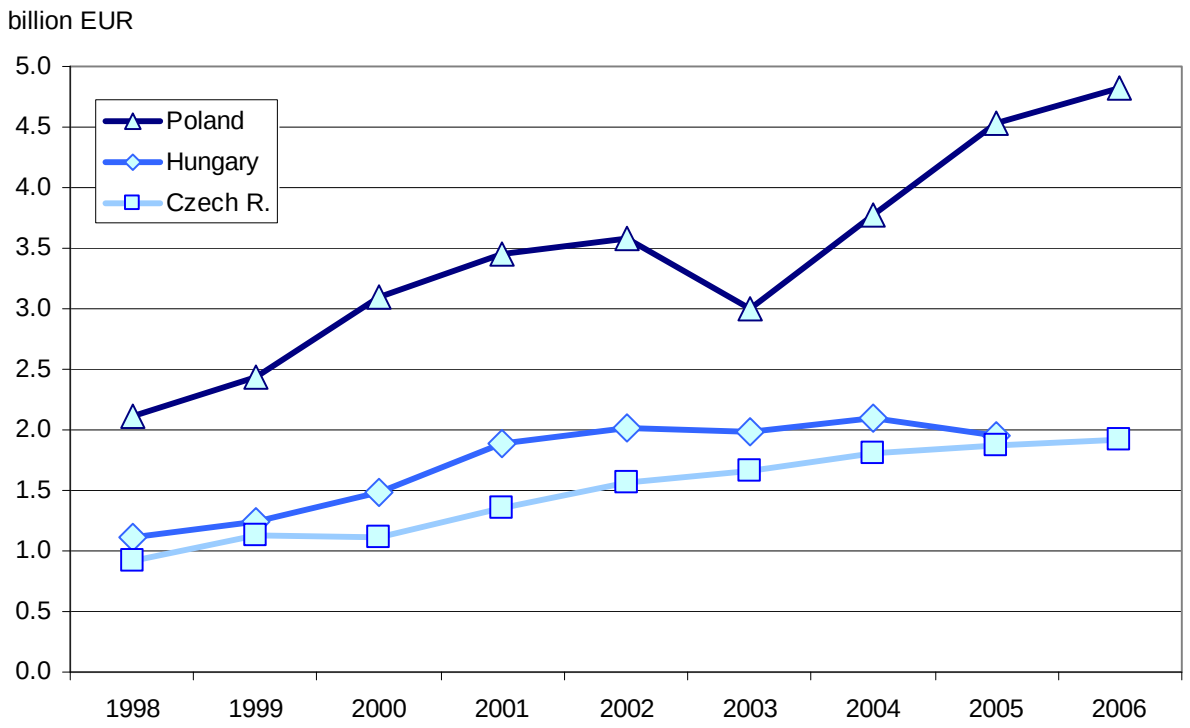
Source: Agricultural Economics Research Institute (AKI).

This international realignment of food industry FDI started in the tobacco, biscuits, confectionery, and soft drinks sectors a few years ago. It strengthened and spread to certain large first-stage processing industries such as the dairy industry subsequent to EU accession in 2004.

Hungary, which was considered a fore-runner among FDI recipients in the 1990s, attracted a massive amount of investments, so that nearly 63 per cent of the aggregate company capital in the food industry was in foreign ownership by 2000. This proportion gradually decreased to 47 per cent by 2006, which reveals a partial withdrawal of FDI from the Hungarian food industry.

Polish food industry has been a definite winner of the realignment of food industry FDI in CEE, the amount of FDI stock boosted from €3 billion prior to the accession in 2003 to nearly €5 billion in 2006. Concurrently, food industry FDI stock did not change or even decreased in Hungary and increased only moderately in the Czech Republic. Cheap raw materials, large domestic food markets and possibilities to exploit economies of scale have recently directed FDI to Poland.

Figure 3. FDI stock in the Polish, Hungarian and Czech food, beverages and tobacco sector, 1998-2006.



Source: National Bank of Poland, Central Bank of Hungary, Czech National Bank.

In addition to domestic market potential, several food multinationals selected Poland as a main regional hub for production and distribution to supply e.g. the neighbouring CEE countries. This export orientation is a new feature in foreign investment trends; earlier food industry FDI focused on the market of the target country. The geographical realignment of FDI has contributed to the changing power of food trade relations among the CEE countries. The Polish agrifood trade balance became positive around the EU accession and exports jumped from €4 to €11.3 billion between 2003 and 2008. The traditionally export oriented Hungarian agrifood sector, however, had a notably slower export growth rate, from €2.8 to €5.8 billion during the same years.

The transfers of foreign owned production capacity within the CEE countries have favoured individual industries such as Polish dairy, Czech and Slovak confectionery and adversely affected others such as the Hungarian dairy industry. The sugar industry has also been subject to reductions in capacity, the rate of decrease varying by country.

Recent FDI trends

Foreign investors have apparently targeted the entire agrifood supply chain over the recent years and investments into agriculture have especially accelerated since the EU accession of the CEE countries.

The food sector is considered to provide a secure return on investments, as the general income level in these countries is constantly rising. For this reason other segments in the food supply chains including the supply of inputs into agriculture, agricultural production and food wholesale and retail sector have also become increasingly attractive since the EU enlargement, a phenomenon widely perceived in the CEE countries.

Northern European agri-input manufacturing and trading companies, for instance, filled the vacuum left behind in the Baltic countries by the collapse of the former input supply network; they built up new vertical relations that now provide the farmers with a wide range of inputs and services, including chemicals, machinery, financial and payment arrangements and purchases of their crops.

Foreign investors also arrived in the food wholesale and retail business concurrently with the food industry, acquiring old retail chains and setting up new ones. They introduced concepts such as hypermarkets and soft and hard discount stores in order to reach out to customers in the large cities and remote rural areas through a new outward appearance, wider assortments of goods and/or more affordable prices.

Agricultural production, the last among the segments of the food supply chain to be targeted, has attracted rapidly increasing FDI quite recently. Dutch, Danish and other Western European farms have acquired various agricultural production operations in activities ranging from horticulture to livestock production in Hungary, Poland, Lithuania, Estonia and other new member states. This new wave of FDI surged forward with EU accession in 2004 and will gain a new impetus with the removal of the moratorium on the purchase of agricultural land (Dadak 2004). At least in Estonia and Romania the acquisition of farmland has been legally permitted fro several years.

As far as the impacts of food industry FDI are concerned, they stretch over the whole food supply chain. Foreign-owned food processing companies have played an important role in reorganising the broken vertical relations in the agrifood chain that occurred following the crisis that hit the entire agrifood sector in the 1990s. They offered agricultural producers secure markets, guidance on standards and quality and even financial assistance in the early years. FDI also contributed to the rapid improvements in productivity achieved in the CEE food industries. As a spill-over effect, foreign-owned subsidiaries have spread new management techniques and marketing attitudes and have applied state-of-the-art processing standards and technology, setting a model of a new business culture to be followed by the domestically owned enterprises. These spill-over effects have been identified in several studies e.g. Jansik 2002; Swinnen 2004; Jensen 2004).

Conclusion

The overall impact of food industry FDI on the agri-food sectors of the CEE host countries has been a positive one especially in countries and industries, where foreign investors have a long term vision to operate in the host country. Some of the decisions, however, made by foreign investors may have generated a bitter aftertaste in certain geographical areas.

Part of the foreign capital has been shifted to neighbouring New Member States of the EU, a prominent example being FDI from Hungary. It is likely that in the long run some of the other CEE countries will also experience ’saturation’ and a similar slight cut in their FDI stock, with part of the production capacity being shifted to their neighbours or further east. The food supply chains of the two most recently acceded countries Romania and Bulgaria have already been popular targets, while Ukraine and Russia provide vast potential to food manufacturers eager to expand.

A decline of FDI stocks may also be reinforced by the demand drop in the current economic recession. Lately, the withdrawal of FDI may simply be ex-

plained by the streamlining or adjustment policies of multinational companies resulting in divestment in the food sector.

Yet, the fact that FDI has flowed into all segments of the food supply chain in the new member states of the EU, implies a convergence and closer integration between the Western and Eastern European food sectors.

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Diverse access to production factors as a reason for unequal actor development in the Romanian dairy sector

Abstract

This paper addresses the various modes of access to production factors, such as capital, specific inputs and know-how, as reasons for the varied development of Romanian dairy supply chains and its respective actors (farmers, processors). The paper draws on results from an ongoing World Bank study. The findings are based on semi-structured telephone and face-to-face interviews conducted in January-February 2009. The interviews indicate that large and prosperous dairy chains have better access to all production factors, which allows the strengthening of their relationships, especially in the upstream stages (farmers), and supports their competitive advantages in the domestic market. Many barriers exist in the domestic market, particularly for small and medium-sized dairy chains, which hampers their potential exploitation of particular stages in the chain. In the same way the findings indicate that virtually only large companies and farms benefit from public support regarding access to capital (EU-funding, governmental programs) and know-how (extension service).

1 Introduction

The increasing demand for high value dairy products and investments by foreign companies in processing and retailing have led to a diffusion of higher quality standards in Romania. This, together with globalization and EU integration, has had considerable overall effects on the domestic agricultural sector. In Romania, a majority of raw milk deliveries still come from smallholders. At the same time, purchaser (retailers, processor) requiring a certain quality of raw materials apply their standards equally to all suppliers regardless of their size. To adjust production technology and meet the higher quality standards, farmers require access to different production factors as well as to input and output ser-

vices on reasonable terms. As Hertel (2007) indicated, “If one element of the set is missing, then investments in all the others will be lost or significantly reduced”. Thus, both private (i.e., dairies) and public (EU, Romanian government) stakeholders have recognized these needs, and different forms of assistance have been provided so far. These forms include support for investments in agricultural holdings and food processing (i.e., to facilitate the adoption of EU standards); setting up producer groups (horizontal integration); and improving vocational training for actors in the agri-business (knowledge transfer).

The aim of this paper is to analyze the vertical coordination between dairy farmers and the downstream businesses and to identify opportunities and challenges, as well as possible development paths for different types of dairy chains and farmers. Since smallholders face major challenges regarding access to production factors and hence integration within modern supply chains, the main part of the paper, as well as our recommendation, focus on issues affecting small dairy chains/farmers. One research question is whether the CAP is able to correct the market failures or rather increase the disparities among chains, processors and farmers.

The remainder of the paper is organized as follows. The next section elaborates on issues concerning vertical coordination, the position of small farmers in modern supply chains, as well as some relevant GAP aspects. The third section presents the survey methodology, and discusses the results. The fourth section concludes and suggests possible extensions.

2 Theoretical Background

2.1 Verticalization

During the transition process in the Central and Eastern Europe Countries (CEEC), relationships along the whole food chain – from farm suppliers to retailers – have broken down. The result has been disruptions of supply and inferior-quality food products. At the same time, changes in consumer demand, as well as the accompanying entry of ‘western’ investors (retailers and processors), have made adjustments in the structure of the food chain necessary to overcome these problems. Hence, vertical coordination can be described as the synchronization of successive stages in the vertical marketing channel from producers to consumers to overcome problems of supply and quality. In particular, quality can be regarded as a main catalyst for vertical coordination (Gorton et al., 2006), which is often accompanied by farm management assistance, extension services, quality controls, farm input assistance programs, trade credit, and even bank loan guarantees (Dries/Swinnen, 2004). The programs generate important im-

provements in the farms' credit situation, as they contribute directly to improved access to finance (e.g. through trade credit), and indirectly as they improve contracting farms' access to loans from banks or external financial institutions (through loan guarantees, enhanced farm profitability, and improved future cash flows).

The agricultural sector in CEEC is still a mixture of small-scale – even household – production and large-scale farming. Across the NMS, three different land and animal distribution patterns stand out: (i) large-scale-farming dominated structures (e.g. the Czech Republic) in which large-scale farms cultivate most agricultural land and/or hold the majority of livestock units; (ii) mixed farming structures (e.g. Poland); and iii) a farming structure dominated by small-scale-farming, which is especially the case of the Romanian dairy sector.

In general, the majority of agricultural products, especially in the dairy sector, still come from small farming communities in the NMS. However, if a purchaser (retailers, processor) decides for a certain quality strategy, the standards are applied equally to all suppliers regardless of their size. For structural reasons, small-scale farmers often face more difficulties fulfilling these requirements on the same level. Usually this results in a relatively slow compliance process (Pieniadz et al., 2004). Consequently, small-scale farmers face the additional risk of losing market access or missing out on access to modern supply chains. Due to these heterogeneous farming structures, the concern exists that development accompanying vertical coordination will drive small farmers - especially in sectors with increasing relevance of scale economies (e.g. dairy) - out of the chains.

2.2 Small Farms

Definition of "Small Farms"

There is no common definition distinguishing small subsistence-oriented farms from larger and commercially oriented farms in transition economies. Indicators used to distinguish subsistence-oriented from commercial farms are, for example, the percentage of sold production and the share of consumption needs covered by self-production (Heidhues/Brüntrup 2003). However, due to heterogeneity in production and consumption structures, it remains difficult to make a general distinction between the different farm types using these indicators. Moreover, most small farms do not utilize bookkeeping and their land is often unregistered, which makes it difficult to provide exact descriptive figures.

Other indicators used are: 1) the cultivated acreage, as in general the more commercialized farms are larger (Lerman, 2004); and 2) the level of inputs, as the subsistence-oriented farms produce labor-intensively using little external in-

puts. For a more detailed discussion of the definition of small and semi-subsistent farms, see Fritzsch et al. (2008).

For the implementation of EU policy measures, the new member countries introduced their own definitions. In Romania, semi-subsistence farms were defined as farms with an economic size between two 2 and 8 ESU (European Size Unit). This comprises approximately 359,000 holdings with an average area of 4.9 ha for the farms between 2 and 4 ESU, and an average area of 9.4 ha for farms between 4 and 8 ESU (NRDP Romania, 2008:23)[1]. Subsistence farms were defined as holdings smaller than 2 ESU. About 45% of the utilized agricultural area in Romania belongs to such subsistence farms (NRDP Romania, 2008).

A classification of Romanian farms as a function of the production orientation and economic size, provided by EUROSTAT, evidences the following situation: i) the large commercial farms in terms of economic size, over 40 ESU, are mainly specialized in cereals, oilseed plants and protein plants; ii) the small subsistence farms (households), less than 2 ESU, are diversified by growing staple crops and keeping grain-eating livestock (pigs, poultry), producing mainly for own consumption and; iii) semi-subsistence farms, (between 2 and 8) ESU, which are a rather heterogeneous group comprising farms with different levels of subsistence, commercialization and non-farm income.

