Rural economies in Central Eastern European Countries after EU enlargement

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Rural economies in Central Eastern European Countries after EU enlargement

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The aim of the publication is to characterize development of rural economies in selected Central Eastern European Countries.

Reviewer
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Foreword

In highly developed countries agriculture is still important, but it is not the leading sector of the economy. Rural areas still account for the major portion of territories of such countries, thus continuing to be an important determinant of socio-economic policy. Today, environmental problems are becoming increasingly more important because the contemporary society has a new perspective on the advantages of rural areas and natural conditions, cultural and historical peculiarities and landscape curiosities. These factors are more and more important as elements of a full life. Problems of the rural environment take on a new significance also because local development is no longer shaped by one (earlier dominant) sector. Local development is now considered in the light of territorial development and support programmes targeted, in particular, at areas, to same extent, isolated and affected by development difficulties. Therefore, there appears a transitional stage between the policy of equalisation of the level of development and policy of providing subsidies from targeted programmes fostering and supporting the local development. Development of non-agricultural sectors of the economy or services in rural areas gives new job and income opportunities. New social understanding of the advantages of rural regions crops up. In developed countries, the development of rural areas is increasingly more dependent on activity of local entrepreneurs and on securing external sources of financing.

In the recently changing socio-economic reality, not only in Poland, characteristics resulting from special conditions of the rural areas acquire a new dimension directly affecting the situation of the rural population. The farming family is still a consumer community and a production team, where family and production roles coincide. Nowadays, not only care and educational but also decision-making and organisational activities concerning an agricultural holding holistically are important. Fulfilment of both these functions sets new tasks for farmers – it is now necessary to have qualifications linked to planning and management of a family budget, knowledge in the field of rational and economical nutrition and skills in interior design. How a family manages its financial means, time and energy preconditions success or failure of the entire farm. Increase in the wealth of individuals and narrowing down glaring gaps in living standards are treated as the most important goals which should be implemented in the socio-economic development process.

Apart from objectives linked to the improvement in the living standards, agriculture development problems, mainly covered by the Common Agricultural Policy of the EU, are the priorities as before. Their significance grew recently

after enlargement of the EU with the new Member States. At the same time, the EU enlargement with the new Member States creates opportunities for enhancing competitiveness of European agriculture in global markets and allowing stabilisation of rural areas as a whole, thus contributing to improving the wealth across the entire European Union. To this end, support programmes under the Common Agricultural Policy have to take greater account of the needs of the new Member States, most of which have to narrow down development gaps separating them from the EU-15 countries. This publication attempts to identify the changes and processes in agriculture and rural areas in the selected Central European Countries ten[1] years after accession to the EU.

The first chapter, Harmonizing Croatian rural policy with the EU standards and the impact on rural economy, shows that reasons for the relatively slow recovery of agriculture and rural economy may be found in agricultural policies, including: policy goals were often set without adequate economic arguments; selected measures were dysfunctional in achieving these goals; there was considerable lack of control over spending the budget through the subsidy system. Inadequate policy instruments have been used to try to achieve domestic needs and requirements of agriculture (such as increasing productivity and self-sufficiency). Policy measures were often taken from the European legislation, without analysing their applicability under the Croatian economic circumstances.

The second chapter, Rural holdings in the hilly areas before and after entry of Slovenia to the European Union, presents the results of the research on implications of the effects of Slovenia's accession to the EU on structural changes in agricultural holdings in the case of the Škofjeloška hilly areas in Slovenia. Agricultural holdings are analysed according to different natural conditions for agricultural production, economic development of areas and socio-economic types of farms. The effects are studied based on the analysis of income diversification of agricultural holdings and allocation of factors of production of agricultural holdings in 2000 and 2010. We have identified structural changes between 2000 and 2010, while the changes between the municipalities with different natural conditions for agricultural production are different, mainly in the speed and partially also in the direction of structural changes in agricultural holdings.

The third chapter analyses selected issues concerning employment in Polish agriculture such as: economic activity of people related to agriculture, scale of involvement of farm managers in agriculture, unused labour resources in agriculture and conditions for the development of entrepreneurship as non-agricultural rural development directions.

[1] Bulgaria and Romania have been in the EU since 2007 and Croatia since 2013.

The fourth chapter, Development of Lithuanian rural regions towards knowledge society, argues that rural people of Lithuania today live in a society different from that of generations past. Despite the fact that over the last two decades the economic and social system of Lithuanian rural areas has changed substantially, rural policy and support measures not always reflected the fact that society has entered into a new stage of evolution. Approaches to Lithuanian rural development policy in the first decade of the 21st century were incomplete to push predominantly rural regions toward knowledge society. A more comprehensive agenda needs to go beyond information dissemination, trainings and discrete initiatives to include additional approaches.

The fifth chapter, Rural development in Hungary after the EU accession, concludes that modest result of the Hungarian rural development programmes is that over the last ten years their application contributed to reduce the migration from rural areas. The rural development subsidies created opportunities for developing the rural economy, environment and society, assisted to preserve the environmental values, induced community initiatives and mobilised the rural society. The main shortcoming of the programmes is that instead of encouraging sustainable developments to be implemented by creative ideas the programmes only relieved the symptoms.

The sixth chapter, Economic and social changes in the Czech rural areas after the EU enlargement, the changes of socio-demographic structure of rural inhabitants will make higher demands on the facilities and services, which are for the present defined only in the common level and are not preferred (health and social services, support of sport and leisure time activities of all age groups, education, non-profit organization, charitable organizations, etc.). In other words, from material presumptions of rural municipalities functioning the needs are shifted to the social level. Changing socio-demographic structure will influence the political preference and permute the social values and tasks.

The next chapter, Human capital and rural economy in Romania – post--communist evolutions and trends, argues that human capital, its quantitative and qualitative dimensions, represents the "social portfolio" in which the rural Romanian communities participate to re-invent the growth patterns specific to the knowledge-based economy. The profile, contents and main characteristics describe human capital as still under the influence of the processes of rural modernization and rationalization of farming activities, resulting in social empowerment. In the quarter of the century, which has elapsed since the fall of the communist regime, the Romanian rural human capital experienced both quantitative and qualitative depreciation processes: contraction of the available rural human capital

volume due to rural population's ageing and migration (rural-urban and/or to foreign countries), decrease in the educational level of younger rural generations. Although the rural entrepreneurship has recorded some positive trends in diversification of the business fields and openness to innovations, the processes describing rural human capital slow down the development of knowledge-based rural economy in Romania.

It should be stated that regional and local governments have the ability to influence the level of human capital in the administrative unit by promoting pre-school education combined with the creation of nursery schools or alternative forms of pre-school education in rural communities, and thus to equalise educational opportunities for children in rural and urban areas. They also have the opportunity to improve the quality of education by promoting the education of teachers in rural schools. This could allow creating a curriculum to enable young people to acquire practical skills that will be useful for work and exercising.

The following chapter, The employment effect of the agricultural farms' diversification (in Bulgaria), points to some circumstances of development of farm diversification: the development of non-agricultural activity of farms could not be the main source of jobs' creation in rural areas. Agricultural farms diversification could not reduce the divergence of the labour market.

In its Bulgarian variant, the diversification toward non-agricultural activities does not justify the expectations for jobs' attractiveness. Agricultural farms diversification is an important factor for optimal rural households' labour force use – the amount of the invested labour in a farm is more than three times bigger.

The last chapter, entitled: Development and management of rural areas in Bulgaria by introducing alternative types of tourism, describes the development of rural areas in Bulgaria, which represents significant part of the National Programme for Development: Bulgaria 2020. It reflects the main aims and priorities of "Europe 2020" strategy and defines two types of alternative tourism with potential to bring value added to the rural area product. These are cultural and spa tourism – both directly corresponding with the key concept of vast dimension coverage of the necessary resources in various areas. However, the main issue remains the proper management of the destinations as insurance for achieving sustainable results.

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Chapter I
Harmonizing Croatian rural policy with the EU standards and the impact on rural economy

1.1. Introduction

Croatia, the newest member of the European Union, is located on the central axis of Europe, which makes it Central European Country. Long Adriatic coast linking the Mediterranean Sea, makes it Mediterranean country as well, while the southern part of the country joins Croatia to the Western Balkans. Due to its interesting geographical position, different political influences have shaped the political and economic scene of the country. This is why now, a decade after historic enlargement of the EU with Central and Eastern European Countries, Croatia analyses "impressions", more than impact of the first year of its EU membership.

However, although Croatia entered the EU in different economic circumstances (marked by economic crises, not growth), the EU membership has been greeted with modest optimism. As in other NMSs, the EU accession is seen as an opportunity with respect to available funds, investments and development programmes, greater job and educational opportunities [IAMO, 2004]. Of course, Croatian socio-economic situation, especially in rural areas, provides justified reasons for threats arising from the ageing of the population and migration, inabilities of using money from the European funds, unwillingness to reform domestic business patterns and to adopt European business standards, especially in agricultural sector. Therefore, the processes of policy and economic harmonization in Croatia intensify.

We can find arguments for encouraging these processes in some early research results on the effects of the EU membership in the New Member States (NMS). It seems that the NMS gain from higher prices and budgetary support, and projections for most sectors show real improvements on production levels and in aggregate, CEEC agriculture has less favourable growth potential if it

remains outside the European Union and retains the policy instruments in place before accession [Erjavec et al., 2006]. Or, as concluded by Csaki and Jambor [2013], the EU accession has had a significant impact on agriculture of the NMS, although Member States capitalised their opportunities in different ways, due to initial conditions and pre- and post-accession policies.

The specific (positive) experiences of New Member States are used as examples of good practice for Croatia. We can find optimistic expectations for agricultural income within the European agricultural policy options (specifically direct payments), where authors conclude that income situation for Slovenian agricultural households is likely to improve under all analysed policy scenarios [Kožar et al., 2005]. The other popular example of benefits from the EU membership is Poland; we can find statements about Poland's economy that was further strengthened by the EU funds and foreign investment, with continuing efforts to implement the planned reforms. Thus, despite strong opposition from Polish farmers to Polish accession to the EU, agricultural income has increased significantly due to increased subsidies and trade balance in agri-food products increased as well. There was also a shift in the rural areas in terms of increasing economic activity, diversification of income and quality of life because of funds from pre-accession and structural funds [Mikuš et al., 2011].