The phenomenon of (semi-)subsistent farming households

During the first phase of transition in Romania, there was an immediate and strong increase of individual farms, while on average, agricultural labor use also increased. Further, parts of the collective land were restituted to members and workers of collective farms. In a second phase, labor use in agriculture started to decline while the shift to individual farms slowed (Swinnen 2005). On the other hand, many households already possessed small plots and some animals for their own production before transition.

One reason for the existence of subsistence farming in transition economies is the buffer function: due to high uncertainties, unemployment and inadequate social security and pension systems, people rely on (semi-) subsistence agriculture (Caski 2000). Fritzsch et al. (2008) show that semi-subsistent farm households do not form a homogenous group; they also identify and characterize different types of semi-subsistence farms based on a farm household survey. Besides semi-subsistent farm households, which have a clear orientation towards agricultural production, there are also many poor households with members in

[1] NRDP: Romanian National Rural Development Program.

retirement age, households that started agricultural production after transition and others that mainly try to earn additional income from non-farming activities.

Main problems for growth and development of smallholder agriculture:

Small farms use simple technologies, have a low degree of mechanization and mainly do not possess any assets. Due to high risks and missing securities, they hardly have access to credits. Further, due to missing exit options, the dualistic farm structure and land fragmentation, land market and land rental market imperfections occur (Ciaian/Swinnen 2006) that impede structural change. Moreover, the high age, traditional orientation and lack of human capital of many smallholders result in limited capabilities to adapt to changing market conditions and to increase the quality standards of production. Furthermore, smallholders are rarely organized in associations, resulting in little market power and political influence.

Generally, we can conclude that smallholders seem to be disadvantaged on topics such as on-farm efficiency, obtaining welfare and grant scheme benefits, securing off-farm employment, training and up-skilling.

2.3 The Role/Impact of the Common Agricultural Policy (CAP)

Prior to EU accession, the SAPARD[2] program focused on the agri-food sector and rural infrastructure, and under this program both the agricultural administration and the beneficiaries (farmers, processors) gained first-hand experiences with measures similar to those provided under the CAP. The majority of these funds were allocated to particular stages of the marketing channel. However, few financial resources have been allocated to foster the relationships between producers and downstream businesses to create sustainable linkages between them. Additionally, some studies indicate that mostly large units (farmers, processors) benefited from these measures (Luca 2007). In general, for most of the medium- and small-sized units, the reduced capacity to co-finance was one of the main limiting factors that slowed down the absorption of the SAPARD funds, especially in the first period of the program's implementation.

Since Romania's EU accession, agricultural policy implementation is based on the CAP structure. In each country, the organizational structure follows the administrative requirements of each of the two pillars. For the NMS, additional transitional measures have been introduced, such as special farm advisory measures, the transitional semi-subsistence measure or a simplified version of direct payments (the Single Area Payment Scheme).

[2] SAPARD: Special Accession Programme for Agriculture and Rural Development.

3 Empirical Results

Activities of foreign investors and an increasing demand for high-value milk products promises dynamic structural change in Romania. On the other hand, since the Romanian government considers the dairy sector as one of its strategic sectors, an over-proportional share of aids is allocated to this sector.

3.1 Characteristic of the Romanian Dairy market

The economic, legal, and political adjustment processes induced by globalization and EU-integration have had a considerable effect on the dairy sector, a market with 21.5 million consumers and more than 1 million dairy producers. The average consumption of dairy products is still far behind the European average, but is constantly growing as consumer purchasing power increases. Additionally, roughly 55% of raw milk (about 3 million tons) are still marked as individual consumption and losses. However, the majority of this quantity is reckoned to be sold on the black market. These figures indicate that there is a considerable demand for milk products, and hence an unexploited potential for high value products.

In the retail sector, German (Metro, Rewe, Real, Kaufland), French (Carrefour, Auchan, Interrex/Intermarche Group), and Belgian (Cora) retailers, all of which require IFS standards, dominate the Romanian market. Meanwhile, multinationals are increasingly switching their focus from Bucharest and other large cities (which have already reached a certain degree of saturation) to other regions, and they are also targeting smaller towns, depending on their profile. Regarding the processing sector, top international dairy producers have already entered the domestic market via Greenfield investments (Danone, Tnuva) or acquisitions (Lactalis, Campina, Nordex Food) or both (Friesland, Hochland). Even some dairies from eastern European countries (e.g. the Hungarian company Sole-Mizo) are also considering investing in the Romanian dairy market.

On the other hand, consolidation and quality upgrading are still challenging issues. For example, in 2007, the MAPDR[3] reported that there were 1.1 million dairy producers; 93% still hold one or two cows. There are many dairies, especially small dairies in mountainous areas, which still procure the milk from these farmers. The majority of those suppliers are older farmers without a successor. Some of them do not (or are not willing to) understand the quality requirements and have problems with adjusting to new organizational rules (contracting, farm economics). Thus, the delivered milk usually does not comply

[3] MAPDR: Romanian Ministry of Agriculture and Rural Development and Forestry.

with the mandatory EU standards. At the same time, in areas such as South Romania (around Bucharest), it can be said that the higher demand for quality products and hence the respective activities of retailers and leading companies, have had a significant influence on consolidating the procurement base. For example, Danone today procures raw milk directly from (relatively large) farmers; it outsourced the procurement of raw milk via collection points prior to Romanian's EU accession. Likewise, other foreign investors prefer to deal with a few larger suppliers to reduce transaction costs (collection/transportation costs, quality risks). Consequently, large dairies (usually FDI) use two types of measures to fortify the efficiency of their supply chain: they select partners' and provide farm assistance to the selected once. Farm assistance includes usually advisory service and provision of financial assistance for inputs and investments. In general, a "good business plan" is the decisive eligibility criteria. However, the best business plans usually provide the largest dairy famers who can afford a professional, private consultancy service.

Thus, we conclude that increasing demand for new quality, the activities of foreign investors, as well as the great need for restructuring are the major challenges faced by the medium and small dairy processors and farmers.

3.2 Methodology

The findings are based on semi-structured interviews conducted across different stakeholders in the Romanian dairy supply chain and representatives of the Romanian agricultural administration in early 2009.

The representatives from the dairy sector were usually processors, producers, and experts in relevant organizations; the goal of the survey was to identify the design of vertical coordination and the use and sources of structured finance instruments to provide access to production factors such as know-how/information, capital, and specific inputs. Additionally, the intention was to identify opportunities and challenges fostering or hampering access to production factors and hence vertical coordination.

The aim of the survey regarding representatives of the agricultural administration was to assess the quality of service provided to Romanian farmers within the CAP, the quality of back-office support to policy-makers and planners, as well as the quality and client orientation of technical and socio-economic advisory and extension services. In order to additionally assess the administrative service quality as perceived by the farmers, semi-structured interviews with farmers in one region (Harghita County, Transylvania) were carried

out (Marquardt et al. 2009). The survey included both recipients and non-recipients of CAP payments.

3.3 Vertical coordination and access to production factors

The conducted surveys indicated that vertical coordination takes very heterogeneous forms in the Romanian dairy market. The most sophisticated instruments are provided by chains governed by an FDI as an initiator of contracting. Domestic companies still lag. Small dairy chains have restricted access to all production factors (capital, inputs, know-how), and hence show quite loose partnerships along the chain or tend towards vertical integration. The results indicate that the majority of domestic dairy chains still have a large demand for any type of support. The main findings are summarized below.

a) The enormous demand for basic quality controls has not yet been met.

The interviews' results reveal that especially small chains (farmers, processors) have restricted access to any kind of veterinary support and quality control, even to those which are required by law. The production holdings should undergo periodic inspections to ensure that the nationally-regulated hygiene requirements for the production of raw milk are fulfilled. For example, a milk holding is given an appropriate health certificate as a result of a positive inspection To our knowledge, only a small share of farmers possess an appropriate certificate, which indicates considerable quality risks at the procurement stage.

Farmers in Romania generally have three alternatives for the control of raw materials: i) The farmer can receive the respective service free from the milk processor; ii) the Veterinary Sanitary County Department (DSV); or iii) independent labs.

Our findings indicate that because quality controls in independent institutions are both efficient and equally beneficial, the establishment of similar independent labs should be encouraged.

b) The more sophisticated the dairy chain, the better its access to know-how.

The provision of a technical advisory service appears to be more effective in well-functioning supply chains. Whereas the top companies usually provide a well-structured extension service and vocational training, the large and medium-sized domestic dairies focus on "informal information exchange" and usually give "…oral advice to farmers who wish to expand their milk holdings and specialize stronger in milk production," (respondents' answers). It also holds

that the larger the farm, the larger the processor's willingness to advise the farmer. Respondents that represent small chains claimed that neither processors nor farms receive any kind of technical advice. It is interesting to note that the majority of small and medium-sized processors did not consider providing and do not wish to provide education to their suppliers. They indicated, however, that "…the system should solve the major problems first," while providing more extension services and vocational training to the farmer. In some cases, they indicated that even education on basic farm economics and business culture is needed.

c) Access to capital is strongly skewed among dairy chains.

In order to exploit the full potential of the value chain, the initiators of contracting require sufficient funds and cash flow to finance the arranged instruments with suppliers. Again, the prosperous dairies have better access to financial sources originating from both i) private and ii) public providers.

We found that farmers and processors linked to foreign investors have the best access to capital. International foreign investors (Danone, Firesland) have access to their own companies' capital. Furthermore, we found that domestic processors who have links with international finance through contracts with international companies (such as Fiesland/Napolact and Covalact/Campina) can more easily access money from the parent company. Our findings suggest that only a part of domestic companies and farms benefit from governmental support. The interviews indicated that small and medium-sized dairies have restricted access to governmental programs because not all domestic companies were or are eligible for different governmental programs.

Some of the initiatives were again hampered by the lack of capital needed to cover the farmer's own participation in the investment. Commercial banks usually refused to provide credits to cover the farmer's own participation. The banks did not accept any farmer's pledge or mortgage as a loan guarantee. The respondents mentioned that banks did not consider livestock, equipment, or buildings owned by farmers as eligible criteria for credit. The only factor increasing the farmers' ability to secure credit was a large area of land. Hence, the majority of farmers are unattractive to banks. In some cases the dairies offered to provide respective pre-financing to the affected farmers. An interesting issue is that some of the farmers did not accept this offer, because they were afraid of "…becoming too dependent on both the processor and the bank."

d) Small chains face additional challenges that are not only due to the heterogeneous support in the past.

The investigated small and very small dairy chains usually provide generic products at the cheapest possible prices. They usually distribute their products via their own outlets (60%), wholesalers and food services, and small shops, usually "…by its own car from gate to gate of the purchasers." Oral contracts dominate. Some of the chains are not registered, as was the case of one investigated farmer-processor involved in black market operations. The main reason for the low competitiveness of these products and their marketing to small shops is the low quality of raw materials. The respondents indicated that many of their suppliers are not certified producers, and provide milk quality that is far below EU standards. Additionally, the quantity produced is low, as there is a lack of both specialized dairy cow breeds and "…prospective to grow for small farmers". Quality control is a challenging issue for these chains. Some of the dairies provide a 'trusted' man at the collecting point, who supports the dairy while controlling for quality and preventing any fraud. However, "…even if at the collecting point the quality of delivery is controlled (fat, protein) it does not restrain some small suppliers from ongoing cheating," e.g. by adding water to the milk. To reduce the hazards of providing low quality products, some small processors provide certain financial assistance to the farmer (e.g. financial support to renovate farmers' residences).

3.4 Institutional development

The responses of the representatives of the Romanian dairy market argued at many stages that the institutional framework should still be improved to support the efficiency of market coordination mechanisms. In this part of the study we consider how the business environment works.

a) General institutional framework

Our findings suggest that there are major impediments regarding the scale of i) the black market and ii) contract enforcement.

i) The black market is not effectively addressed by governmental institutions. The increasing requirements implemented in the course of EU accession have intensified dairy milk operations on the black market. Additionally, certain farmers and small processors avoid paying taxes, and hence avoid registering their business activities. Some respondents mentioned that the numerous middlemen especially contribute to the persistence of the black market. Many of the interviewees indicated that governmental institutions must provide instruments

to reduce the scale of the black market. It is interesting to note that the call for such solutions was not very intensive and was very seldom, even though the share of raw milk sold on the Romanian black market is considerable (30% to 40% of milk production).

ii) Contract enforcement is (still) difficult but essential. Enforcement is crucial to make any of the contracts or supplier-assistance programs sustainable. Enforcement is especially problematic in environments in which public enforcement institutions are essentially absent. Evidence from the interviews suggests that all dairies – regardless of their size – face contract enforcement risks. For example, some farms diverted their pre-paid inputs for other uses. In other cases, despite being provided assistance instruments on a contractual basis, the suppliers sold all or part of their produce to other companies or traders. Trust is also often lacking within the large chains. Even within the small chains, contract enforcement is still a challenge. The small dairies usually use short-term (monthly) contracts with small (one or two cows) and medium (11 or 20 cows) farmers. The biggest farm is seldom larger than 40 cows. Contracts are mainly trust-based, even if they are written. The respondents indicated that they do not pay much attention to the formal (written) contract. The low contract enforcement is also one reason that the small chains see vertical integration via the establishment of farms as one solution to overcoming delivery problems within one firm (internalization of market transactions). Thus, the government should be encouraged to create the proper institutional conditions for successful contracting. Alternatively, the initiators of contracting must find an innovative way to design self-enforcing contracts. This, however, requires extensive knowledge of the local partner.

b) Quality of agricultural service delivery

Additionally, the surveys regarding the quality of the delivery service provided the following main results:

i) CAP measures not targeted to small farmers require conditions that are difficult to fulfill for smallholders. Two specific challenges are advising and delivering information to small farms, as these issues are completely dependent on personal advice, which demands a substantial amount of administrative resources. Small farmers do not have proper records, their land is often unregistered and they are not accustomed to formal paperwork; thus, advising them on applications ties up much of the agencies' capacities at both the county and local level. For instance, field checks have to be repeated for revising failures in land

declaration, and the fieldworkers, not the farmers themselves, fill out these application forms.

ii) There are still many structural obstacles regarding the functioning of the public agencies that provide service to farmers. For example, agencies at the county level are sometimes found in multiple locations. This makes the contact that farmers do have with the administration more cumbersome and increases farmers' transaction costs, e.g. for requesting information. In addition, this may also lead to incoherent information provided by the agencies, as the distance hampers direct and informal communication. Additionally, agencies are challenged by human resource management, which results in less motivated and less qualified staff. The main obstacle of human resource management seems to be the wage system. First, due to low wages, qualified employees leave for the private sector after receiving training and insight into public administration. Low salaries also hamper the recruitment of qualified employees. Second, different salary levels, for instance between the paying agencies on the one hand and the DARD[4] and the COAC[5] on the other hand, can lead to conflicts. Furthermore, single agencies pay diverse bonuses as top–ups, which makes the system even more opaque. Further problems, such as the changing legal administrative framework (ongoing adjustment to changing EU legislation), conflicts of interest and public internal financial control still exist.

iii) A lack of producers' associations and their feedback lead to low enforceability and little participation. Farmers do not have clear means of claiming their interests and there is a lack of farmers' associations that represent small farmers. Due to their experience with cooperatives during the socialist era, in general most farmers are skeptical of associations or producers groups. Farmer and expert interviews revealed once again that lacking trust is still a problem for increased cooperation among farmers. Nevertheless, there are some success stories, such as the Farmers' Association from Udvarhely, Harghita County, which began assisting farmers with applications. Moreover, there are also some newly-founded farmers' associations like the LAPAR[6] and FNBAR[7], which represent farmers' interests at the national level, but thus far they represent mainly large farms. There are still no associations that represent small farmers at the national level. All in all, associations and NGOs play a minor role in the farmers' business. Both activities and the farmers' courage to improve implementing CAP measures are missing. Moreover, farmers rarely

[4] DARD: Directorate for Agriculture and Rural Development.
[5] COAC: County Office for Agricultural Consultancy.
[6] LAPAR stands for "Romania Agricultural Procedures Associations League".
[7] FNBAR stands for "Romania Agricultural Procedures National Federation".

provide individual feedback to agencies and do not know about the client charter. In addition, agencies do not systematically collect feedback from farmers about the delivery of service.

iv) **Producers' associations seem to be less attractive partners for the processors.** The evidence from our survey suggests that the initiators of contracting in dairy chains prefer to invest in partnerships with trade companies, rather than farmers' associations. Some respondents indicated that "…due to the lack of solidarity among farmers' associations it is difficult to build a strong lobby or any kind of umbrella organization". Thus, the Romanian government should rethink how to more effectively support the establishment and functioning of producer organizations to make them attractive to partners in dairy supply chains and to strengthen their 'articulation power'.

c) Conclusions and recommendations

The results indicate that the dairy market, likewise the whole agri-food business in Romania, is characterized by a dualistic production and processing structure; In dynamically changing market conditions, the relatively small chains (farmers, processors) are usually disadvantaged regarding access to input and output markets. Following Hertel (2007), targeted policy interventions that correct the underlying market failures might be win-win solutions for efficiency and equity. The development of (dairy) farmers requires sufficient access to different production factors, i.e., land, labor, technical skills and information, purchased inputs, and fixed and working capital. We found that growth for some large dairy producers, especially in relatively prosperous regions (Bucharest area) is increasingly restricted by access to additional land (only) (as in the majority of producers in Western countries). On the contrary, the majority of farmers and dairy chains are restricted by almost all other production factors. The majority are small or medium-sized units, all of them demanding a complete set of these factors of production and input and output services on reasonable terms.

This situation raises three key questions: i) how can agricultural policy measures adjust to the unique circumstances of the New Member States and what are the unique service demands of the different groups of farms; ii) what strategies are needed to deal with the large number of small entities (Fritzsch et al. 2008) to help with adjustment and modernization or exit from agriculture; iii) how to increase competitiveness of the few medium-sized farms?

How can the CAP effectively engage in the problem?

Our first conclusion is that two years after accession, the CAP has successfully supported many investments to upgrade the dairy chain in Romania. However, this support seems only to facilitate the development of relatively large and financially strong farms and firms, which usually have sufficient financial means to access modern agricultural supply chains. At the same time, the traditional financial instruments do not help establish mechanisms to connect small producers and producer organizations with food processors, marketers, and traders. Thus, the gap between the prospering chains and small or medium-sized dairy chains seems to have increased over the last two years. This result questions the effectiveness of the traditional CAP instruments, which seem to be unsuitable for the dualistically-structured NMS.

Since EU accession, the NMS have additionally benefited from transitional measures such as aids for semi-subsistence farmers and support for producers' groups. However, the effectiveness of these measures in the Romanian case seems to be low or should be questioned. For example, our results indicate that the access of potential beneficiaries to semi-subsistence aids is relatively restricted, indicating this measure's low impact. Additionally, we argue that these measures probably encourage some nonviable small farms to stay in agriculture (in the dairy market). Since the majority of these farmers do not comply with mandatory EU standards, their existence contributes to the persistence of the black market, which hinders the allocation of resources (i.e., land) to more effective units, and hence the competitiveness of the Romanian dairy supply chain.

The case of active entrepreneur (small commercial farms)

The need for governments to support commercially-oriented small farms (chains) to exploit growth opportunities is less obvious. In functioning markets, one expects that the government should stand back and let the 'invisible hand of the market' coordinate the behavior of economic agents. In theory, this process should ensure the optimal allocation of production factors to the most efficient commodities, regions, organizational forms and farm sizes. Hazell et al. (2007) argue that in this case, "…policy interventions would focus on providing an enabling economic environment for market-led development, typically by providing stable and undistorted economic incentives and essential public goods and services". However, our results indicate that both Romanian institutions and markets show many failures, which can lead to discriminatory and inefficient outcomes.

Generally, the importance of improving the delivery of service in Romania to reduce market distortions is obvious. However, even with effective institutions, transaction costs cannot be reduced to zero. Looking at the various mar-

keting channels in the Romanian dairy chain, a self-enforcing dualism exists: The large supply chains (and commercially-oriented farmers) that use direct marketing channels usually face lower transaction costs (higher quality, lower transportation costs per unit and quality risks). In contrast, small farmers whose production does not considerably exceed the subsistence level incur relatively high (per unit) transaction costs when selling their produce on local markets or via collecting points.

In our opinion, the government should help maintain the dualistic structure of the dairy sector in Romania, due to the various advantages of such a structure (competition, landscape, job opportunities, etc.). These are our suggestions:

…provide financial aid to support niche marketing. Through negotiations with the EU, Romania obtained brand recognition and protection for the name of origin (PDO) and geographical designation (PGI) of several types of products (i.e., some yoghurt sorts and semi-hard cheeses). However, there is need for a better understanding of these protected products, as well as a general regard for the 'traditional/organic agriculture' meeting of European standards. Some respondents indicated that lacking know-how and experience, as well as the complexity of applying for potential aid, are the major challenges to the development of marketable regional food production. For the producers it is important to change the thinking from a production orientation to market orientation to successfully target the market niches. Additionally, the provision of additional capital is needed to first invest in the local brand and finally to collectively promote the local products.

… however, **target active farmers only.** Effective policy measures (extension, financial support) should target active farmers or business starters with a high level of entrepreneurial skills and good business concepts. "Investing in education of farmers which are averse regarding any change is a waste of money."

… do not mix agricultural and social policies. Some small chains still procure raw milk from very small farmers (with only one or two cows). However, the quality of the milk is low, and the farmers are usually advanced in age and are neither flexible nor willing to adjust to changing market conditions (quality requirements, farm economics, contracting). The majority of these farmers do not possess milk quotas. Thus, for them it will be difficult to even enter the legal market. Due to these additional market entry barriers, it cannot be expected that those small farmers will ever be vertically integrated into modern supply chains. The case of the small farmers should not be the responsibility of the Romanian Ministry of Agriculture since they represent a social problem ("If the Ministry allocates money for them, the money is lost forever"). A solution for the dairy

farms would be to help them diversify their production portfolios or to include them in the European retirement programs.

In this context, the EC should consider an expanded range of eligible measures under Pillar II to provide advisory services geared exclusively towards the needs of smallholders who do not qualify for farm payments and who may want to explore off-farm employment, or alternative enterprise options while maintaining a semi-subsistence operation, or to exit agriculture altogether". After the health check of the CAP there are some additional opportunities to engage in, and received financial support is available to diversify the incomes of the rural population.

However, at this stage one might question the role/effectiveness of the 2nd pillar measures, since some of them are linked to agricultural production. Since a clear differentiation between the agricultural and social (regional) policy is not given, it is likely that this structure contributes to the persistence (scale) of the currently observed paradigms such as the freezing of agricultural structures and the black market. Perhaps for the next CAP reforms (after 2013), joining the cohesion policy and the 2nd pillar measures should be considered (especially the measures regarding water, landscape management, etc.) to guarantee a more clear direction and clearer goals of the particular EU policies. At the same time, the scale of the paradigms such as the freezing of agricultural structures and the black market could be reduced and the effectiveness of the EU policy measures increased.

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Milk Quota and the Romanian Farmers: A Regional Approach[1]

Introduction

The Common Agricultural Policy experienced continuous adjustment in the last 50 years, as a reaction to the socio-economic evolution of the EU Member States, to the gradual enlargement process and under the pressure of globalization. The Common Market Organization and the policy instruments related to the milk and dairy sector were subject to a series of changes in the last 40 years, following the general CAP trend; yet, compared to the other sectors where the reforms were radical, in this case the changes had slower rates and did not target radical reforms.

At the end of the year 2007, the European Commission submitted to the European Parliament and Council the document named CAP Health Check, meant to prepare the continuation of reforms, in which the sectors that needed reforms were mentioned. An important issue in this document is the proposal to abolish the milk quota beginning with the year 2015. This document proposed the elimination of this instrument only after the sector has been prepared for such a radical measure. In this respect, it was proposed that one of the measures would be the gradual increase of quotas until 2015.

The main worries refer to the possibility of milk production concentration in the areas where this activity implies lower costs and its disappearance in certain zones (e.g. in the mountain areas). In order to avoid such situations it is necessary to create alternative policy instruments for maintaining this activity in the mountain areas.

Although Romania is already an EU Member State, it is confronted with significant structural difficulties with regard to farm structure in general (excessive fragmentation of agricultural holdings) and to processing. The farmers, processors and traders have to comply with the EU milk quality standards and to the rigors imposed by the *acquis communautaire* in this field. Although the situation of the milk production and processing sector in Romania is at present largely different from that in the EU-15 and even from certain EU New Member States, and there is an obvious need to change this situation, the policy makers should be aware of the fact that no wonders can be done in a short time in order

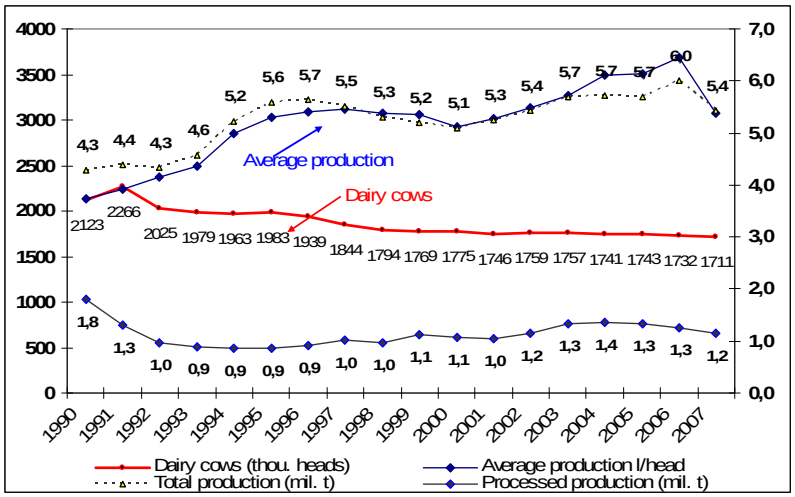
[1] This paper is part of the research co-operation with the European Institute of Romania elaborated in 2008

to bridge up the gap between Romania and the other Member States, the more as the sector opposed the structural changes for a long time. The most feasible actions of the decision-makers should target equilibrium between complying with the norms imposed by the *acquis communautaire* and Romania's agricultural interests, based upon the national realities and possibilities and the active involvement in the European decision-makers debates on the sector reforms. This represents a true challenge for Romania's future agricultural policy.

1. Romanian Dairy Sector Dynamics: Before and After EU Accession

In the period of transition to the market economy, deep changes occurred in the agro-food sector and as well in the dairy sector implicitly. As compared to other sectors, 82% of the cow milk and the bovine herds had been concentrated in the private sector (until 1990), agricultural production cooperatives and small producers. The number of the dairy cow herds decreased sharply after 1989 and maintained this trend until 1999, remaining almost stable in the last decade. Despite the decreased trend of bovine herds the productivity largely increased at the beginning of 90's, and the trend was positive, up to 2006 when the highest productivity was reached (see Graph 1).

Graph 1. Dynamics of herds, milk production and yields in the period 1990-2007



Source: Based on data from the NIS Yearbook collection and data provided by Ministry of Agriculture and Rural Development (MARD) for 2007.

Although a significant productivity increase took place in the sector, this is quite modest compared to the EU-15 and even with that from the EU New

Member States[2]. In the first years of transition (1993 - 1998) the small farmers adjusted their herds according to the own needs and economic possibilities, and as a result the decline continued but at slower rates, then a stabilization period and a slow increased followed. This evolution reflects the sector' sensitivity to the support policies addressed to farmers throughout this period, which unfortunately did not result in the expected increased of production delivered to the processing industry.

In the period 1990-2000, the processed milk production constantly declined in all types of products[3]. More than 50 milk processing factories were privatized until 2002 and at the same time many new processing units were established in the reference period. According to the data of the National Institute for Statistics, there were over 870 dairy factories in the year 2002, most of them being small-sized as regards the number of employees (780 units with less than 50 employees), replicating the primary production structure.

In 2007 the Common Market Organization and the quota system were implemented, as well as the complementary national direct payments and a premium for milk delivered to dairies (the quality of which is conform to the EU standards). The effects of the new support policy in the sector one year after its implementation are practically difficult to measure and are certainly not the expected ones.

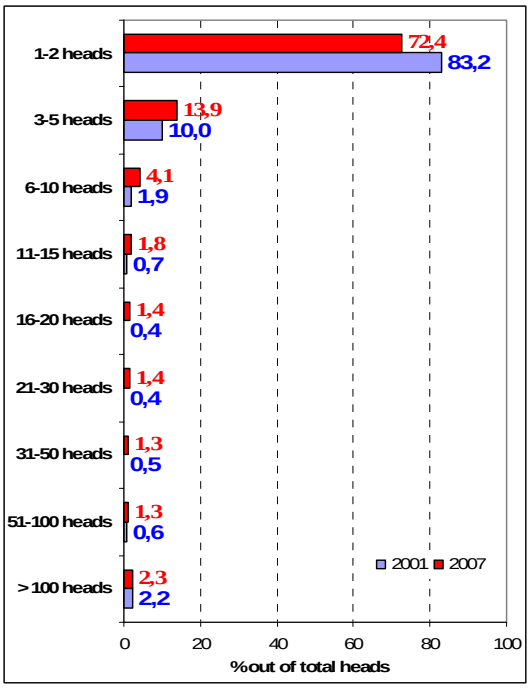
After a long transition period to the market economy the EU Member status did not changed visible the Romanian dairy sector. Farm restructuring is far from being completed. In 2007 milk production was obtained on 1.05 million holdings, with an average size of 1.63 cow heads and 72 % of the total dairy cow herds were raised on very low-sized agricultural holdings (1-2 heads). The farms with more than 100 heads that we consider commercial or potential commercial farms account for only 2.23% of total farms, which own only 0.02% of the national dairy cow herds.