All these positive experiences are welcome, but accepted with certain delay. Namely, unlike other NMS, Croatian independence was very challenging politically and economically. War trauma[2] has left still visible effects on human and natural resources and economy, especially in rural areas. Therefore, in time when other Central and Eastern European countries were one step closer to the EU membership, Croatia was still lagging behind with its preparation to the accession to the EU [Franić, Žimbrek, 2003]. Past two decades were characterised by a process of political and economic transition from a centrally planned to market-oriented system with a strategic political goal of integration into international trade associations and the European Union. Domestic socio-economic situation is burdened by numerous problems limiting the development, especially of rural areas: mess in agricultural land ownership, land registers and inheritance system, unorganized agricultural markets, taxation and subsidies, weak demographic situation and characteristics of rural population [Franić, Mikuš, 2013]. All these issues were often stressed as obstacles for successful adjustment of Croatian

[2] Although the war ended 20 years ago, we believe that it is inappropriate to blame it for any economic and political inefficiencies.

rural policy and rural structures to the European requirements, and especially when Common Agricultural Policy is experiencing significant reforms.

However, research results assure us that, regardless of the future development of the CAP, the NMS can expect positive effects for agricultural sector resulting from accelerated technological development and the opportunities provided by the EU common market, or at least not dramatic medium-term changes to agricultural markets in the NMS [Chantreuil et al., 2013].

1.2. General characteristics of geo-economics, rural areas and population

As stated above, Croatia is an Adriatic, Central European and Western Balkan country. Although rather small in surface, it covers a diversity of landscapes: from the Mediterranean coast, through the mountain areas to the Pannonian plains. Geographic diversity is accompanied by a rich wildlife, and some parts of the country are the richest areas in Europe in terms of biodiversity [Franić, Mikuš, 2013]. Croatia is a country with valuable natural resources, primarily in terms of quality: fertile agricultural land, high quality water resources, forests and attractive coastal zone ensure a good basis for development of agriculture and other rural economic activities. The most valuable parts of its natural heritage comprise 447 different protected areas covering about 10% of its territory [Franić, Žimbrek, 2003].

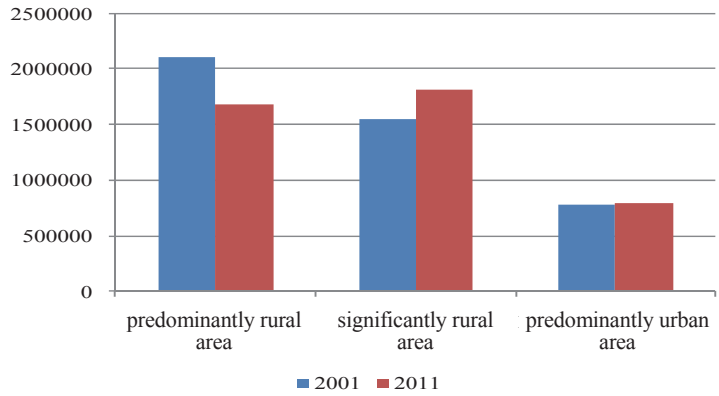
With an average population density of 78 inhabitants per km^2, it is predominantly rural; the population density is the greatest in the north-western region of Croatia (due to its capital city – Zagreb) and the lowest in the mountainous region in the south of the country. While population growth rate has been declining for several decades, migration balance has been positive in past years, but motivated more politically than economically, since most inflows and outflows refer to people that return to homes they abandoned during the war.

Population decline is a common characteristic of European rural areas and main reasons are generally found in aging population and unemployment, worse working and living conditions in rural areas compared to urban areas, low salaries (due to less educated workers and job structure), declining agriculture as the most important rural business, but also in risks arising from climate change and ecological considerations [IAMO, 2011; Karcagi Kováts, Katona Kovács, 2012]. All these reasons can also be applied to explaining population trends in Croatian rural areas, showing migration pattern toward less rural areas (Figure 1.1).

There are significant discrepancies in economic performance and standard of living between urban and rural areas. Several negative indicators suggest why

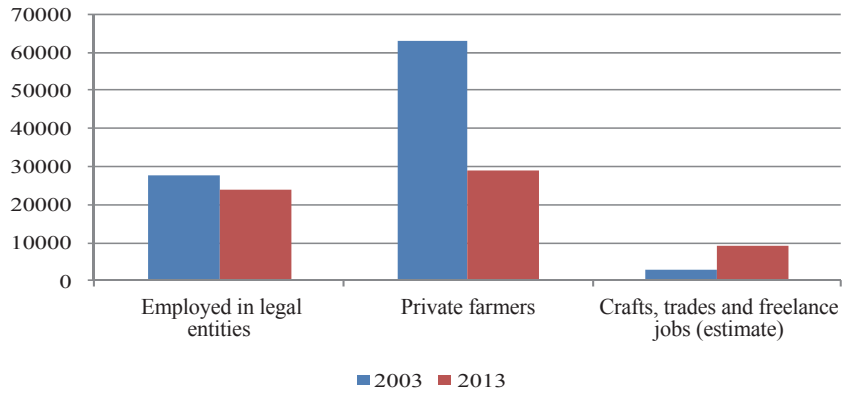
living in rural areas is not attractive: low level of education, a high dependence of rural population on social support, poverty and high rate of unemployment, poor access to basic infrastructure, etc. [Franić, Mikuš, 2013]. Regarding education, data show that 20-35% of people in most rural areas have only primary education. The employment rate for active population of more than 50% is the lowest of all EU Member States and about 13.5% lower than the EU-27 average [EAFRD, 2014].

Figure 1.1. Rural population in Croatia by place of residence



Source: CBS, Census in 2001 and 2011.

Figure 1.2. Employment in agriculture, forestry and fishing



Source: CBS.

Croatian agriculture is characterized by a large number of small, fragmented family farms that own about 77% of total agricultural land. In addition to holdings in the Register, there were about 300,000 family farms where agriculture is only one source of income. Agricultural holdings are much smaller than the EU-27 average, both in physical (5.6 ha UAA/holding) and in economic (EUR 9,065 per holding) terms.

1.3. Influence of the Common Agricultural Policy on the evolution of Croatian agricultural policy

It is known that harmonization in the area of agriculture is particularly demanding, especially for economically less-developed countries, whose agricultural policy usually has a different role than in the EU [Volk et al., 2010]. Since it was just a case in Croatia, the process of policy adjustment was often characterised by misinterpretations (even in terminology) and discrepancies between domestic wishes and obligations under international agreements, and particularly under the CAP administrative rules.

Croatia made serious steps towards the EU in 2000, when non-tariff exports to the EU have been arranged, due to the basic principles: asymmetric trade liberalization (in favour of Croatia) and non-tariff access for Croatian goods to the EU markets. The process continued by signing the Stabilization and Accession Agreement with the EU (in 2001), CARDS programme, bilateral support programmes and Protocol 7 (in 2004), regulating trade regime with the enlarged EU [Franić et al., 2005]. Trying to adjust to the future European agricultural policy standards, price policy reform was initiated already in 1998, in conjunction with the reform of trade policy required for WTO membership (2000). Direct price subsidies and all input subsidies were abolished, and as a compensation measure for farmers' income loss (due to the reduction in import protection and associated floor prices), coupled area payments were introduced for the major crops.

In 2002, the new Act on state support to agriculture, fishery and forestry was adopted and enforced in 2003. The precondition for its implementation was introducing the Farm register, the first serious administrative base for managing agricultural finances. Besides the previous production incentive models (a kind of "hybrid" between the European area payments and previous coupled payments), three new models of structural support were introduced: income support, capital investment and rural development [Franić et al., 2005; Franić, Kumrić, 2008]. The expectation was that the new measures would contribute to the structural adjustment of domestic agricultural sector to European standards by reallocating

funds in favour of these new models. However, years after, the majority of budgetary support was still earmarked for the production support schemes without any significant structural improvement [Franić et al., 2005; Franić, Mikuš, 2013].

Only with the Act on state support to agriculture and rural development in 2009[3], the difference between direct payments and rural development support was defined as well as the expected results of these measures. Basic area payments were set apart from coupled payments (still kept for the greater part of crop and livestock production). Intensifying negotiations on the EU membership resulted in final harmonisation of the farm support policy with the single farm payment scheme and rural development policies. Direct payments are kept only for sensitive sectors (olive oil, sugar beets, tobacco, suckler cows, sheep and goat, cattle fattening, breeding sows, cow, sheep and goat milk), meeting the requirements of cross compliance, land and farm identification system and modulation.

Table 1.1. The European Union and Croatian reforms

CAP reforms		Croatian agricultural policy reforms	
Year	Reform	Year	Reform
1999	Agenda 2000	1999	Area payments introduced
2003	Mid-Term Review – decoupling	2003	New models of agricultural and rural support
2008	Health Check	2009	New Act on state support to agriculture and rural areas
2013	Four Basic Regulations and the Transitional Rules	2013	The EU membership and accepting the CAP rules

Source: own compilation.

From the aspect of rural development, in the middle of the 1990s good legislative basis was created regulating protection and management of resources in the agricultural sector. In arranging the rural development activities, in 2006 the SAPARD programme has been prepared, as well as unofficial Action plan for agriculture and rural areas. Competitiveness of the sector was stimulated by investments in agricultural holdings and in the processing and marketing of agricultural and fishery products [Franić, Kumrić, 2008]. Since 2008 the SAPARD has been replaced by IPARD Programme 2007-2013 – Agriculture and Rural Development Plan, whose priority axes included (i) improvement of market efficiency and implementation of community standards, (ii) preparatory actions for implementation of the agri-environmental measures and local rural development

[3] Official Gazette, no 83/2009.

strategies, and (iii) development of rural economy. Both programmes showed deficiencies of Croatian agricultural sector, due to which their utilization was rather unsatisfactory: weak financial capacity of farmers, complications with gathering ownership documents and other administrative obstacles, poor information dissemination, etc. [Franić, Mikuš, 2013].

1.4. Impact of rural policy adjustment on the rural economy

At the end of 2014, after the EU accession, Croatia was still in the process of raising awareness about its EU membership. One of the most powerful instruments of this awareness was the adjustment of Croatian statistics to the Eurostat standards in 2005, which resulted in considerable decrease to all agricultural data (land area, production quantities) by almost 30%. So the following data should be interpreted with view to the above.