In the last 7 years the restructuring process was very slow, with very low differences compared to the year 2001 (see Graph 2), mainly for the medium-sized farms (20 - 100 heads) that would feature development potential.

[2] according to Eurostat data, in the year 2006 the average yields obtained in Romania reached only 55% of the average yields in EU-15 and 75% of the EU-10 average

[3] mainly due to the industrial sector restructuring, which was oversized for the milk production structure in Romania (after 1989) and as a reaction to the economic environment evolution and price liberalization (after 1997).

Graph 2. Structure of cow herds by types of farms



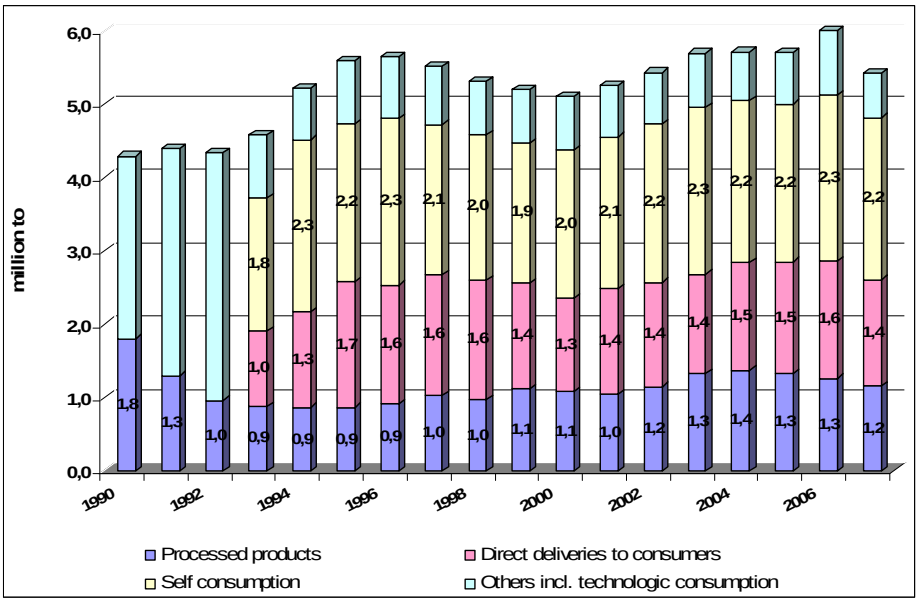
Source: Based on data provided by MARD.

The fragmented farm size, the insufficient development of infrastructure corroborated with the inconsistency of agricultural policies as well as the dynamics of the economic environment mainly in the rural areas are also reflected in the structure of milk production destination (Graph 3).

The graph can lead to the conclusion that from 1993 up to the present moment no significant changes have been produced with regard to the share of self-consumption; self-consumption remained quite high throughout the period, averaging 40% of total production, with oscillations ranging from 37% to 45%. The milk that went to the market (deliveries to dairies and direct sales) accounted for 45% on the average, to get near 50% of total milk production in recent years, which provides a positive signal in relation to processing sector revigoration and market stabilization. After 1994, out of the total milk production obtained each year, 20% was processed on the average, and 25 - 30% was directly sold on the market (mainly under the form of liquid milk, cheese or cream).

Both milk quality and quantity are affected by the high farm fragmentation level. The logistics of the milk collection process is still deficient and infrastructure in the rural areas is still insufficiently developed. Out of economic reasons, processors rather prefer to collect milk from a single source on an area of 500 km, than from 100 sources on a 10 km area.

Graph 3. Milk production utilization in the period 1990-2007



Source: Estimation based on data from the collection of NIS publications regarding the consumption availability 1990-2000, producers balances and for 2007 data provided by MARD.

It can be concluded that at present, out of total 3.3 billion liters of milk produced in Romania, 2 billion liters are sold on the peasant markets, on market stalls, or go from farmers directly to consumers, under the subscription system, while the remaining 1.3 billion liters go to processing.

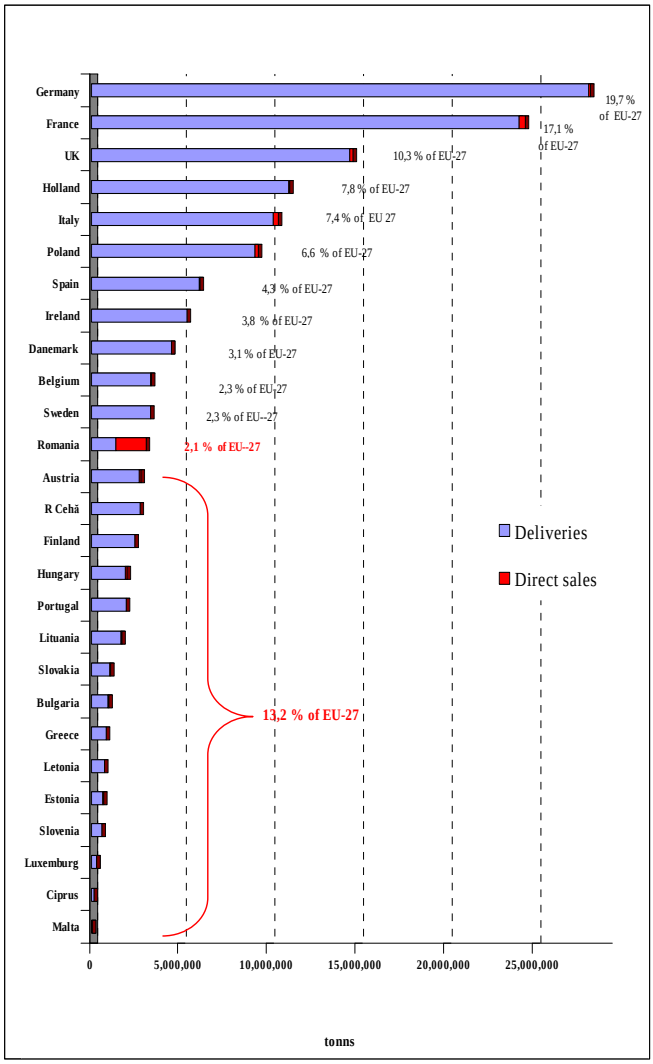
The processing industry dynamics at the moment of accession was getting closer stressed a structural change tendency, so that in late June 2006, according to the NIS data, there were 361 processing units, out of which 117 with high capacity (over 2000 tons of milk/year), 165 with medium capacity (500-2000 tons of milk/year) and 79 of low capacity (under 500 tons of milk/year).The largest part of these units tried fast to conform to the EU standards so that by the year 2008, according to the data of the National Sanitary-Veterinary and Food Safety Agency (ANSVSA), out of the total 264 processing units, 35 units are authorized for Intra-Community trade, 44 correspond to the EU standards and 185 units are still in the transition period (until 31.12.2009, when they will have either to conform to the EU standards or to stop their activity).

2. The milk quotas allocated to Romania and in EU-27 a comparative analysis

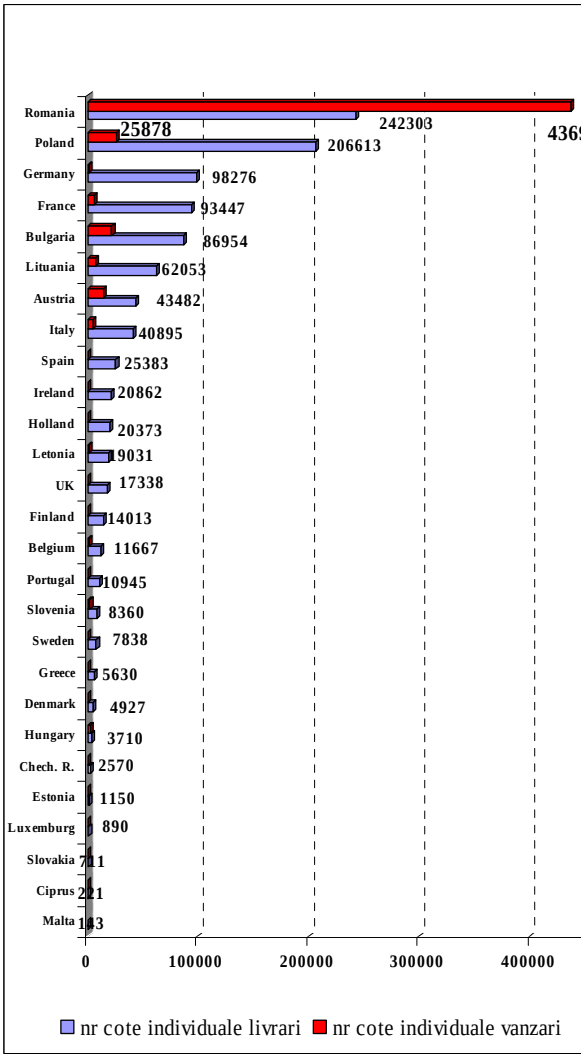
The milk quota allocated to Romania (3.057 million tons) was considered by the specialists as being much under Romania's potential (50% of total production in 2005, used as reference year on which quota calculation was based);

yet this was a consequence of the situation of the sector, with small-sized farms, a processing sector in an early development stage, with high self-consumption and a statistical data system with quite inconsistent data on the milk production destination. The ratio of the two components of the quota (44% deliveries to dairies and 56% direct sales obtained as a result of negotiations) is quite strange compared to the quota structure in EU, the share of direct sales being the largest in EU-27 yet explicable due to the Romanian milk production specificity.

Graph 4. The milk quota allocated in EU-27 in 2007/2008



Graph 5. Number of individual delivery and direct sales quotas



Source: Based on data provided in the Annex of the report "Milk quota : levies for milk quota exceeds accounted 340 millions EUR", 13 Oct 2008.

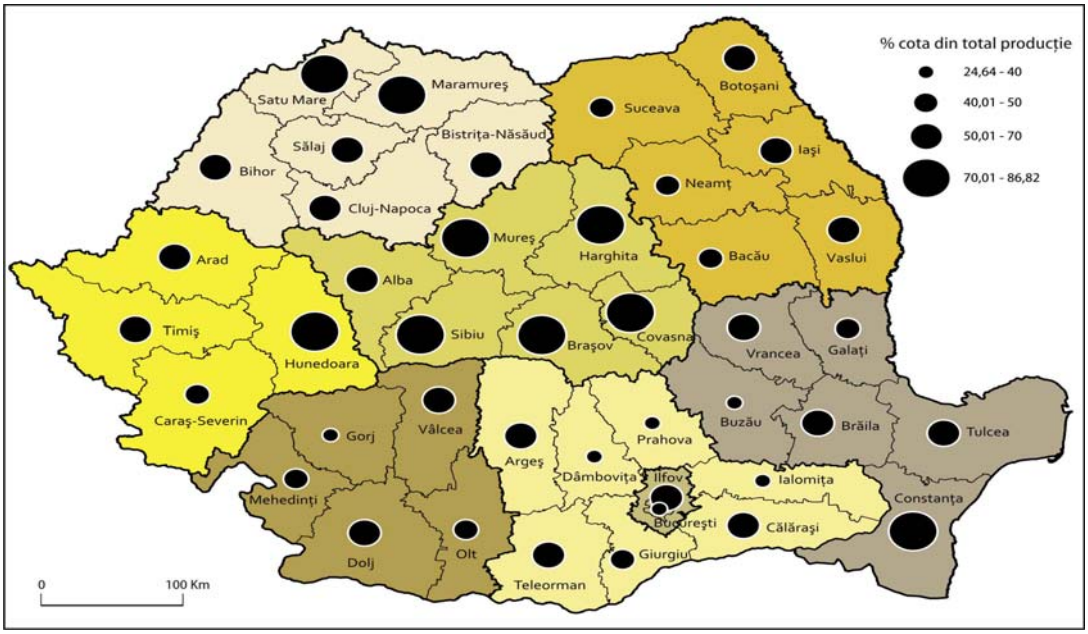
Romania holds 2.1 % of total quota allocated in EU -27 (Graph 4) being on the twelfth place as regards quota size in EU–27; Germany, France, United Kingdom, Netherlands and Italy together account for over 62% of total quota in EU-27. As it can be seen in Graph 5, the largest number of individual quotas (farmers) for milk delivery to dairies and direct sales are found in Romania (23.1% of total milk delivery quotas from EU-27 and over 82% of total direct sales quotas from EU-27).

It is worth mentioning the huge logistic and administrative effort needed from Romania's part for the processing and monitoring of 43% of the total number of individual delivery and direct sales quotas from EU –27, which in reality represents 2.1% of the overall quota allocated to EU -27.

3. Romanian milk quota – a regional analysis

The milk quota allocated to Romania represents only a part of the total cow milk production obtained, and presents significant differences in the territory (Figure 1). Out of total milk production obtained in the year 2007, the allocated quota represents 56.1%. The territorial distribution is significantly heterogeneous. High quota shares (over 74% of total production fulfilled) are found in the counties Constanța, Covasna, Harghita and Mureș. The counties Gorj, Dâmbovița, Prahova, Buzău, Ialomița and Bucharest lie at the opposite pole; in these counties the shares of milk quota in total production are lower than 40%.

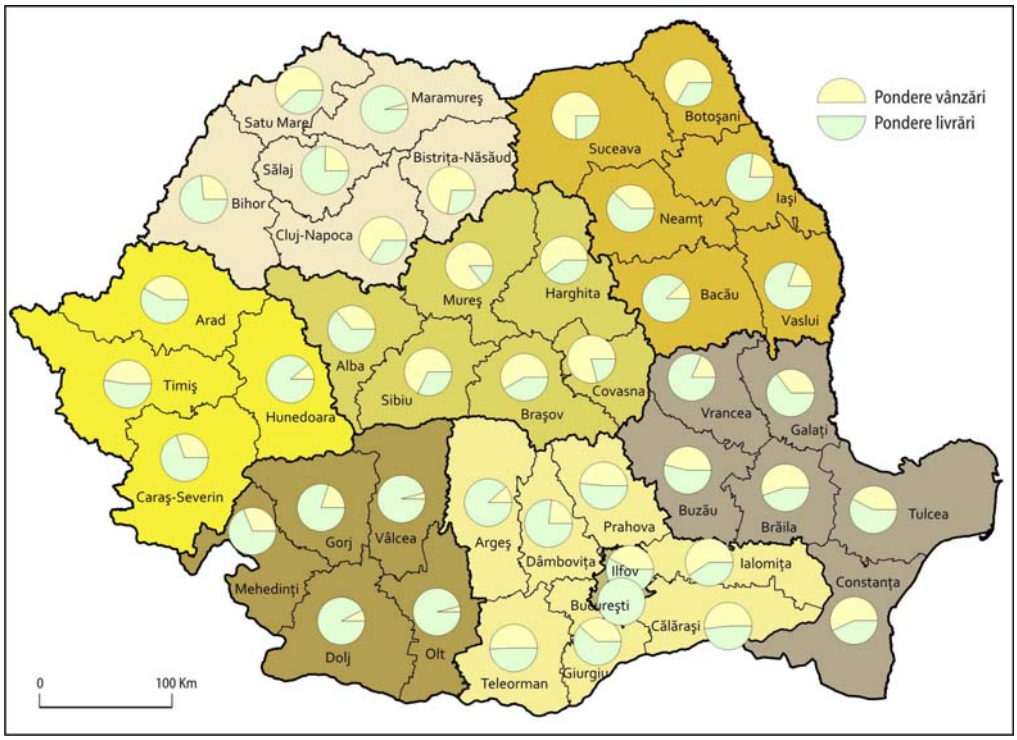
Figure 1. Territorial distribution of milk quota in total production



Source: Based upon the processing of DACL data (2008).

The structure of direct sales and delivery quota practically reflects the specificity of dairy cows rising in Romania. In the territory there is an unequal distribution with regard to the share of deliveries and direct sales in total allocated quota (Figure 2). Seven counties located in the northern and central part of Romania have a significant share of deliveries in total allocated quota. These are: Covasna, Sibiu, Mureş, Cluj, Bistrița-Năsăud, Suceava and Botoşani. In the south-western part of Romania there are counties with low and very low shares (under 12%) of deliveries in total quota. Among these, the following can be mentioned: Hunedoara, Vâlcea, Argeş, Olt, Dolj and Mehedinți.

Figure 2. Territorial distribution of milk quota, by structure



Source: Based upon the processing of DACL data (2008).

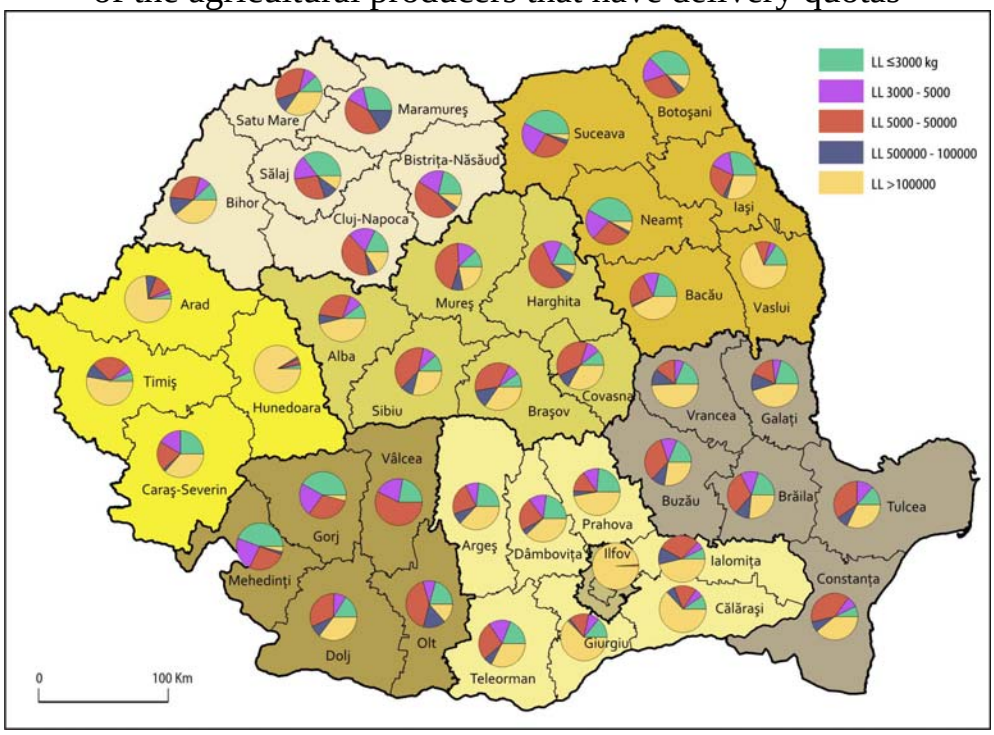
The regional analysis of milk quotas allocated for deliveries to dairies and for direct sales was carried out by five size classes: i) under 3000 kg; ii) 3000-5000 kg; iii) 5000 -50 000 kg; iv) 50 000 -100 000 kg; v) over 100 000 kg. Within these categories, the number of producers under each size class of allocated quota was also taken into consideration. A territorial analysis by classes of the number of producers that are allocated delivery quota reveals the following situation (Figure 3):

- class under 3000 kg: the largest number of producers that have been allocated small quantities of milk are found in the counties Tulcea and Dâmboviţa

and the smallest number of producers are found in Sălaj, Maramureş, Bacău, Hunedoara, Gorj, Vâlcea, Argeş and Ialomița;

- class 3000 – 5000 kg: the counties Vâlcea, Giurgiu, Dâmbovița, Bacău and Vaslui have the largest number of producers that fall into this class, while Tulcea, Prahova, Ialomița, Ilfov and Hunedoara have the smallest number of producers in this class;
- class 5000 – 50000 kg: in the counties Gorj and Vâlcea there is no milk producer that falls into this category. The county Hunedoara has the largest number of producers that have been allocated delivery quotas ranging from 5000 to 50000 liters;
- 50000-100000 kg: the largest number of producers that have been allocated delivery quotas from this category are found in the counties Ilfov and Hunedoara. On the other hand, the smallest number of producers are found in the northern part of the country in 11 counties as well as in the southern part of Romania (Caraş-Severin, Gorj, Vâlcea, Dâmbovița and Prahova);
- over 100000 kg: the largest number of producers with delivery quotas of over 100000 kg cow milk are found in the county Hunedoara. In the counties Gorj and Vâlcea there is no producer that falls into this category.
-

Figure 3. Territorial distribution, by classes,
of the agricultural producers that have delivery quotas



Source: Based upon the processing of DACL data (2008).

The territorial analysis, by classes, of the total milk quantity allocated to delivery quota, has the following particularities:

- class under 3000 kg: the largest amount of quota allocated under this class is found in the counties Tulcea and Dâmbovița, while the lowest in 8 counties located in the south-western and western part of Romania;
- class 3000 – 5000 kg: the counties Hunedoara, Tulcea, Prahova, Ilfov and Teleorman have the lowest milk delivery in this group. The counties Bacău, Vaslui, Vâlcea, Dâmbovița and Giurgiu lie at the opposite pole;
- class 5000 – 50000 kg: in this group the counties Hunedoara and Ilfov have the largest delivery quotas. Five counties from the south Romania and eleven in the north have extremely low delivery quotas that fall into this size class;
- 50000-100000 kg: the largest delivery quotas in this group are found in the county Hunedoara and the lowest delivery quotas are found in the counties Gorj and Vâlcea;
- over 100000 kg: in the counties Mehedinți and Vâlcea there are no delivery quotas that fall into this category, while seven counties are on a top position in this respect.

From the analysis of data supplied by DACL on delivery quota allocation to buyers/processors and producers related to each of them (Table 1), it can be noticed that out of total delivery quota allocated to Romania, 53% is distributed to 30 “active buyers” (7% of the total number of buyers/processors) among which the great players on the market are found, namely SC Friesland Romania SA, SC Danone SRL, SC Hochland Romania SRL, SC Napolact SA, SC Covalact SA, SC Albalact SA, SC Industrializarea laptelui Mureş SA, SC lactate Harghita SA, SC Dorna lactate SA (Lactalis), SC Prodlacta SA, etc. These 30 buyers/processors that have been allocated over 50% of the milk quota have to collect the milk from more than 115 thousand producers (43% of total producers with delivery quota). 155 buyers/processors (36% of total) should collect milk from about the same number of producers while 57% of buyers/processors that have been allocated 11.4% of the delivery quota have to collect milk from over 37 thousand producers (13.7% of total).

Table 1. Categories of buyers/processors classified by the size of allocated delivery quota and the number of producers from whom they have to collect the milk

No of buyers/processors by categories according to % of delivery quota allocated to a buyer/processor in total delivery quota	Allocated delivery quota Kg	% of total allocated delivery quota	No of producers /buyer-processor	% of total producers with delivery quota
The first 30 7.5 % ≥ 0.6%	699041360	53.56	115028	43.1
The next 155 0.5% ≥0.11%	456956208	35.01	117088	43.2
The last 248 0.10% ≤ 0	149096774	11.43	37777	13.7

Source: Based upon the processing of DACL data (2008).

Analyzing the delivery quota distribution by the number of producers with individual quotas allocated to buyers, 14 of these (among which SC Friesland, SC Napolact SA, SC Dorna lactate (Lactalis), SC Hochland Romania SRL, SC Covalact SA, SC lactate Harghita SA etc) have to collect milk from 13000-3000 producers, most of them with an average number of 3-4 cows / agricultural holding. 10 buyers have to collect milk from only one producer, most of these having medium-sized farms ranging from 35-55 to 250 heads. Other 12 buyers (among which SC Tnuva Dairies, SC Danone) collect milk from 1-2 producers with average farms of 250-500 heads.

Since mid-1990s, many dairy factories have had as main objective the modernization of existing production capacities and their utilization at a level as closest possible to the designed capacity. In this respect, new equipment and transport means were bought, the production premises were modernized, so that these companies can comply with the quality requirements imposed by the international standards. The situation improved from the quality point of view through the purchase of new equipment (for the analysis of the physical-chemical properties of raw milk and dairy products; cleaning and disinfection systems of the technological flows, of the technological equipment and installations, etc.) and of transport means; the production and storage premises were also modernized.

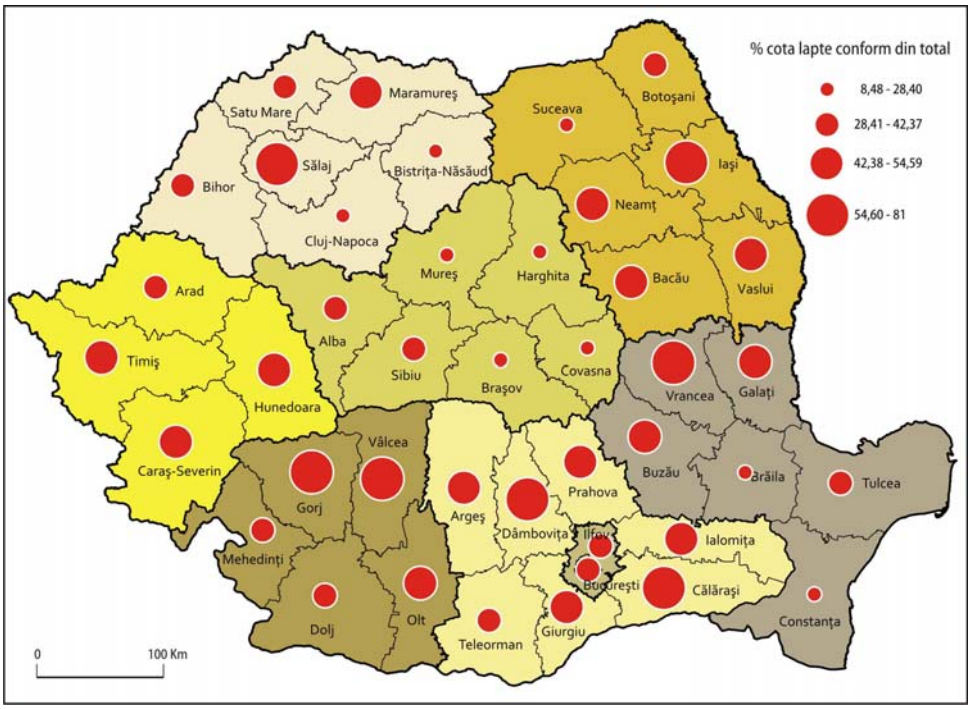
Raw milk quality in Romania is regulated by the standards established at EU level by the Council Directive no. 46/1992. Thus, out of total allocated quota, only 17.2% reached these standards in the market year 2007-2008. If we take into consideration the delivery quotas, the conform milk percentage is 39% per total country. The territorial distribution of conform milk percentage, out of total allocated quota, reveals above the average situations in the counties Bistrița-Năsăud, Suceava, Mureş and Gorj). The share of milk delivered as conform

milk is extremely high (over 80%) in the counties Hunedoara, Dolj, Vâlcea, Argeş, Olt and Bacău (Figure 4). For the estimation of the share of milk that conforms to the EU quality standards in total production and allocated quota, the value of payments received by counties as premium for the conform delivered milk.

A territorial analysis, by classes, of the number of producers who have direct sales quota, reveals the following situation (Figure 5):

- class under 3000 kg: the largest number of producers with direct sales quota that fall into this category is found in the county Braşov, and the smallest number in the counties Maramureş, Buzău, Vrancea and Mehedinţi;
- class 3000 – 5000 kg: the largest number of producers with direct sales quota that fall into this category is found in the county Buzău. The county Braşov lies at the opposite pole. A compact group of counties can be noticed with quite low direct sales quotas (Sibiu, Mureş, Harghita, Covasna, Prahova);
- class 5000 – 50000 kg: under this category, the lowest level of direct sales quotas is found in the county Sibiu. In the county Hunedoara and a group of three counties located in the south-eastern part of the country (Călăraşi, Constanţa and Tulcea) the largest milk quantities allocated for direct sales from this size category are found;

Figure 4. Territorial distribution of the conform milk share in total allocated quota



Source: Based upon the processing of DACL data (2008).

- 50000-100000 kg: the largest number of producers with direct sales quota under this size category are found in the county Braşov. On the other hand, the smallest number of producers from this group are found in the counties Caraş-Severin, Bistrița-Năsăud, Covasna, Prahova, Teleorman and Giurgiu;
- over 100000 kg: the largest number of producers with direct sales quota over 100000 kg of milk are found in the counties Iaşi and Ialomița. Four counties are found in this category (Maramureş, Caraş-Severin, Gorj şi Mehedinți).