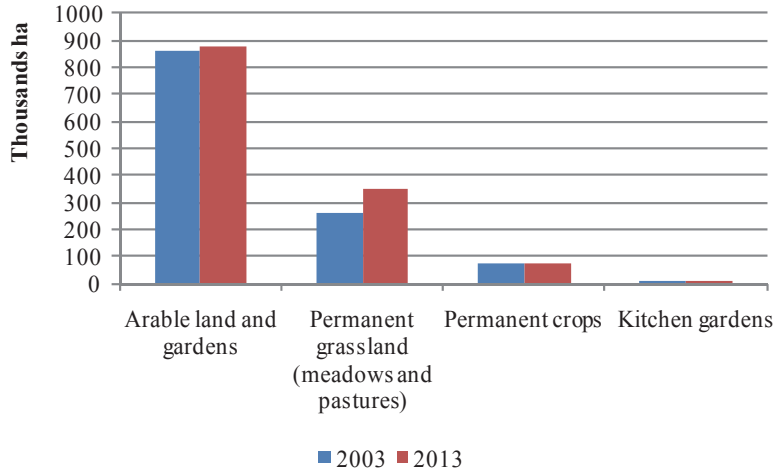
Currently more than 1,300 hectares of agricultural land is utilized, although almost three times as much of it is available. Destructive political and economic events from the beginning of the 1990s, together with unclear and unstable policy goals during the time, are reflected in rather poor production results.

Changes in the structure of land use, together with paid support did not make significant impact on the labour productivity[4], production quantity and value of agricultural production. Compared to the European average, yields are low and volatile, and production of only a few products satisfies domestic consumption, so during the last two decades Croatia was a net importer of agricultural and food products [Franić, Mikuš, 2013].

Official data show that the value of agricultural production demonstrated slight, but unsteady rise during the past decade, contributing to the total GDP by about 6%. From the EU perspective, Croatian agriculture is a minor factor, since in all production and economic data it contributes with less than 1%. Main structural indicators confirm that Croatian agriculture achieves rather modest results, despite increasing budgetary support. However, although during the past decade average farm size was increased (to 5.6 ha), high share of farms in Croatia still produced more than 50 % of their output for own use [Franić et al., 2011; Franić et al., 2014]. Almost one third of them generated an operating profit of less than EUR 1,200 and majority of them organized their work by family labour.

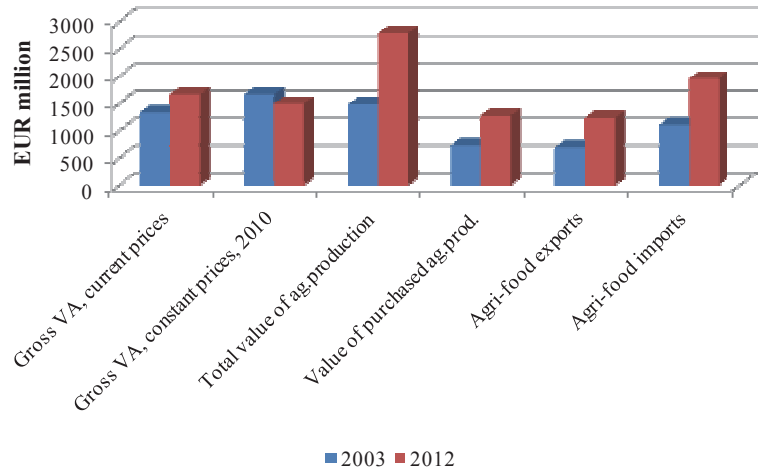
[4] The labour productivity in Croatian agriculture only comes to 37% of the EU-27 average [European Commission, DG AGRI, 2013].

Figure 1.3. Utilized agricultural area, by categories



Source: CBS.

Figure 1.4. Basic economic indicators for agri-food sector

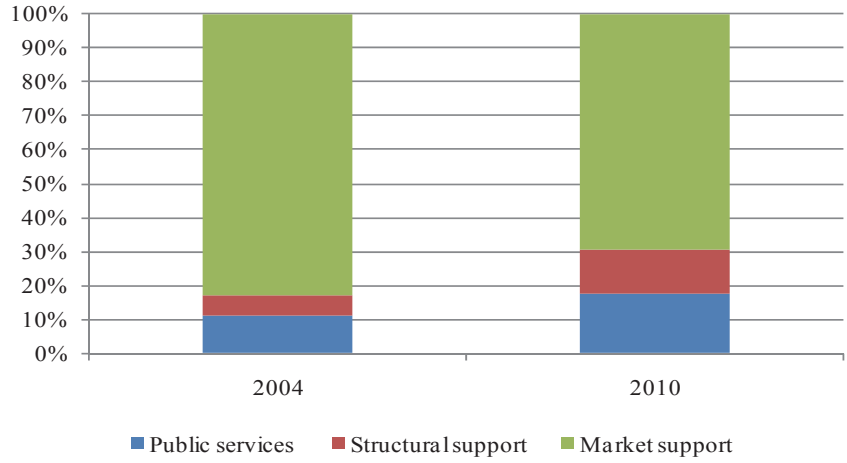


Source: CBS.

Distribution of budgetary support reflected the previous policy measures that did not recognize differences in production results and economic power of farms. Because of a lack of sophisticated criteria the paid incentives often did not serve their basic purpose – i.e. to be a support to the agricultural income. On the one hand, they were turning into extra income to already profitable

large companies or – on the other – to a social support measure for economically inefficient farmers highly dependent on the state support, thereby deepening polarisation of farms[5].

Figure 1.5. Structure of budgetary support for agriculture in 2004 and 2010



Source: Franić, Mikuš, 2013 (according to the MA, 2011).

Regarding the utilization of the pre-accession programmes, the European Commission in 2007 noted a lack of harmonization and serious activities in the field of rural development. Utilization of SAPARD was rather unsatisfactory and this was interpreted as lack of initiatives to follow the EU practice of implementation of agricultural policy measures. The programme IPARD was adopted in 2008 (EUR 41.8 million has been approved), but by the end of 2012 only 38% was used. Reasons for such unsatisfactory utilization of these funds were found in lack of financial abilities of farmers and their insufficient administrative skills, but also in overlapping with national measures that had lower requirements and a milder control system compared to the EU requirements [Franić, Mikuš, 2013].

In 2011, negotiations on the accession to the EU were finished for the chapter Agriculture and Rural Development, and significant financial possibilities were settled: EUR 373 million for direct payments and EUR 333 million for rural development. Special transitional measures of support were anticipated for semi--subsistence farms and producer groups, which could help a considerable number

[5] Almost 90% of farms have less than 5 hectares accounting for just a third of agricultural land, while only 1% of farms have more than 70 hectares accounting for another third of land.

of Croatian farms to sustain themselves. Regarding agricultural budget structure before the start of negotiations and before entering the EU, the structure is changed in favour of structural policy and public services. Also, additional initiatives in rural areas evolved over time (based on LEADER approach), so local actors are increasingly involved in various projects for education, business incubators, involvement of women and young people in agricultural business and rural activities. Moreover, great part of vital family farmers sees their opportunities for business survival and growth in non-agricultural activities in rural areas. Aware of their rural comparative advantages, they expect that forthcoming entrance to the EU will result in increased farm competitiveness, better market functioning and more efficient use of support for agriculture and rural development. They find possibilities for improvements of agricultural income in quality natural resources, production of value added farm products and touristic activities [Franić et al., 2014]. Examples from more developed rural areas show that the greatest impact on rural development can be expected from the construction of entrepreneurship zones, infrastructural improvements and changes in employment structure. The strengthening of local identity and investments in human resources, as well as support to new production standards are measures that bring the most important production and rural development outcomes [Ljubaj et al., 2012].

1.5. Future challenges for Croatian rural policy and rural areas

Lack of published statistical data on agricultural sector and rural economy in Croatia does not allow us to estimate the economic impact of the first year of Croatian EU membership on rural economy. Agricultural policy is formally adopted and gradually implemented in agricultural practice. As some research show, the agricultural sector is continuing to change its structure: small-scale, marginal producers have been leaving the sector; the larger production units have been growing [IAMO, 2011]. Such trend is registered and can still be expected in Croatian agriculture. Considerable weaknesses are identified through the Rural Development Programme: large number of small agricultural holdings unable to profit from economies of scale and on the verge of economic viability; uncompetitive agricultural production and low productivity in the food processing sector, high unemployment rate in rural areas, the degree of exposure to poverty in rural areas that is significantly above the national average, low level inclusion of agricultural holdings into higher-level organizational forms and other types of cooperation, etc. [EAFRD, 2014].

On the other hand, the same document highlights the strengths of Croatian rural areas, including possibilities for producing high-quality domestic products due to good natural conditions and traditional production methods, high-quality natural resources and cultural heritage and extensive family farm structure that provides a strong basis for rural tourism development, increasing interest of producers in integrated and organic production, increasing environmental awareness in the farming community.

Croatian farmers and farm managers are aware of the majority of these advantages and have optimistic expectations about the future. They see the possibilities for their survival and growth in non-agricultural activities and in achieving added value through organic production, traditional practices or new product development and, above all, through linking agricultural activities with tourism [Franić et al., 2014]. The same measures are identified for sustaining and improving agriculture, and also to prevent population decline in rural areas by researchers in other New Member States [Karcagi Kováts, Katona Kovács, 2012; IAMO, 2011]. Additional, improvements in rural economy can also be expected through better targeting of agricultural subsidies – farmers living in regions with higher subsidies per worker are more likely to exit agriculture [IAMO, 2011]. In order to stabilize and improve their income situation, rural households are strongly encouraged to diversify their activities both in and outside the agricultural sector [Franić, Mikuš, 2013; Falkowski, Jakubowski, 2014].

Factors of the competitive advantages of the regions take account of: the qualified workforce, a sufficient industrial concentration of enterprises, developed supplier-customer relations and the accessibility to specialized infrastructure and technologies; however, rural regions are often characterized by limits in their socio-economic and demographic potential. That is why European instruments can play a supporting role in the stimulation of promising activities in rural areas [Abrhám, 2011: 289], which is also recognized in the Rural Development Programme of Croatia for 2014-2020. Opportunities identified for rural areas point out easier access to information on the latest technology solutions and innovation in the EU and more opportunities for cooperation and exchange of practices – better trained, more highly qualified farmers will be more innovative and receptive. Better connectivity of rural communities is expected, including opportunity for direct sales by small producers through ICT and broadband accessibility within and outside the EU, etc. [EAFRD, 2014].

1.6. Conclusions

More than two decades since gaining independence, the report on Croatian socio-economic situation still starts with consequences of the past events: war and post-war transitional difficulties had worsened the already unfavourable demographic situation in Croatian rural areas that, in previous decades, were exposed to strong exodus of vital population and the natural process of depopulation. An aging population results in a decline in the overall rate of economic activity in rural areas.

Reasons for the relatively slow recovery of agriculture and rural economy may be found in agricultural policies during the past period: policy goals were often set without adequate economic arguments; selected measures were dysfunctional in achieving these goals; there was considerable lack of control over spending the budget through the subsidy system. Inadequate policy instruments have been used to achieve domestic needs and requirements of agriculture (such as increasing productivity and self-sufficiency). Policy measures were often taken from the European legislation, without analysing their applicability under the Croatian economic circumstances.

Therefore, there is a reasonable fear for the survival of agriculture under the strong competition of the common European market, especially because Croatian agricultural policy was focused on an outdated concept of direct payments, and farmers still expect from the government to organize production and guarantee purchase prices. Through several phases of policy reforms trying to gradually adjust domestic standards to the Common Agricultural Policy, Croatian farmers were now forced to accept all CAP requirements. They are, of course, concerned that they will not be able to meet the strict standards of European financing, but the majority of them still believe they have great opportunities for business survival and growth in additional (non-agricultural) activities. Within the EU market they see the possibilities for better positioning and more efficient use of agricultural and rural development support [Franić et al., 2014].

Finally, as concluded many years ago, "Croatian accession to the EU will undoubtedly have a strong influence on Croatian agriculture" [Franić, Kumrić, 2008: 37]. First estimations of expected consequences were not very optimistic, but benefits were expected from market enlargement, improvements in product quality and the EU funds for agricultural restructuring and rural development, as well as more organised government attitude towards agriculture and rural areas [Franić, Kumrić, 2008; Franić, Mikuš, 2013].

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Chapter II
Rural holdings in the hilly areas before and after entry of Slovenia to the European Union

2.1. Introduction

According to the criteria of the Organization for Economic Cooperation and Development (OECD), Slovenia ranks among the Member States of the European Union (EU) with above-average proportion of rural areas. With around 2 million of total population, around a half is rural population. Its share in total population has been rather stable and only in the future a decline is expected in the absolute size and in relative share of rural in total population (Appendix – Figure A1).

Following the accession to the EU, the share of the gross domestic product (GDP) and employment in agriculture, hunting and forestry in the Slovenian economy has decreased. During the 2000-2010 period, the share of GDP declined from 3.2% to 2.1% and the share of employment declined from 11.9% to 8.4% [SORS 2005 and 2011]. Much higher share of employment than GDP shows relatively low productivity in agriculture, hunting and forestry versus the rest of the Slovenian economy.

In Slovenia, most of rural landscape is managed and operated by agricultural holdings or family farms[6]. Less-favoured areas cover 85% of the territory of Slovenia intended for agricultural production, of which slightly less than 72% is situated in the mountain areas [MAFF, 2009]. These areas are characterized by lower production potential in agricultural production. Due to the difficult natural conditions and unfavourable farm structure Slovenian agricultural products on the common European market have been relatively uncompetitive [Bojnec, 2002; Baum et al., 2004].

[6] In 2000, agricultural holdings or family farms in Slovenia owned 99.7% of land and operated 96.7% of land as well as almost 94% of all agricultural land in use [Dernulc et al., 2002, 50-54].

Agricultural holdings, after Slovenia's accession to the EU, are faced with relatively intense structural changes [Knific and Bojnec, 2014, 2015]. These changes have been caused by changes in agricultural and trade policies, adoption of the euro, and other economic and development policies. Strategies of agricultural holdings have changed in terms of use of factors of production and preferences of the members of agricultural holdings. This is reflected in the allocation of labour and diversification of income. Maintaining farming in these hilly and mountainous areas plays an important role in maintaining rural populations and the maintaining cultural landscape and ecological balance [MAFF, 2007].

The results presented in this paper are based on an analysis of income diversification and allocation of factors of production (land, labour, machinery, and livestock herd) to agricultural holdings in 2000 (three years before Slovenia's accession to the EU) and 2010 (six years after Slovenia's accession to the EU). Analysis of the differences and structural changes is carried out for the entire hilly area (Škofjeloška area), and the agricultural holdings from two municipalities, which vary according to natural conditions for agricultural production and level of economic development. The Škofja Loka municipality is economically more developed with better natural conditions for agricultural production than the Gorenje vas-Poljane municipality. In addition, the analysis and results are presented by the socio-economic types of agricultural holdings: pure farms, mixed farms, supplementary farms, and farms in abandonment [Kovacic 1996, 19]. These results are used as basis for findings and conclusions about structural changes on agricultural holdings focusing on income diversification of agricultural holdings [Frenkel and Rosner 1999] and use of factors of production with the goals and strategies of agricultural holdings.

2.2. Methodology and data

Information on the allocation of factors of production to agricultural holdings and the size of farms in 2000 and 2010 concerns the entire population of agricultural holdings. We have obtained data of agricultural censuses in 2000 and 2010, conducted by the Statistical Office of the Republic of Slovenia (SORS). Data on income of agricultural holdings were obtained through personal interviews for the sample of 60 agricultural holdings, representing approximately 5% of the population of active agricultural holdings in agricultural production in 2000 (sample of agricultural holdings). Sample of agricultural holdings was composed of municipalities selected as a proportional stratified random sample of agricultural holdings. Strata were socio-economic types of agricultural holdings

according to Kovačič [1996, 19-22]: pure, mixed, supplementary farms and farms in abandonment, with the difference that agricultural holdings with only elderly persons were not included in the sample. The first survey was conducted in 2001. Data on agricultural production and income of agricultural holdings concern the last season (2000-2001) [Möllers, 2006; Möllers et al., 2009]. The second survey was conducted in December 2011, data on income of agricultural holdings are relating to the year 2010.

Structural changes in agricultural holdings for engagement of production factors include changes in the scope of employment of factors of production: labour expressed in the productive power of labour in annual working unit (AWU), all land use and agricultural land in use in utilized agricultural area (UAA), capital in hardworking assets and herd size in livestock units (LU). AWU is calculated using the methodology in the census of agricultural holdings in 2000 [Dernulc et al., 2002]. The income in the sample of agricultural holdings is calculated as the sum of incomes by source of incomes. Income from agriculture is the difference between revenues from agricultural activities and costs (variable and fixed costs). It also includes net income from forestry activities. Income from agriculture is the sum of incomes from livestock, crop production, other agricultural resources (services and rental of machinery) and state subsidies. All revenues from sales and the value of domestic consumption are taken into account among the revenues of livestock and crop production. The off-farm incomes include incomes from supplementary activities on the farm and incomes from off-farm employment. Other allowances of members of agricultural holdings include social assistance, cash contributions from relatives and pensions.

Other revenues of agricultural holdings taken into account cover incomes from securities, partnerships, gambling, rents and late payments. Real incomes of agricultural holdings in the year 2000 are calculated using the harmonized index of consumer prices between the years 2000 and 2010 [SORS, 2012]. In this context, the year 2010 is used as the base year. Relative incomes of agricultural holdings are the quotient of real income of agricultural holdings and the number of members of agricultural holdings.

Analyses of differences of arithmetic means between 2000 and 2010 or between the municipalities of Škofja Loka and Gorenje vas-Poljane are made by t-test and use the Statistical Package for the Social Sciences (SPSS). Analysis of the differences between the socio-economic types of agricultural holdings is based on analysis of variance.

2.3. Results

Structural changes in agricultural holdings in Škofjeloška area are confirmed by reducing the number of agricultural holdings due to the exit of agricultural holdings and a change in socio-economic types of remaining agricultural holdings. The speed of structural change, expressed in percentage of the reduction in the number of agricultural holdings, was in 2000-2010 half slower for Škofjeloška area than the average in Slovenia and was different in areas with a variety of natural resources and with different level of economic development. In the municipality of Škofja Loka structural changes were almost twice as fast as in the municipality of Gorenje vas-Poljane. The differences between the municipalities and other analysed areas are primarily attributable to natural conditions for agricultural production, which is reflected in the quality of agricultural land and the extent of less-favoured areas for agricultural production (hilly and mountain areas). In 2000-2010, the number of mixed farms and farms in the abandonment was reduced, while increased the number of supplementary farms and pure agricultural farms. Increasing the number of pure farms is mainly attributed to retirement of farm heads and their spouses.

Structural changes in agricultural holdings based on changes in income diversification have been confirmed [Knific and Bojnec, 2014]. Incomes from agriculture, for most of agricultural holdings six years after Slovenia's accession to the EU, are not sufficient for survival. The income situation of agricultural holdings in 2000-2010 for the majority of agricultural holdings has relatively deteriorated despite higher real state subsidies for agricultural activities.

Structural changes in agricultural holdings have been also confirmed based on changes in the allocation of factors of production [Knific and Bojnec, 2015]. This is presented for land, labour, farm holders, capital, and livestock herd. In the 2000-2010 period, total area of land, in management and operation, by agricultural holdings, decreased by 3%. Reduction of the total land area is attributed to the sale of agricultural land for construction purposes. Most of the land in the management and operation of agricultural holdings in 2010 represented land with forests (61%) and agricultural land (38%), and only 1% of it was barren land.

In the case of labour, the scope of work of the members of agricultural holdings in AWU was in 2010, compared to 2000, smaller for population of agricultural holdings by municipalities, pure and supplementary farms and farms in abandonment, while in mixed and the elderly farms it increased, mainly due to the increased volume of work of holders of farms. This result is attributed to technical progress, which substitutes labour and agricultural activities of retired farm

holders. In mixed farms these changes are mainly due to changes in socio--economic type of two-thirds of mixed farms. The most important work force in agricultural holdings dealing with agricultural activities remains the core of labour in agricultural holding, which carry out more than four-fifths of work in agricultural activities in agricultural holdings. From the core of labour on agricultural holdings are the most active holders of agricultural holdings, which in 2000 and 2010 carried out about half of all the work in agricultural activities. In 2000-2010, the volume of the leased or employed labour in agricultural holdings has increased by two-fifths, but the total did not exceed one-twentieth of labour activities in agricultural holdings dealing with agricultural activities.

In the case of features of holders of farms, their average age in 2010 was 56 and compared with 2000 it increased by slightly less than one year. The youngest holders were on supplementary farms and the oldest on elderly farms. The average age of holders of farms has increased in pure farms by more than three years and in farms in the abandonment by a little more than a year, while in the supplementary farms it has declined by just over one year. Structural changes in agricultural holdings, which in 2000-2010 are reflected in an increase in the age of the holder of farms, are disadvantageous especially if retirement of holder of a farm does not lead to a successful transfer of the farm to his successor.