4. Quota fulfillment after the first year of quota system implementation

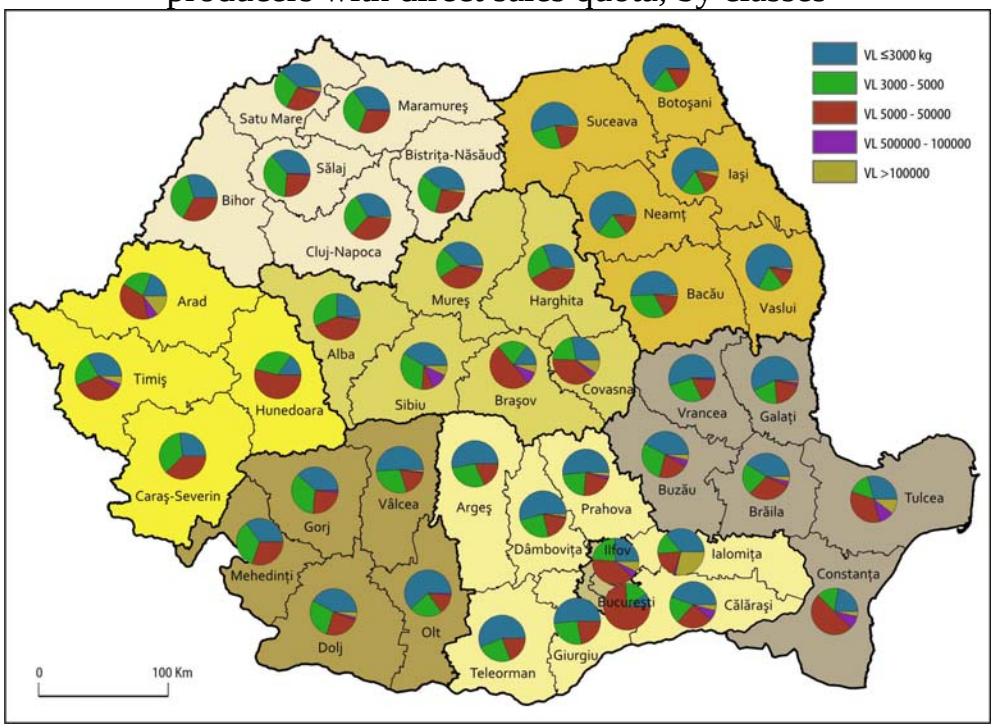
According to the provisional results published by the European Commission[4] one year after the milk quota system was implemented in Romania, 242 303 active buyers reported a total milk quantity for processing of 937 689 tons, which represents 71.4% of the delivery quota; 436911 producers reported direct sales of milk and dairy products in milk equivalent of 1421 thousand tons, which accounts for 82.1% of total direct sales quota allocated for the year 2007/2008.

The quota non-fulfillment percentage per total country is quite high, mainly in deliveries - almost 30% and about 18% in direct sales. The highest percentage of quota non-fulfillment (71%) is found in the small producers categories with allocated quotas under 3000 kg and 3000-5000 kg, hence in the producers that have 1-2 cows, up to 3-4 animals/farm on the average. The large commercial farms (over 100000 kg) even exceeded quotas by 9%, while the farms with quotas ranging from 50000 to 100000 kg fulfilled their quotas in a percentage of 83%. The medium-sized producers (quotas of 5000-50000 kg) fulfilled 74% of the allocated quota on the average.

Graph 5 presents the volume and percentage of quota fulfillment versus initial allocations by counties. If the DACL data have a high accuracy level, on the basis of which these results were obtained, it can be concluded that there are significant differences between counties as regards the structure (% deliveries and % direct sales fulfilled) and the volume of quota fulfillment. This situation, if analyzed in correlation with the situation of initial allocations at regional level, may give a first picture of the quota fulfillment potential and on the quota dynamics in the future.

[4]October 13, 2008, “Milk quotas: the fees for exceeding the milk quotas totaled 340 million EUR”

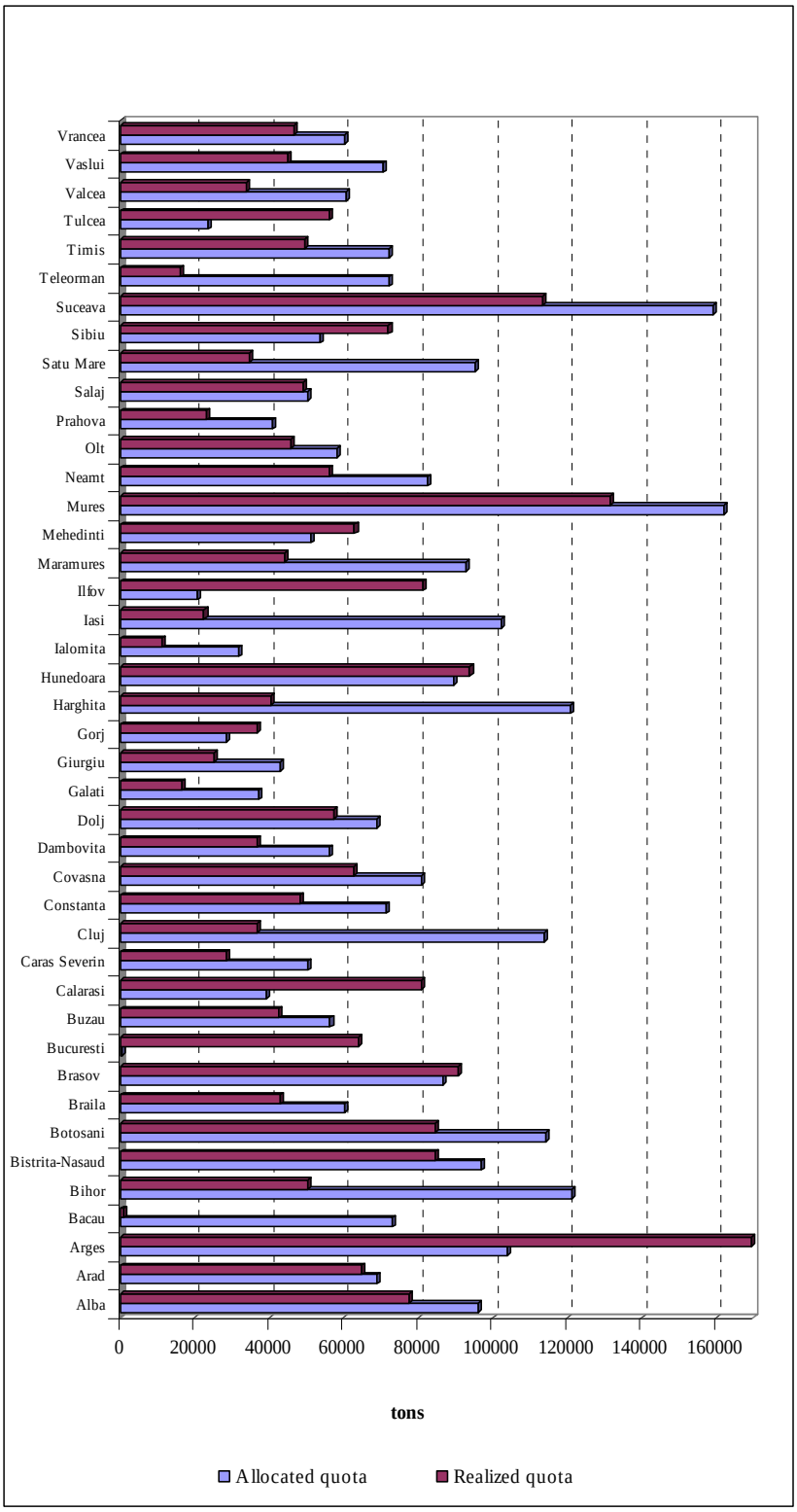
Figure 5. Territorial distribution of the agricultural producers with direct sales quota, by classes



Source: Based upon the processing of DACL data (2008).

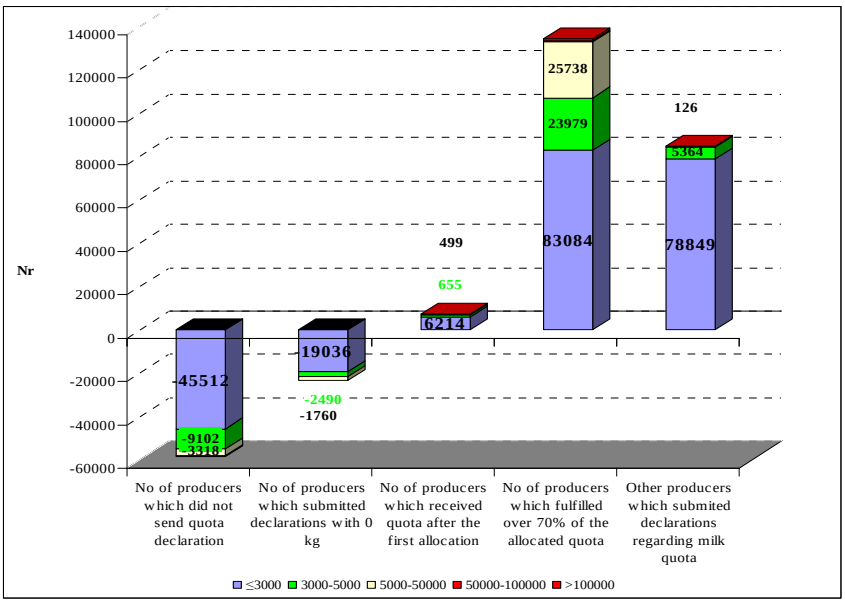
Graphs 6 and 7 present the quota fulfillment/non-fulfillment dynamics in relation to the size and number of producers with delivery and direct sales quotas. The picture is extremely suggestive and can provide an insight into the quota potential and future evolutions. The most significant category of producers that have not submitted declarations is represented by the small producers under 3000 kg both for deliveries and for direct sales; those who submitted declarations with 0 are mostly found in the case of deliveries.

Graph 5. Fulfilled quota versus allocated quota by county



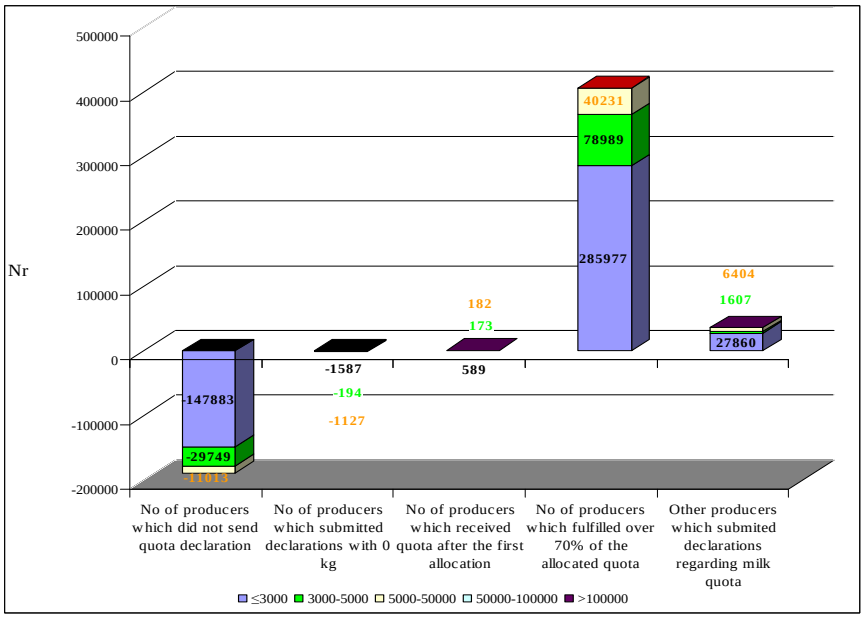
Source: Based upon the processing of DACL data (2008).

Graph 6. Number of producers who fulfilled/did not fulfilled the allocated delivery quota in the year 2007/2008, by categories



Source: Based upon the processing of DACL data (2008).

Graph 7. Number of producers who fulfilled/did not fulfilled the allocated direct sales quota in the year 2007/2008, by categories



Source: Based upon the processing of DACL data (2008).

Considering these results, obtained after one year since quota system implementation, as well as the atomized structure of their distribution, where the small producers have a significant share both in deliveries and in direct sales, and the fact that Romania is at the first exercise of this system implementation, the non-fulfillment of quotas was expected, even in a higher percentage.

The reason that lay at the basis of the decision to allocate quotas to small producers envisaged the creation of premises for a quota market, which has not happened, at least not at the expected level. The processors who intended to make investments could have been the first buyers of quotas from the small producers, and this did not happen; the transfers between categories (direct sales and deliveries) were not dynamic enough, and the processors' expectations were rather allocations from the national reserve.

The analysis of the structural dynamics of the sector corroborated with our perception in the field (discussions with the small producers and the consultancy organizations) lead us to the conclusion that the quota non-fulfillment percentage at the level of these small producers exceeded our expectations in a positive sense. Probably the consultancy structures (ANCA and OJCA) and the General Directorates at county level supported the small producers in filling in their documents and declarations, which is a good thing, as this requires a very large amount of work.

The most important aspect that we want to signal out is the lack of information or rather the way in which the milk quota system operation in the rural area is explained. The correct information, in advance, could have largely changed the small producers' perception of "quotas", who invariably, mainly in the case of older people, consider that quotas are rather an obligation and not a benefit that will continue to give them the right to produce. After the unfortunate experience of imposing quotas in the communist period, it is difficult to "destroy this myth", as it is very difficult for them to have a right perception of the cooperative concept.

The lack of information with regard to this policy will result in implementation problems in the future, as this segment of producers has a considerable size and hence it cannot be neglected. Although in most EU New Member States the quota system implementation effect induced production concentration and significant restructuring, on the basis of our previous analysis, we estimate that the restructuring rate in Romania will not be as high. The habits that have been accumulated in time and the precarious economic situation in the rural area will be the main determinants, so that this segment of small producers and the direct sales will continue to have quite a high share in the future.

Conclusion

Having in view the current situation and the fact that the deadline for getting in line with the standards is the year 2009, we could state that at present Romania is in a delicate situation. Having in view the slow movement of the sector (proved by the presented evolutions) there are not too many reasons for

an optimistic outlook, yet a basis for a realistic strategy to solve up the problem could exist.

The Romanian milk producers, mainly the very small producers, are not used to working with the quota system. Probably the situation mentioned above in this study will not be the same after several years and if we look back to what happened after this mechanism was introduced in the European Union we can estimate that the number of farmers will decrease and the farms with a larger number of animal heads will increase and the farms with 1,2 or 3 cows will gradually give up the milk quota, as meeting the milk quality standards becomes an obligation and meeting the standards needs modern milk collection equipment, and this investment is not justified on a farm of 1-2 cows.