The group of holders of agricultural holdings in the Škofjeloška rural area in 2000 and 2010 is dominated by holders with off-farm employment, retired holders and holders of the farm with employment status of a farmer. In 2000--2010, the share of retired holders increased, and decreased the proportion of holders with employment status of a farmer. The proportion of retired holders has almost halved. Agricultural holdings by municipalities differ slightly by the employment status of the holder. The group of holders of agricultural holdings from the Škofja Loka municipality in 2000 and 2010 was dominated by the holders with the status of a farmer, while the group of holders of agricultural holdings of the Gorenje vas-Poljane municipality by the holders with non--agricultural and off-farm employment. The number of retired farmers has increased in pure farms. Structural changes in agricultural holdings in 2000-2010 are reflected by a reduction in the number of holders with employment status of a farmer and increasing number of retired holders. The latter has mostly increased in pure farms.

General and agricultural education level of the holders of agricultural holdings in 2000-2010 has improved. The highest general education level in the years 2000 and 2010 fell to holders of farms in abandonment, followed by the holders

of supplementary farms and mixed farms. Holders of pure farms and supplementary farms had the highest agricultural education level. In terms of structural changes in higher agricultural and general education level of holders they are favourable, since an increase in human capital makes more effective use of information and decision-making regarding the use of funds, including state subsidies, and new technologies [Boehlje, 1992; Goddard et al., 1993; Huffman and El-Osta, 1997; Lin, 1991; El-Osta and Morehart, 1999; Bojnec and Dries, 2005]. As regards agricultural holdings in Škofjeloška rural areas this has been somewhat more reflected in the supplementary farms than in pure farms.

The structure of working capital in agricultural holdings in 2000-2010 has changed by the scope of equipment of farms with more powerful farm mechanization and equipment, which require higher power of tractors to drive them. The total number of tractors has slightly decreased primarily due to a reduction in tractors of low-power (up to 37 kW), while the number of tractors of high power (over 60 kW) increased, mainly in farms which sell their products to the market to a greater extent. The number of machines for arable land has decreased, which is due to their greater capacity. There was a slight increase in the volume of lease of services with use of agricultural mechanization.

Structure of agricultural holdings by the size of the herd in LU in 2000--2010 has changed, but the changes between the municipalities are different depending on a variety of natural resources and the socio-economic types of farms. The size of the herd in LU is slightly more than one-tenth higher in agricultural holdings in the municipality of Škofja Loka, while in agricultural holdings from the municipality of Gorenje vas-Poljane has not changed. The burden of agricultural land, expressed by a factor of LU per UAA, in the 2000-2010 period, somewhat decreased in agricultural holdings from the municipality of Gorenje vas-Poljane. In 2010, agricultural holdings from the municipality of Škofja Loka on average had almost 9.5 LU per farm, while farms from the municipality of Gorenje vas-Poljane little more than a third less. The volume of LU in 2000--2010 dropped for non-commercial farms, while for commercial farms, which sell more products on markets, the volume has slightly increased. Changes in the size of the herd in LU suggest structural changes in agricultural holdings, which are reflected by the increasing number of relatively larger commercial farms (over 30 LU per farm), on the one hand, and a group of farms without LU or with a small number of LU (between 0 and 2 LU), on the other side. Differences in structural changes between commercial and non-commercial farms are attributed to the phasing-out of the non-commercial livestock farms and increasing economies

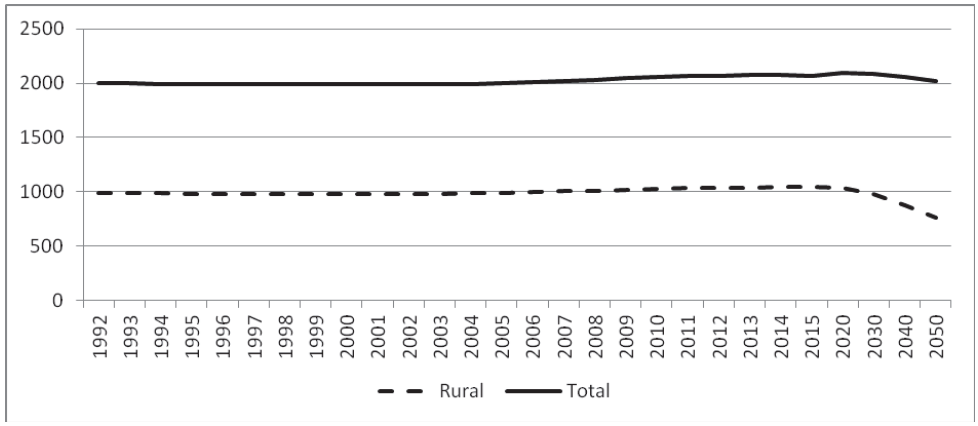
of scale in livestock production in LU (more than 30 LU) on specialized cattle farms. Differences in structural changes between the municipalities are primarily attributable to better natural conditions for agricultural production in the municipality of Škofja Loka than in the municipality of Gorenje vas-Poljane, and production specific subsidy payments for extensive breeding of female cattle that limit load on UAA with LU.

2.4. Conclusions

This paper presents the results of the research on implications of the effects of Slovenia's accession to the EU on structural changes in agricultural holdings in the case of the Škofjeloška hilly areas in Slovenia. Agricultural holdings are analysed according to different natural conditions for agricultural production, economic development of areas and socio-economic types of farms. The effects are studied based on the analysis of income diversification of agricultural holdings and allocation of factors of production to agricultural holdings in the years 2000 and 2010. We have identified structural changes between the years 2000 and 2010, while the changes between the municipalities with different natural conditions for agricultural production are different, mainly in the speed and partially also in the direction of structural changes in agricultural holdings. We found differences in structural changes between agricultural holdings by socio-economic types and between commercial (pure, mixed and additional or supplementary farms) and non-commercial farms (farms in the abandonment and farms with elderly persons), and in particular differences in the direction and extent of structural change. The observed *non-economic objectives* explain the relatively slow structural adjustment of agricultural holdings, while *economic objectives* explain a dependency of decision of holders of commercial farms on incomes of agricultural holdings and the inevitability of income diversification of agricultural holdings with non-agricultural employment. The differences observed in the strategies of adaptation among pure farms and other socio-economic types of agricultural households further explain the reasons for the relatively slow changes in the structure of agricultural holdings. The results are transferable to other rural areas with similar natural resources and economic development level in Slovenia.

Appendix

Figure A1. Total and rural population in Slovenia
(estimates and projections in thousands), 1992-2050



Source: FAO (2014).

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Chapter III
Rationalisation processes, employment in Polish agriculture and directions of non-agricultural rural development

3.1. Introduction

In Poland rural areas include 291.4 thousand km^2. These areas constitute over 90% of the entire territory of the country. In 2011, according to the Central Statistical Office (CSO, Polish: *Główny Urząd Statystyczny, GUS*) 15,105.9 thousand people, i.e. 39.2% of the total population of Poland, lived in rural areas. As compared to 2002, when the previous national census was held, the rural population increased by 486.2 thousand people. The total population of Poland decreased at the same time by 281.7 thousand people. The increase in the rural population resulted from many factors, which include increasingly stronger trends of moving to rural areas, especially by relatively young urban residents.

According to the Central Statistical Office data rural areas in Poland are inhabited by a significant share of the country's population (over 39%). However, the share of non-farming families has been increasing since many years. The Institute of Agricultural and Food Economics – National Research Institute (IAFE-NRI, Polish: *Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej – Państwowy Instytut Badawczy, IERiGŻ-PIB*) research reveals that the last decades have brought a significant rise in the share of non-farming families in the general population of the villages surveyed. In the research sample of the population surveyed in 2011, the number of non-farming rural families, i.e. possessing no land or owning plots below 1 ha of agricultural land, represented over 60% of all respondents and was by 3 pp higher than six years ago. Thus, in relation to the period before the political transformation, the share of non-farming families in the surveyed population of rural families increased by nearly 20 pp. This process was primarily determined by a shift of

the rural population from agricultural activities and its professional activation in other sectors of the economy or the end of productive activity due to reaching retirement age.

In 2001-2010, according to the CSO, the balance of internal migration for the first time in the post-war period was beneficial for rural areas and amounted to 337.7 thousand people. Such a phenomenon is mainly affected by the process of settlement of urban residents in suburban localities, which in effect become an extension of the suburbs remaining outside the administrative borders of cities. A negative effect of this phenomenon often consists in disappearing of the unique natural and landscape assets (through urbanisation), and weakening of social relations typical for the countryside. A positive effect is economic development driven by increased demand and increased investment opportunities of local authorities, through the revenues from local taxes going to the local government (*gmina*) budget. The villages located away from the main urban areas, which usually constitute the voivodeship capitals, still face problems typical to the peripheral regions.

Transformations of the rural population did not only concern changes in their number and demographic structure, but they were also expressed in changes in the relationship between the people related to the farms (agricultural) and not having an agricultural property (landless). The field research of the IAFE-NRI shows, that along with the economic development progresses the process of disagrarisation of rural areas, which is expressed e.g. in a reduction of the size of the agricultural population to the advantage of the landless population.

A decrease in the number of people employed in Polish agriculture is one of the major factors in determining the pace of efficiency-oriented transformations in this sector. The acceleration of the desired structural transformations in agriculture requires a shift from agricultural employment to non-agricultural activities. The need to reduce agricultural employment and the shift of labour force from agriculture to non-agricultural sectors is an essential prerequisite for the improvement of the agrarian structure, the effectiveness of farming and the financial situation of not only farmers but also the rest of the rural population. As a result, the increased diversification of economic activity not only leads to the implementation of multifunctional agricultural and rural development, but also contributes to the modernisation of the entire economy [Tomczak, 2005]. This paper is an attempt to analyse selected issues concerning employment in Polish agriculture such as: economic activity of people related to agriculture, scale of involvement of farm managers in agriculture, unused labour resources in agriculture and conditions for the development of entrepreneurship as non-agricultural rural development directions.

Research findings presented in the paper are based on various source data available, the main empirical material being the findings from field surveys conducted regularly by the Institute of Agricultural and Food Economics – National Research Institute, mostly from the 2000 and 2011 studies. The survey covered, in both mentioned years, more than 8 thousand rural households (both farming and non-farming) located in 76 villages across Poland. These are long-term studies carried out periodically (every 5-6 years) in the same 76 villages from different regions of the country. Places for study were chosen deliberately so that they reflected the actual socio-economic characteristics of rural areas and their residents. Every separate study sample comprised ca. 0.2% of the actual number of agricultural households (families). In 2011, the study included nearly 9 thousands of rural households. The results of surveys carried out on a similar sample, mainly in 2000 and 2005, were used as a reference point to determine the dynamics of developments. Research results from field studies were supplemented with the public statistics of the Central Statistical Office (CSO).

3.2. Economic activity of people related to family farms

A family agricultural holding is a specific place of work, since it operates primarily thanks to the work of people associated with it. At the same time, a reasonable use of family labour force is one of its tasks. For this reason and due to the nature of agricultural production (seasonal nature of work and its periodic accumulation), the need for agricultural family members to engage in production activity is relatively large, yet very diverse. That is why people associated with individual agricultural holdings [Zegar 2006] have higher economic activity than the rest of the population. This thesis is also confirmed by the results of field studies and the scale of diversity is illustrated by the economic activity rate[7] of the populations selected in the labour market (Table 3.1).

Having analysed developments in the economic activity rate, it can be concluded that each surveyed population was increasingly less active in the labour market in the period concerned. These trends were particularly strong in the group of the rural population, especially following the EU accession. Consequently, data from field studies reveal that in 2011, 67.3% of people aged 15+

[7] The economic activity rate is the share of the employed and jobseekers in the total population (of the group concerned). As regards the analysed community of the agricultural population, the rate was at most only about 0.7 pp above the employment rate. However, the difference gradually decreased to reach 0.3 pp in 2011. This is due to the family organisation of labour dominant in agriculture. This means that open unemployment among the agricultural population is not only relatively small, but also follows a downward trend.

related to a user of a family farm were economically active, compared to the economic activity rate in 2005 which stood at 79.6%. This means that the economic activity rate of the farming population in 2005-2011 decreased by 12.3 pp, which is almost 2.1 pp per year on average. Thus, the drop in the economic activity of the population in question, recorded at the time, was twice higher than that of 1992-2005, when the average decline in the economic activity rate of the agricultural population reached 1.0 pp. The decline in economic activity was mainly associated with a lower level of involvement of the learning youth, women and post-working age people in family agricultural activity.

Table 3.1. Developments in the economic activity of the selected groups of the population in Poland

Year	Economic activity rate (%)		
	population		
	urban*	rural*	including the farming population**
1992	59.5	65.5	93.3
1996	56.4	60.3	90.7
2000	55.8	57.5	89.1
2005	54.2	56.0	79.6
2011	50.6	53.7	67.3

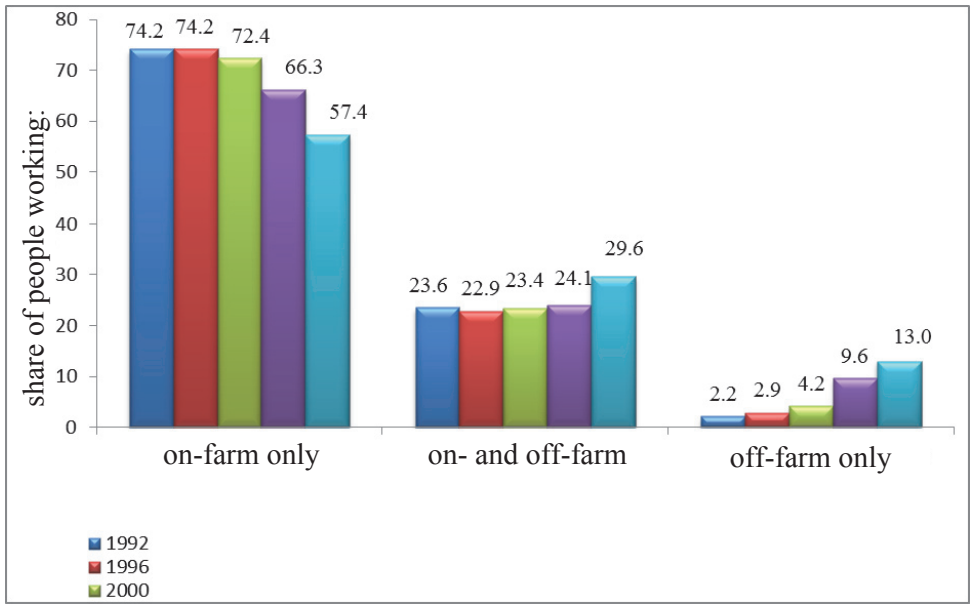
*Source: based on * LFS results for selected periods: Aktywność ekonomiczna ludności Polski w latach 2003-2007, CSO and Podstawowe informacje o sytuacji demograficzno-społecznej ludności Polski oraz zasobach mieszkaniowych. Wyniki Narodowego Spisu Powszechnego Ludności i Mieszkań 2011, CSO, Warszawa; ** The IAFE-NRI surveys of 1992, 1996, 2000, 2005 and 2011.*

Developments in the structure of employment by place of work were relatively minor. The share of people working in their individual agricultural holdings decreased slightly (from 74.2% to 72.4%). Nevertheless, the share of those employed exclusively off a family farm in the total working farming population almost doubled. The affected group of the working farming population was still small (4.2%). In parallel to these trends, a relatively constant share of people working on and off their family farm was observed (Figure 3.1).

Along with the advancement of adaptation of the Polish economy to operate under competitive conditions, the diversification of economic activity of the farming population notably strengthened. This was largely due to increasing employment opportunities in Poland and abroad. As a result, 57.4% of working members of farming families in 2011 were engaged only in their own agricultural activity and 13.0% – exclusively off their family farm. In 2005-2011, the share

of the employed from farming families combining their economic activity with working on and off their units – although previously stable – slightly increased (from 23.6% to 29.6%).

Figure 3.1. Developments in the structure of the agricultural population by place of work



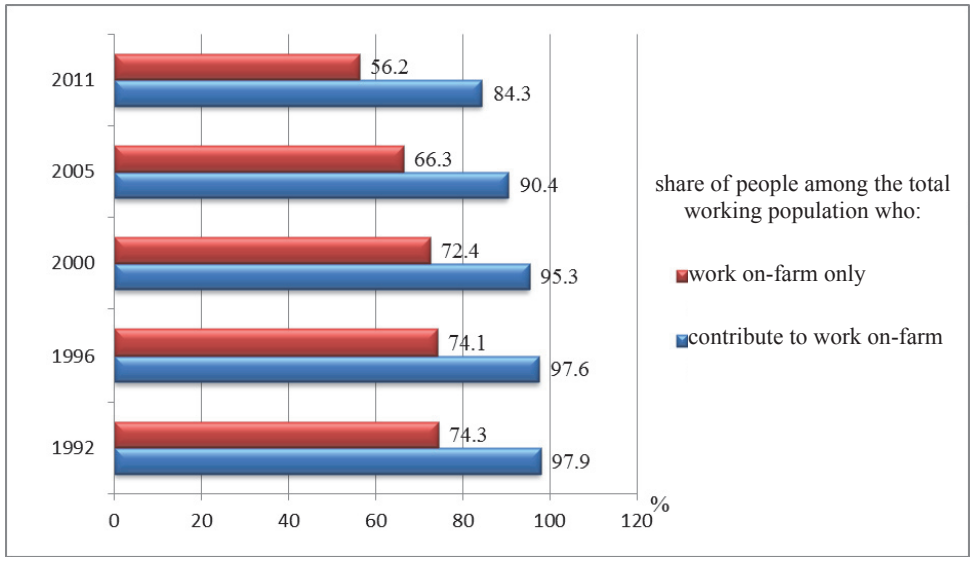
Source: based on the IAFE-NRI surveys of 1992, 1996, 2000, 2005 and 2011.

The research conducted proves that the scale of agricultural activity has a bearing on opportunities for the rational use of labour resources of a family with a user of an individual agricultural holding, which translates into the amount of earned income from work on a family farm. Consequently, this justifies differences in the advancement of diversification of economic activity of the agricultural population associated with particular groups of agricultural holdings. This is evidenced by, e.g., the share of the employed exclusively in agricultural production growing along with the area of a holding, which still determines the volume of production and the amount of agricultural income under Polish conditions.

In accordance with data from field studies, the diversification of economic activity of people related to larger area family agricultural holdings accelerates. However, just like earlier, the share of those working exclusively on a family farm in 2011 grew from 39.6% (39.0% in 2005) in the group of units with 1-2 ha of agricultural land to 79.4% (82.0% in 2005) in units of 30 ha and larger.

In summary, transformations in the structural distribution of the population by place of work were continuous in nature and clearly intensified after 2000. The ongoing transformations indicate that a growing number of people from farming families begin to actively seek employment alternatives, often completely giving up work on a family farm. There are trends to rationalise employment and hire only needed resources in an agricultural holding. This process is proven by a decreasing number of family members engaging in work on a farm. This thesis is also confirmed by the dwindling importance of a family farm as a place of economic activity for the rural population, especially as an exclusive place of work (Figure 3.2). These trends accelerate along with the advancement of functioning of our agriculture under market conditions and in the EU economic structures.

Figure 3.2. Importance of an individual agricultural holding as a place of economic activity of the farming population



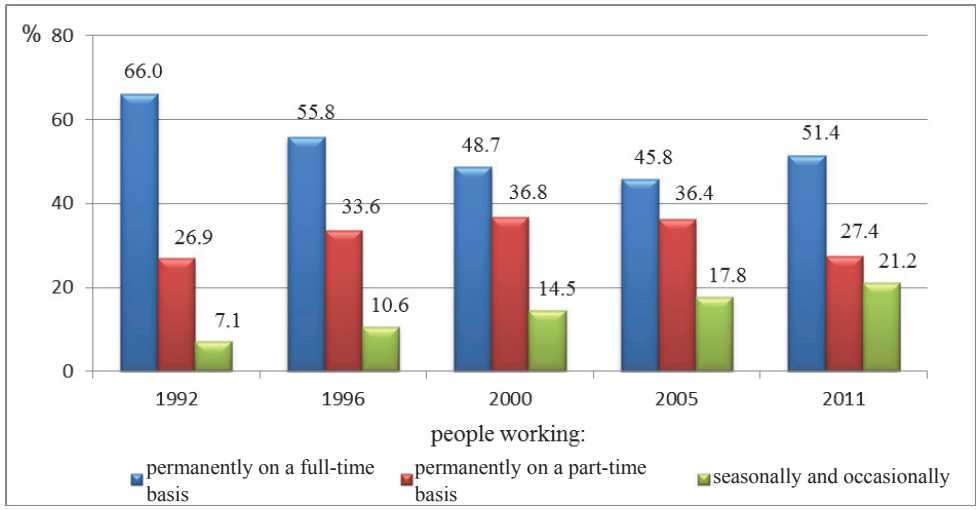
Source: based on the IAFE-NRI surveys of 1992, 1996, 2000, 2005 and 2011.