At the same time, the ratio of milk deliveries to direct sales, which is almost equal due to sector specificity, will probably suffer great changes in time.

Another problem that could be raised by this fragmented structure of the sector is related to the possibility of non-fulfilling the allocated quotas. The non-fulfillment of at least 70% of the individual quota for two years entails quota diminution by the non-fulfilled amount that goes to the national reserve. We consider that the sector is not sufficiently restructured so as to be put into the situation of exceeding quotas and paying penalties, maybe only in isolated cases, i.e. at processing level and in the case of large farmers with competitive farms.

The emergence of a more dynamic milk quota market is expected, but its functionality will not reach the optimum parameters on the short term, due to the lack of information and experience in this respect. Probably the small producers will be “chased” on short-term by the farmers who made investments but do not have milk quota yet, and on medium term by the large producers.

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Modelling of agriculture multifunctionality on a regional level Slovak case

Introduction

The task solution has focused on creating assumptions for an objective answer to the question:

- what is the extent of agriculture development after EU accession, and what are the trends and signs of multifunctional nature in agriculture through its production systems in regions and in varied natural conditions of Slovakia;
- what will be the impact of Common Agricultural Policy (CAP EU) on the mid-term/long-term multifunctional nature of agriculture and its production systems in agricultural natural areas of Slovakia caused by structural changes;

This work also discusses quantification of modelable effects of non-production functions (some positive and negative externalities); as part of quantification of policy effects on production and economic changes in agricultural natural areas in Slovakia.

Methodology approach to the evaluation of multifunctionality in agricultural production systems is based on the solution of this issue in the Czech Republic (Doucha, T., Foltýn, I.: Czech agriculture after EU accession - impact on development of its multifunctional nature, periodical report on the research intent, solution results 2007, s. 29).

Evaluation and modelling of multifunctional nature in agriculture, in breakdown by legal forms of farms in regions (agricultural natural areas – ANA) is based on three axes of Rural Development (RD) of CAP EU[1]:

- Axis I - Economic performance (in international comparison: competitiveness)
- Axis II - Relation to environment
- Axis III - Relation to rural development

Indicators were designed for each axis which reflects, directly or indirectly, the multifunctionality of agriculture and which fully rely on public

[1] In Czech Republic breakdown by farm size categories were use.

information sources, and, in exceptional cases, they use combination of public sources and normative values. Information sources are represented by the data from the Farm Accounting Data Network (FADN), data of the Agricultural Paying Agency (APA) and MoA SR on the actual use of agri-environmental programs. Each indicator was assigned the direction of its effect/evaluation: positive indicator sign (+) represents higher value for higher and more positive impact on evaluation of multifunctionality; negative sign (-) means the opposite, i.e. higher indicator values represent worse evaluation of multifunctionality.

Regional model solution is based on differentiated natural conditions in 15 agricultural natural areas (ANA NT1-V4) which cover the entire territory of Slovakia. The solution is identified in 14 agricultural production systems (Phase 1 of this stage). This structure has also been applied in the evaluation of multifunctionality. Slovakia, as a reference area, represents the 16th ANA. The interpretation of results uses 15 ANAs which are aggregated to 4 basic areas - warm lowlands (NT), lowlands (N), uplands (P) and highlands (V). Multicriteria evaluation of multifunctionality in agriculture and its natural areas, and given the time available, also the categories of enterprises, was provided for the period of 2004-2006 (FADN results in 2007 were not yet available at the time of the solution, due to complex nature of data processing).

Results which describe the period of 2004-2006

Multifunctionality (MF) in RD axes of CAP

Private farmers (PF)[2]:

- In 2004, they achieved unbalanced result in ANAs along the rural development axes.
  - in the highlands area - maximum orientation to axis 3 (rural development), below average score in other axes;
  - upland area - orientation to axis 1 (economic performance), minimum orientation to axis 3;
  - lowlands area (N) - orientation to axis 1, higher level of axis 2 (environment), and low level in axis 3;
  - in warm lowlands area - highest score in axis 1 and axis 3;
  - compared to highlands the NT, N and P areas have a wide dispersion in Axis 2
- A high imbalance was recorded in 2006 for all ANAs, mostly in V and P areas.
  - Lowlands maintained maximum score in axis 1 and axis 3;

[2] Individually farming farmers – close to the form of family farms

- in highlands, maximum effects in axis 2 with worse results for other axes and substantially worse results in axis 2 for other ANAs.

Legal persons (LP)[3]*:*

- in 2004 they also achieved an imbalanced result in ANAs in individual axes:
  - highlands - maximum orientation to axis 3, below average score for other axes;
  - uplands - orientation to axis 3, high level of axis 2 and lower effects in axis 1;
  - lowlands (N) - orientation to axis 1, lower level of axis 2, and low allocation of resources in axis 3;
  - warm lowlands - highest level in axis 1 and 3, relatively low level in axis 2;
  - large dispersion of NT, N and P areas in axis 2, away from highlands area.
- Strong imbalance continued in 2006 in highlands and lowlands (N) ANA. On the other hand, the axes in uplands area developed in a balanced manner. The position of axis 1 has worsened in the area of warm lowlands (NT). The highest score in this axis was achieved in the lowlands area (N).
  - Highlands - highest imbalance of axes and large distance from other areas, high environment score is to the detriment of very low economic performance, diversification and employment,
  - Although uplands show a balanced scoring, it is mostly below 50% of the score for best ANAs,
  - Lowlands (N) - maximum score in economic performance, although to the detriment of environment axis,
  - The economic performance (axis 1) in the most productive NT areas dropped down on the highest level of rural development axis, and achieved low score in the environment axis.
- Farms of legal persons total (LP) achieved balanced score in the best ANA throughout the entire monitored period. The score is more stable than that of PFs. They tend to
  - increase score in the environment axis,
  - volatility and decline of economic performance of ANA,
  - decline in score in the rural development axis

Multifunctionality according to the total score of all three RD axes

a) The highest MF value was achieved by farms of legal persons (also due to their stability throughout the entire analysed period) in the conditions of the most productive areas (NT). However, PFs achieved this stability in the conditions of mountain areas. This result suggests that private farmers are able

[3] Cooperative farms, limited liability companies (farms), share holder companies (farms)

to better use the conditions in less favoured areas. On the other hand, LPs achieve better MF results in conditions requiring higher concentration of production, i.e. in lowland production areas.

b) LPs have been able to adapt themselves to multifunctional production also under worse natural conditions (gradual improvement of their score in highlands area). The trend of overall improvement of MF score is visible in other lowlands (N), although not in the best NT areas.

c) Total MF score for SR agriculture during the monitored period of 2004-2006 has improved more substantially in the group of LPs than in the group of PFs. The variations between individual ANAs are much smaller in the group of LP farms than in the group of PFs.

d) The highest classes of MF score in 2004 (classes from 1 to 10) concentrated in the area of southern and southwestern Slovakia. In 2006 the situation had changed due to reduction of regional differences (differences between ANAs). Classes with higher score were allocated to the central and northern Slovakia. Classes with low score include eastern Slovakia, south of central Slovakia and large part of south-west region (Zahorie).

Forecast of changes in ANA multifunctionality

Modelling of multifunctionality of agriculture production systems (APS), effects of CAP EU and rural development policies on regional level is closely related to the results of APS-regio model[4].

Agricultural policy scenarios

Base scenario (BS) - anticipates continuation of current development trends with the effects of reform changes, with regard to the conclusions of "health-check" to be implemented after 2010;

Development scenario (DS) in CAP EU - anticipates that some measures proposed under CAP EU will not be accepted by member states and/or they will be able to choose a scheme which will better correspond to the need for solutions in national sectors of agriculture and its perspective development as one of the important (priority) sectors in the national economy. This scenario anticipates continued targeted subsidization of products coupled with production;

We have included a brief survey of the forecast solution results until 2015.

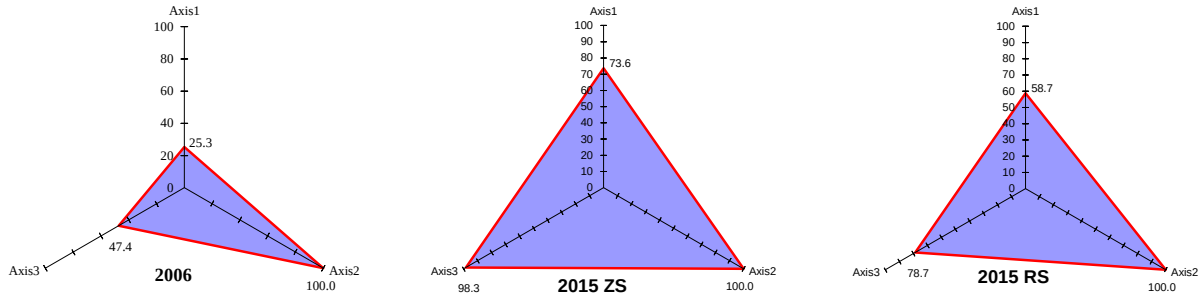
[4] Partly equilibrium model on the national level and allocation of its results (supply and policy) into the regions in the frame of regional constraints

Changes in multifunctionality in RD axes

1. Highlands

Compared to 2006 (obvious imbalance of axes) the score tends to improve mostly in the case of base scenario. Compared to the base scenario, lower score for the development scenario in axis 1 and, subsequently, in axis 3. Axis 2 will retain the highest relative score out of all ANAs.

Figure 1. Percentage score in 3 axis of RD - highlands

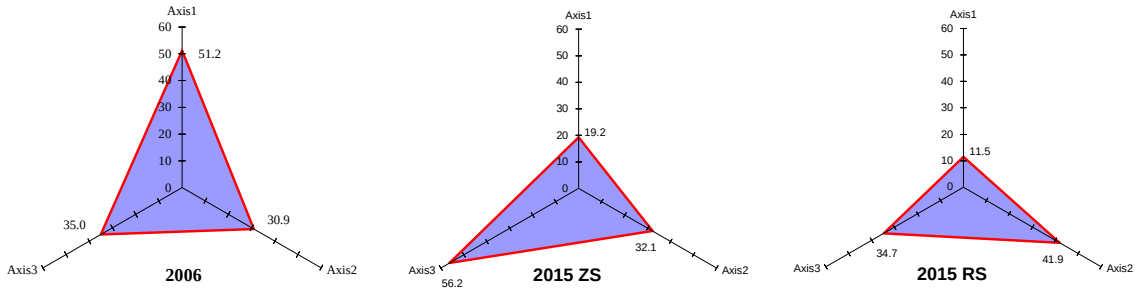


Source: Author.
Legend: ZS – base scenario, RS – development scenario

2. Uplands

Relatively high decline in axis 1 score - economic performance, lower generation of net value added (NVA) than in other ANAs, will reflect in increased score in axis 2 and 3. Compared to the DS scenario, the conditions of base scenario in this ANA favour higher balance of axes. Development scenario favours axis 2 - related to the environment.

Figure 2. Percentage score in 3 axis of RD - uplands



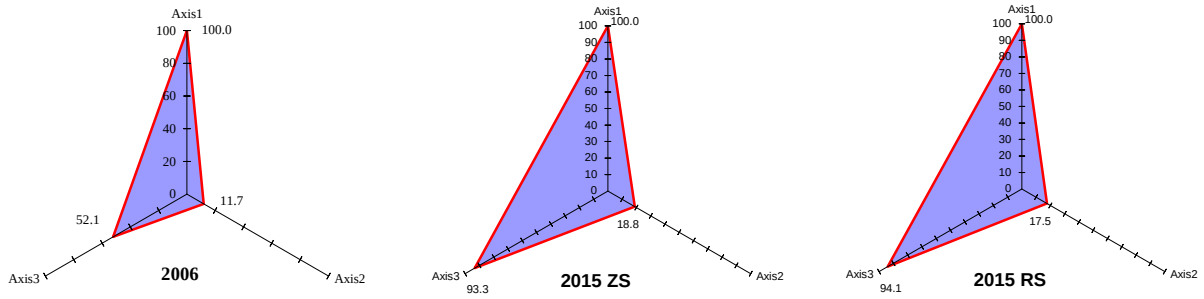
Source: Author.
Legend: ZS – base scenario, RS – development scenario

3. Lowlands

Relatively highest score in axis 1 (for both scenarios) - economic performance. Compared to the previous period, however, the score may substantially

decline, mostly in axis 3 - rural development. Scenario format does not have any significant impact on these results.

Figure 3. Percentage score in 3 axis of RD - lowlands

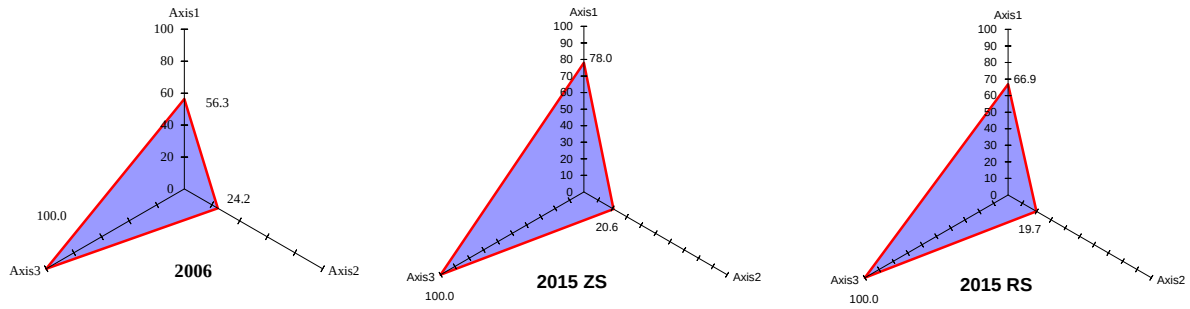


Source: Author.
Legend: ZS – base scenario, RS – development scenario

4. Warm lowlands

Improved economic performance may have a positive impact on high score in rural development axis. On the other hand, it may contribute to decline of the score result in axis 2. Similar to the lowlands ANA, the scenario format does not have any negative impact on the results (except axis 1).