Despite this decline, in 2011, the majority (84.3%) of economically active farming family members aged 15+ continued to work in their agricultural holdings, being the only place of employment for over half of them (56.2%).

Nevertheless, it should be noted that the share of people contributing to work on their own farm in 1992-2011 decreased on average by 0.7 pp per year, while the share of people from farming families engaged in work on a farm in

2000-2011 declined on average by 1 pp per year. As regards those working only in a family agricultural holding, the corresponding rates were about 0.9 and 1.5 pp, respectively. Furthermore, the research reveals that the drop in the population engaged only in agricultural activity brought also changes in its structure in terms of the amount of work performed (Figure 3.3).

Figure 3.3. Transformations in the structure of people working only on a family farm by amount of work performed



Source: based on the IAFE-NRI surveys of 1992, 1996, 2000, 2005 and 2011.

The rate of these transformations was different in the specific periods concerned, so did their directions. After all, it can be concluded that the transformations in the amount of work performed by the population engaged only in agricultural activity were primarily reflected in a decline in the share of permanent full-time farm workers (from 66.0% to 51.4%) and a 3-fold increase (from 7.1% to 21.2%) in the share of those seasonally or occasionally engaged in agricultural activity. In 1992-2011, there were no changes in the share of permanent farm workers, but working less than 8 hours a day (26.9-27.4%).

In short, the trends of changes in the location of economic activity of the agricultural population surveyed are confirmed by the diversification of its economic activity and the professionalisation of employment in family agricultural holdings. Despite these changes, they also document a still relatively large group of people contributing fairly little to work. The size of this group proves the scale of the untapped labour potential of the farming population.

Pursuing the most optimal use of labour resources is one of the key tasks of agricultural holding managers. Given the family character of agricultural holdings in Poland and the relatively strongly fragmented area structure, the decisions of managers in this respect include not only the scope of involvement of family members in running the activity, but also the level of involvement of a farm manager. More than two-thirds of managers of individual agricultural holdings surveyed in 2011 worked only in their own holding, and one-third combined this work with economic activity in the non-agricultural labour market. This share has been on an upward trend for years. The data of 2000 reveal that the share of such people constituted less than one-quarter of the total described group. At the same time, the share of redundant labour resources among all the employed in an individual agricultural holding is still rather high.

The research also proves dependence between the number of people combining work on their own farm with paid employment in non-agricultural sectors, and the size of their unit (Table 3.2).

Table 3.2. Managers according to the involvement in work at a farm and size groups

Share of persons	Total	Size group (ha of UAA)							
		1-2	2-5	5-10	10-15	15-20	20-30	30-50	50 and more
working on-farm only	64.0	50.6	55.8	67.2	75.1	74.8	83.4	84.1	81.1
combining on-farm and off-farm employment	36.0	49.4	44.2	32.8	24.9	25.2	16.6	15.9	18.9

Source: based on the IAFE-NRI survey data of 2011.

In accordance with data from field studies, the share of managers of smaller farms, i.e. with up to 2 ha of agricultural land, active in the non-agricultural labour market constituted almost half of all respondents in this group in 2011. This share decreases along with an increase in the size of the unit owned, while even in the case of the largest-area farm, i.e. above 20 ha of land, every sixth manager, on average, combined work in an agricultural holding with non-agricultural employment. Similar relations may be observed in the case of holding managers, who combine this function with non-agricultural employment. In general, those choosing that type of economic activity worked outside their own agricultural holding. This group amounted to 90% of the total number of people combining these two forms of employment. When analysing dependences

between farm areas and the economic activity of managers, it should be noted that permanent full-time agricultural workers represent no more than 41% of all respondents. Others do not engage in farm work, as there is no need for it, or they are active also in the non-agricultural labour market.

Despite the ongoing diversification of economic activity and rationalisation of employment in individual agricultural holdings, there are still many of those contributing relatively little to work, being redundant from the perspective of the size of their agricultural activity. The size of the population is a measure of hidden unemployment in the agricultural sector whose level, in accordance with field study findings, is estimated at 500-550 thousand people.

3.3. Unused labour resources in family farming

The statistics available reveal that the scale of unemployment registered among the rural population is relatively small, as it affects 45-50 thousand farmers. This is due to the existing legal environment and the family organisation of labour in agricultural activity. On the one hand, this form of organisation results in significant economic activity of farming family members, and, on the other, in the persistence of a large group of people contributing little to work. This group is largely redundant in terms of its agricultural activity, since its withdrawal would be without prejudice to the level of agricultural production (marginal productivity of their work is close to zero) and basically is a measure of unused labour force in agriculture (hidden form of unemployment). What is important is not the prevalence of this phenomenon, but mainly its scale. If the level of redundant labour resources in holdings significantly exceeds the level of the so-called hygienic unemployment[8], there are usually (intensified) difficulties in modernising agricultural structures [Woś, 2000].

The IAFE-NRI research proves a high level of latent (hidden) unemployment on family farms, which is structural in nature and results from limited earning opportunities for those who actually fail to find employment in their agricultural holdings. Given the level of technological development, this segment of the population is redundant in agriculture and has no employment opportunities in non-agricultural sectors, most often due to its inadequate qualifications and limited mobility. The rate of hidden unemployment is hard to measure due to its complex nature. Even the so-called actual unemployment in the family economy

[8] An unemployment rate of 3-4% is assumed as a limit value for hygienic unemployment, i.e. the share of the unemployed in the total number of people able to work (employed and unemployed) will not exceed this rate.

cannot be clearly determined. For this reason, any method to determine the level of redundant labour resources carries imperfections that arise mainly from the complexity of the issue.

Moreover, data from the IAFE-NRI field studies make it possible to determine the redundant population according to a subjective criterion[9] and objective reasons. Any method to determine the level of redundant labour resources carries certain imperfections that arise mainly from the complexity of unemployment in family holdings. In determining this phenomenon on the basis of survey findings, the unused working time was considered the most appropriate criterion[10]. Under this condition, based on survey findings, it can be estimated that 500-550 thousand working age people redundant from the perspective of farm needs (being a measure of estimated hidden unemployment in the agricultural sector) worked exclusively or principally in individual farming in 2011, accounting for about 16% of the working age population working exclusively or primarily in individual agricultural holdings (rate of redundant labour resources).

Improving the competitiveness of Polish agriculture, also in terms of resources, involves creating an appropriate group of economically strong farms. This goal can be achieved upon accelerating agrarian transformations, which entails increasing the rate of liquidation of agricultural holdings and diversification of economic activity of people working in individual agricultural holdings and, consequently, decreasing (by about 50%) the number of employees in individual farming. The pace of this process will be conditioned by an increase in the number of jobs for the rural population. A strong competitive pressure, resulting from operating under the European market conditions, made agricultural holdings further specialise and concentrate their means of production. Therefore, the demand for labour force is gradually decreasing, thus causing the population to date engaged solely in agricultural activity to more often take action to diversify its sources of income.

[9] All surveys were performed with reference to the opinion of managers on the usefulness of work of working age family members in agricultural production, assuming that the farm concerned is to operate at least at the current level.

[10] All working age people working exclusively or mainly in an individual agricultural holding for at most three months per year were considered redundant, so did those working for over three months per year, but no more than 3 hours a day.

3.4. Conditions for the development of entrepreneurship as non-agricultural directions of rural development

Interest in rural efforts to undertake non-agricultural economic activity is primarily due to looking for ways to improve the economic situation of the rural population, mitigating the effects of actual and hidden unemployment in rural areas, and finally improving agricultural structures [Sikorska, 2013].

The survey data of 2011 show that 79% of all the villages surveyed provided access to workplaces employing local people. In total, their number amounted to 2,020, half of which were located within the villages surveyed. On average, there were 4-5 companies in the vicinity of every village, each of them employing 6 residents on average. It is important that half of them, on average, were employed in a facility located in the village in which they reside. Spatial differences in the prevalence of workplaces within the villages surveyed were associated primarily with a different density of manufacturing companies, the number of which ranged from 1 to 3 in the neighbourhood of the village concerned, depending on the macroregion analysed. The number of service facilities operating in all macroregions, excluding the Western-Central macroregion, comprised 2 enterprises.

Having analysed the structure of workplaces by their business profile, it can be concluded that service facilities were the most frequent, accounting for 42% of all entities employing residents of the villages surveyed in 2011. The remainder included mainly manufacturing companies (32%). In addition to these two main groups, there were also public entities related to the functioning of the local government, education and healthcare (25.6% of all workplaces in rural areas). However, the analysis of the demand for labour generated by facilities of different types proved a major role of manufacturing enterprises, employing almost 60% of all those who work in companies located within the villages surveyed. Service facilities and other entities provided employment for about 20% of all people working in proximity to their place of residence.

In terms of the development of local labour markets, newly established manufacturing enterprises generated the greatest demand for labour. A large share of service companies in the total number of enterprises was characteristic of local entrepreneurship and, apart from manufacturing facilities, was an important determinant of the local demand for labour. Such activity was highly flexible in adapting to market demands and to developments in general economic conditions, as evidenced by the relatively greatest fluctuation in the number of newly established and liquidated service facilities, as compared to other companies.

Changes in the business profile of companies located near the villages surveyed were accompanied by the changing ownership structure of sectors. In 2011, almost 78% of workplaces were privately owned. At the same time, state entities represented only a small share, while cooperatives were negligible. Furthermore, research findings comprised data on the total number of people employed in workplaces operating within villages (i.e. not only those from the villages surveyed), making it possible to analyse enterprises according to the generally applied staff headcount criterion. In terms of the local labour market, it is important insofar as it often happens that several companies operating in a specific area provide employment for the majority of people working outside agriculture, thus determining the socio-economic situation of the population of the entire area (except for employment, also by creating demand, stimulating the development of regional trade and services). This is confirmed by the research conducted, which shows that there was one or two workplaces in the vicinity of about 5% of the villages, surveyed by the IAFE-NRI, employing over one-third of all gainfully employed residents of surrounding areas.