Figure 4. Percentage score in 3 axis of RD - warm lowlands



Source: Author.
Legend: ZS – base scenario, RS – development scenario

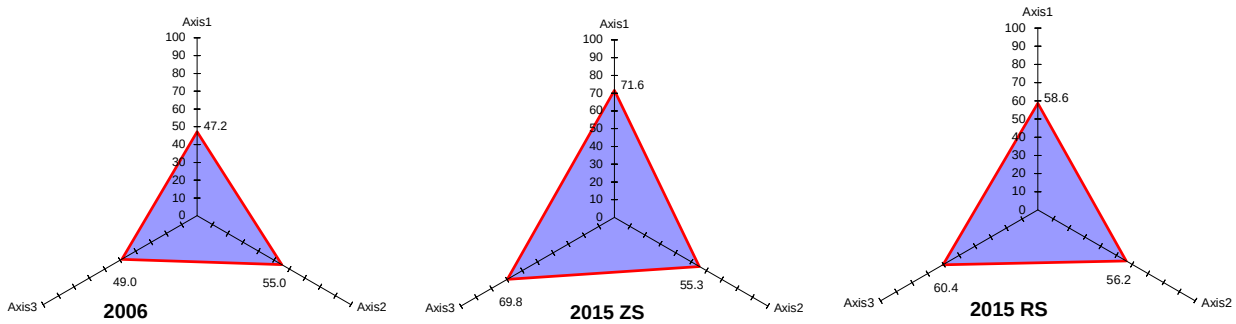
5. Slovakia total

Despite the fact that large imbalances may persist in individual ANAs, the total scoring results for Slovakia suggest a relatively balanced situation in individual MF axes. However, there are obvious differences between the scenarios:

- Increase in economic performance score (axis 1) is higher in base scenario than in DS scenario (higher production in DS requires higher intermediate consumption with possible negative impact on value added - example of areas with economic productive disadvantage).

- Score in environment axis 2 should not experience any significant changes, although it is slightly higher in DS scenario which is probably the result of lower score in axis 1,
- Important increase of score for the rural development axis (axis 3); although the increase is higher in base scenario (effect of higher economic performance, mostly in NT),
- The base scenario appears to be more balanced than DS scenario.

Figure 5. Percentage score in 3 axis of RD – Slovakia total



Source: Author.
Legend: ZS – base scenario, RS – development scenario

Multifunctionality according to the total score of all three RD axes

a) Highest MF value was achieved in farms of legal persons in lowlands (N) which experienced an improvement against 2006. On the other hand, PFs achieved similar result by retaining their position. Improvement of the position may be expected mainly for PFs in most productive areas, legal persons indicate a slight decline.
b) Decline in the total MF value was recorded mostly for highlands, for PFs, with lesser effect on LPs. Under certain conditions (DS scenario), stagnation may occur in uplands.
c) Regardless of the legal form of ownership, MF score should mainly improve in the most productive areas, should stagnate in upland area and should decline in the highlands area. With regard to the size of uplands and highlands, this may contribute to worsened result for all ANAs.
d) The forecast of MF in all ANAs is more favourable in the case of base scenario than in DS scenario.

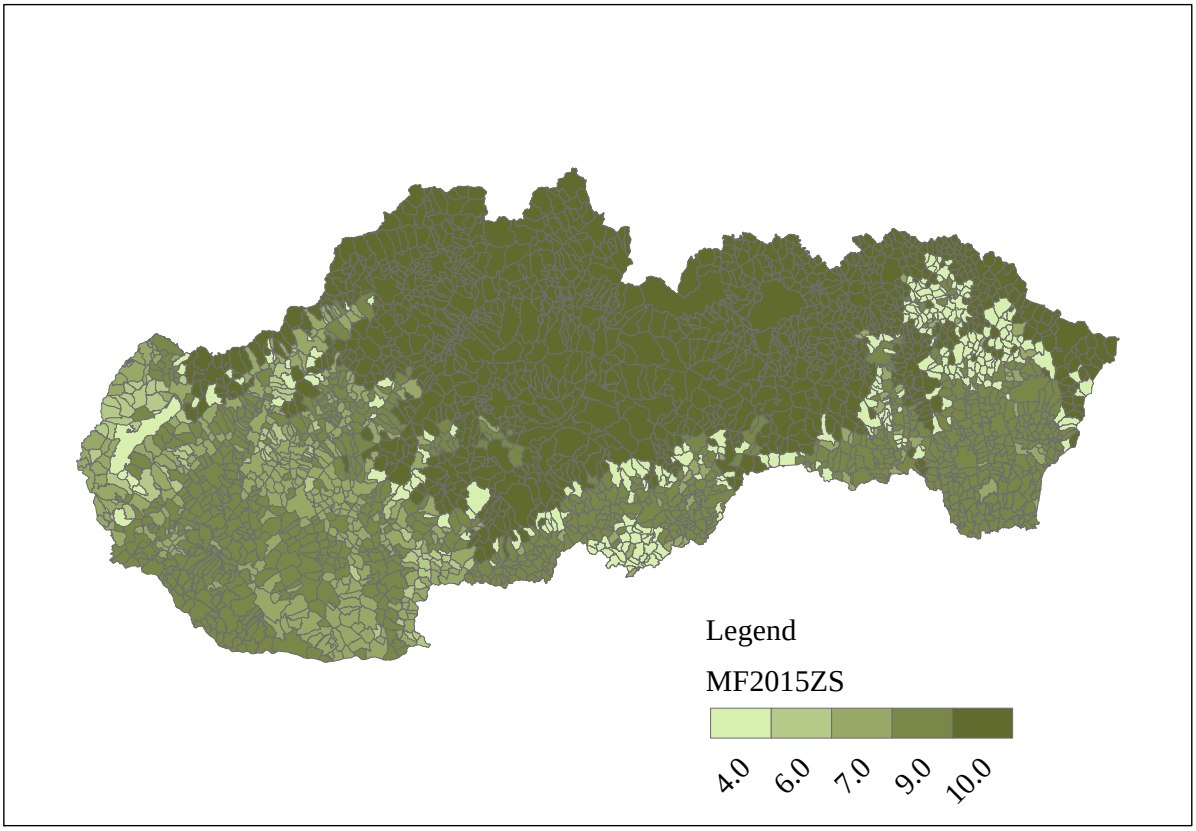
Similar to the analytical section, the **base scenario** shows that under certain conditions some natural areas may become "homogenous" after reduction of regional differences (2004-2006). This process of homogenisation may be determined by differentiation (orientation) with focus on production and social-

environmental effects. On the other hand, an undesirable effect of this is that ANAs may be positioned on the edge of one or both groups of farms.

Compared to the base scenario, the **development scenario** has **more positive impact on the size of interregional differences**. Multifunctionality differentiation is more balanced across the entire territory of SR and differences between MF classes are lower (from class 5 to the best class 10). Boundaries between individual ANAs are not so distinct as in base scenario.

The estimate of the total multifunctionality score is based on the result of individual axes affected by modelling results. We expect that some partial indicators of axes in the final solution of multifunctionality forecast will be derived in a manner which would be different from the method in this solution phase. This mostly applies to some estimates in axis 2 and 3.

Map 1. Multifunctionality score – year 2015, base scenario



Source: Author.

Category 1-10 of the legend represents scoring interval:
1: Score <10%, 2: score >10<20%, 3: score >20<30%, 4: score >30<40%, 5: Score >40<50%, 6th score >50<60%, 7th score >60<70%, 8th score >70<80%, 9th score >80<90%, 10th score >90<100%.

Summing-up the results

The development in the past period was described by imbalanced development along individual MF axes, regardless of legal form of ownership and natural area. Main trends:

- Decline in economic performance in the sub mountain and mountain areas with prioritization of axis 2 is not coupled to diversification of production and preservation of employment (axis 3). This means that the resources of second pillar of CAP are not effectively spent on substitution of ineffective agricultural operations and diversification into non-agricultural activities. The production is on the decline because the growing production/AWU indicator has been achieved by reduction in employment rather than by growth in production volume. Even so, the share of intermediate consumption in production has grown. The generation of net value added is mostly covered by subsidies. The indebtness rate is on the rise. This results in a high imbalance of axes.
- Transitional areas of uplands experienced relative balance in all three axes, although the deviation from the best ANA was very high. Other reasons behind this development included production decline, reduction of fertilization, substantial reduction of AWU and low share of agrienvironmental programs in the total land area.
- Areas of other lowlands (N) recorded the highest economic performance, with the highest growth of indicator in axis 1. This was caused by the highest value of production per AWU as a result of highest decline in AWU/100 ha. Combined with low diversification of production this had a negative effect in axis 3. However, this area achieved the highest NVA per AWU of all ANAs. When we compare the generation of net value added, we have to admit that in contrast to other areas, ANA has received slightly excessive subsidies and/or other ANAs received less. A characteristic feature of this ANA is an enormous decline of operation surplus against little capital increase. The parameters of axis 2 are very low (shares of agrienvironmental programs in the total land area).
- The economic performance as well as NVA/AWU (axis 1) in the most productive areas has experienced a continuous decline. On the other hand, employment on land experienced a relatively positive development (axis 3, the highest of all ANAs). NT is the only area with growing density of livestock units (LU) per ha, although this ANA has a very low share of land in other agri-environmental programs.

The model forecast until 2015 suggests possible directions and changes in the MF indicators, caused by market conditions and policies in different CAP scenarios (BS and DS) and, subsequently, the accumulated effect of changes in multifunctionality:

a) axis I indicators.

- Increased production per AWU in all ANAs, the form of scenario has no effect on the indicator. This increase will be a result of further AWU decline in sub-mountain and mountain areas. AWU decline should stop and/or slow down in the lowlands.
- Reduction of intermediate consumption of production, except uplands in DS, largest reduction in lowlands (N) in DS scenario.
- Increased NVA/AWU in all ANAs, in production areas, regardless of scenario. Higher NVA achieved in uplands and highlands, in the base scenario, as a result of subsidization decoupled from production,
- No subsidies - increased loss expressed by net value added II (NVA subtract of subsidies) per AWU in uplands and highlands, scenario format has little effect on this indicator. This is a result of continued dependence of these areas on subsidization.
- It appears that further agricultural operations in P and V require targeted subsidization (even if decoupled from production), even at the price of lower production.
- NVA II/AWU (without subsidies) may increase in N and NT production areas, whereas the coupled scenario provides more incentives for generation of NVA than decoupled one.

b) axis II indicators.

Model results of changes for axis II - despite certain shortcomings caused by prolongation of land areas in agrienvironmental programs (lack of data after 2013) could result in the following indicator changes:

- Base scenario
  - increased share of organic farming in arable land and permanent crops in the total area of agricultural land in lowland ANA (N); and reduction in uplands and highlands, regardless of scenario and duration in NT,
  - increased share of other agrienvironmental programs (except in NT), in the total area of agricultural land. Development scenario (DS) indicates this change only in highlands and uplands,
  - increased percentage of arable land in uplands, and, to some extent, in highlands (due to lower area of permanent grass land - PGL), and reduction in lowland area (reduced utilisation of arable land),

- Development scenario foresees higher share of arable land in highlands (result of improved use of arable land) and lower share in other areas (higher share of PGL),
- Base scenario anticipates reduced density per LU/ha in highlands and increased density in other areas (increased headage of suckler cows),
- Development scenario foresees reduced density in highlands, uplands and lowland N (increased headage of LU and increased share of PGL), increased density in NT areas (increased headage in LU, without any PGL reserve).

c) axis III indicators.

- The share of leased land has not recorded any changes and does not depend on policy scenario (land market was not simulated).
- AWU/100 ha UAA (utilised Agriculture land) tends to decline in mountain areas (V) (indicator is worsening), regardless of the scenario. This development in uplands speaks against the development scenario (efficiency growth also through reduction in employment). On the other hand, the expected development of production in production areas could stimulate employment growth (growth of production volume).
- Especially the mountain and sub-mountain areas should compensate the decline of agricultural production by income from non-agricultural activities, in order to maintain employment and volume of value added.

Conclusions and recommendations

The results of solution for this stage of research task have shown a number of important facts:

1. **The form of current EU CAP has brought about varied and counter-productive effects across regions of Slovakia**. The division of subsidies to those decoupled from production and those with partial link to production has caused the following effects:
   a. reduced production in areas with certain degree of disadvantage (more extensive production systems), through exclusion of coupled objectives from production structure, giving preference to environmental objectives with negative impact on employment and low ingerence in diversification of activities. Combination of different forms of subsidies in Pillar I and II, without the obligation to produce, is enough to generate NVA on the level of intensive regions. This represents very little effect mostly in Axis 1 and Axis 3 of rural development.
   b. Production (intensive) areas have experienced some stimulation of production, with focus on production objectives requiring a corresponding

level of intermediate consumption. The production intensity in the interest of competitiveness (positive effect in Axis 1, negative effect in Axis 2) contributes to limitation of potential for participation in agrienvironmental programs (Axis 2). The volume of subsidies (without subsidy equal to LFA subsidy in areas with certain degree of disadvantages) is not enough to cover increased requirements of intermediate consumption and demand for work force (production needs work force - positive effect in Axis III), which reduces NVA/AWU to the level of upland and highland areas. The potential for non-agricultural income is very limited in production intensive areas which are concentrated mostly around urban centres in southern and southwestern Slovakia with higher demand for work force and better supply of services.

The forecast results for both CAP scenarios after 2013 suggest that the **current ideas of possible development** with partial link to production or without any link at all (which is more likely) may help improve the production, if the scenario with coupled production is materialised. It seems, though, that this will represent **only a little contribution to change** in current production and its structure in disadvantage, marginal and remote areas. In case of base scenario, this would result in increased differences in agricultural production between SR regions, with negative impact on Axis 3 - rural development and economic performance (Axis 1), in areas with production disadvantage, and unilateral prioritisation of Axis 2. Differences in formation of net value added per AWU would probably increase, to the detriment of production areas.

According to proponents of liberal opinions on CAP, decoupled direct payments also continue the old approach. They jeopardise the competitiveness of European producers, because they increase the prices of land.

As presented above, **the issue here is that some policies may have a positive effect on economic result and negative effect on environmental objectives and positive externalities.** This is an example of maximization of production effects. On the other hand, policy stimulation towards profit maximisation may, in future, lead to social problems in regions that are largely dependent on income from economic activities in agriculture in marginal regions of Slovakia. However if the income is not directly related to agricultural employment in regions (and production, too) the funding from subsidization policy will continue to flow out of the regions. **Therefore, Slovakia should advocate the opinion that CAP use neither the decoupling nor the coupling principle after 2013, and**

- **it should be targeted - from decoupling to targeting.**

- subsidization of income as well as LFA subsidy be replaced with targeted payments for specific operations in public interest,
- the system of subsidization should target production of specifically defined outputs of agricultural operations, in the form of environmental benefits, quality and health harmlessness of food (e.g. organic products) and couple the subsidies with non-commodity outputs,
- create stimuli for application of workforce and other production factors in non-agricultural production activities in rural areas,
- support restructuring, technology change and innovations within the segment of commercial producers in the interest of competitiveness and alignment of agricultural production systems with environmental requirements.

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