Apart from the possibility of employment in nearby workplaces, there were families in 81% of the villages surveyed, whose members conducted own economic activity. Non-agricultural activity is an important driver of local economic development and a significant source of income for families which, e.g. as a result of mounting competition, lost their agricultural livelihood or opportunities for non-agricultural employment. It is often associated with agricultural activity and conducted based on household assets (including the use of buildings, equipment). The research revealed that own economic activity was more characteristic of non-agricultural rather than agricultural families. The research shows that the self-employed have substantial liquidity, especially in high unemployment areas. As regards the underdeveloped local labour market and resulting risk for individuals starting their own business, mainly people with poor alternative income opportunities launch their own economic activity. Agricultural families are less motivated to undertake a new economic initiative, as opposed to non-agricultural families.

Most frequently, economic operators entered the business sector. In particular, they opened groceries and general stores. The involvement of agricultural families in itinerant trade activities (usually itinerant trade in clothing) and trade in their own agricultural products at marketplaces or fairs deserves attention. On average, two (mostly agricultural) families in each of the villages surveyed were engaged in this type of activity. They accounted for 77% of all non-stationary traders. Such activity was largely based on selling own farm-grown

and home-grown (as regards non-agricultural families) products. The foregoing is evidenced by a high share (up to 89%) of families selling agricultural products, i.e. eggs, poultry, meat and vegetables, at marketplaces, within their holding and at roadside stands. The remaining assortment offered by non-stationary traders comprised clothing (almost 7%) and household chemicals (less than 3%). Home and marketplace trading activities were rarely turned into a fixed point of sale. In 2005-2011, only 8% of all non-stationary trading families from the villages surveyed changed itinerant trade into a store.

It should be emphasised that local institutional infrastructure is crucial in supporting rural development. It includes, *inter alia*, standards, principles, organisational structures and mechanisms of action that form grounds for local development. Although local governments constitute the core of this system, information and advisory organisations play a very important role in terms of activation of rural communities, especially Agricultural Advisory Centres, local business centres (foundations, associations, incubators), consulting and advisory points or loan funds. After Poland's accession to the European Union, regional branches of the Agency for Restructuring and Modernisation of Agriculture, which now serve as a paying agency under operating policy instruments to support agriculture and rural areas being a source of information and advice for the rural population in this regard, have gained in importance.

In a world of growing importance of non-agricultural economic activity of the rural population, future development of rural areas in Poland will be closely related to strengthening the residential (housing) function of rural areas, whose importance will grow along with the development of communications and community infrastructure, conditioning the quality of life in rural areas. The research shows that the size of the labour market will be limited not only by distance, but also travel time to a place of employment. The development of infrastructure not only hinders the migration of the rural population to urban areas, but also intensifies the opposite trends: the flow of the urban population to rural areas (primarily, however, to villages located in the vicinity of agglomerations or along major transportation routes) and circular spatial mobility.

In the 2014-2020 perspective, transformations in the socio-economic structure of the rural population will be associated primarily with a growing share of the population in the whole rural population that does not run agricultural holdings. A forecast of changes in the size of the rural population by 2035 [GUS, 2009] assumes positive net internal migration as regards rural areas, mainly as a result of the outflow of the population from large cities to rural areas,

especially in proximity to agglomerations. Therefore, the change in the functions of rural areas will make the share of the rural population in the national population steadily increase despite the decline in its size. These changes will be associated with an increase in the non-agricultural rural population.

3.5. Conclusions

The last decades have brought an increasing decline in the share of people working in agriculture among all employees. The scope of their involvement in agricultural activity is also changing. In 2000-2011, the population of permanent full-time farm workers decreased, while the number of those working only occasionally is gradually increasing. Hence, the growing group of the so-called farming population not involved or involved to a limited extent in agricultural work, staying economically inactive or looking for non-agricultural employment opportunities. The research conducted revealed that transformations in the structural distribution of the population by place of work were continuous in nature and clearly intensified after 2000. The ongoing transformations indicate that a growing number of people from farming families begin to actively seek employment alternatives, often completely giving up work on a family farm. There are trends to rationalise employment and hire only needed resources in an agricultural holding. This process is proven by a decreasing number of agricultural family members engaging in work on a family farm. This thesis is also confirmed by the dwindling importance of a family farm as a place of economic activity for those related to it, especially as the only place of work.

However, agricultural holdings in Poland comprise a large group of units not allowing for securing satisfactory income, thus persons formally acting as managers are minimally involved in agricultural activity. At the same time, it can be concluded that a large share of managers of small agricultural holdings with small-scale or without commodity production is part of a strategy to support their families, which involves optimising the structure of income of their members and also includes decisions on the economic activity of holding managers. The European agricultural model seeks to support holdings whose operation is important from the point of view of their functions in terms of the environment and the preservation of natural and cultural heritage. In this sense, the decisions of managers of small agricultural holdings to diversify economic activity while limiting work in their own holding can be seen as positive.

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Chapter IV
Development of Lithuanian rural regions towards knowledge society

4.1. Introduction

According to van der Ploeg [1998], rural development consists of a "balance of changing and stable elements" and that continuity and change have always characterized rural development [Van der Ploeg, 1998]. What kinds of changes are common for rural development in developed countries at the beginning of the 21st century? In our opinion the most decisive factor of social, economic, technological and cultural transformation in the 21st century is knowledge, which has influence on all spheres of human life.

Burton-Jones [1999] noted that the gap between rich and poor nations is accelerating under "knowledge capitalism". Knowledge-intensity can also lead to a growing gap within societies [Burton-Jones, 1999]. Knowledge-intensive dynamics of scale and scope induce mechanisms for the retention of wealth that are different from the dynamics of mass production. The increasing role of the service sector, notably, generates another dynamic [Barras, 1990]. Today's most advanced economies are fundamentally knowledge-based [Dunning, 2000] and the knowledge has become by far the most important factor determining standards of living – more important than land, capital or labour [Cooke, Leydesdorff, 2006]. Therefore, knowledge has influence on all spheres of human life.

This paper is devoted to examining main changes in Lithuanian rural regions and determinants of rural development important for creation of knowledge society in the past and in the future. Analysed period starts from the restitution of Lithuania's independence in 1990 and continues until recent days.

4.2. Knowledge – main resource of successful development of the economy and society

The 20th century is often described as a stage of post-industrial or knowledge society, where – compared to the industrial era which had lasted for several centuries – people found themselves in a world of completely different values. This is firstly related to the evolution of economic system, which differs dramatically from the preceding industrial phase. Those differences are rather prominent and they can be on a par with the previous fundamental transformation of economics called the "industrial revolution". In the present stage of the post--industrial society the factors of economic success are essentially different from those in the industrial society, with the difference being as great as that between the factors affecting the economic success of the agrarian and industrial society.

Sociologist Daniel Bell, in his book *The Coming of Post-industrial Society* published in 1973, was the first to use the concept of "post-industrial society", which became common in academic and later in everyday language [Bell, 1973]. Today, we can argue that the theory of post-industrial society has become one of the most widespread sociological theories of modern times. According to the advocates of the theory, the evolution of the human civilisation has three rather distinguished stages: pre-industrial/agrarian, industrial, and post-industrial with different principles of organization in each of them. To understand the concept of the new post-industrial stage, there were attempts to find a different name for this stage, which could best characterise key trends in social development. Various names were suggested, including those that gained the broadest recognition: "information", "organised", "conventional", "programmed", "experience", "dream" or "networking" society. Special theories were developed to justify them. The term "information society" turned out to be the most popular and it was broadly used not only in academic literature but also in public administration and business management. After a while it was, however, noted with criticism that the term "information society" is imprecise and thus it had to be replaced by "knowledge society". In 2004, a communiqué was adopted during the 32nd session of UNESCO's General Conference, where ministers and their authorised representatives welcomed the UNESCO's proposal to promote the concept of "knowledge society" rather than that of "information society": "Knowledge societies are about capabilities to identify, produce, process, transform, disseminate and use information to build and apply knowledge for human development".

Scientific arguments behind the concept of "knowledge society" said that the concept of "information society" tended to rely on the understanding of the industrial society and did not reveal the content of the new stage of human development. Information, just like any other production resource, can be and is used as property. Whereas knowledge differs from other production resources in the sense that it is inseparable from human mind. The management guru of the 20th century, Peter Drucker [1992], made a very clear distinction between information and knowledge when he argued that information can be found in books, whereas knowledge means ability to solve problems: "Knowledge like electricity or money is a form of energy that exists only when doing work". According to such knowledge conception, knowledge in modern society can be possession but it definitely may not be property, since neither the employer nor the society can have full control over knowledge. This characteristic of knowledge is considered to be the most important factor, which renders post-industrial society essentially different from the industrial or agrarian society. In the agrarian society, natural forces were the key restriction to the freedom of the economic activities, in the industrial society the freedom was restricted by social relations, whereas in the post-industrial society the main limiting factor is the subjectivity of the key production resource [Inozemcev, 2000].

The description of the key factor of production in the post-industrial society requires a clear distinction between information and knowledge. Information can be seen as an objective thing as it represents encoded knowledge recorded in material media. However, knowledge as such is a subjective production resource dependant on the achievements and willpower of an individual. This difference is rather effectively revealed by the knowledge classification into two types, which is prevalent in the theory and practice of knowledge management: *explicit* and *tacit* knowledge [Polyani, 1966; Nanoka, Takeuchi, 1995]. Tacit knowledge is knowledge held by a person that cannot be transferred by means of writing it down or verbalizing it. Explicit knowledge is less related to the context of its application, it is easy to document, automate and imitate. Tacit knowledge represents personal knowledge while organisations are trying to turn it to explicit knowledge of an organisation. In such conditions, the economy became human-centric and capable people using knowledge as a raw material are a critical success factors.

4.3. Main changes of rural development in Lithuania important for creation of knowledge society

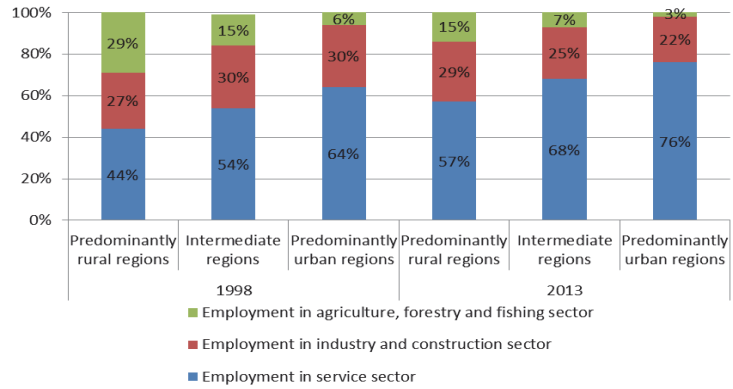
After the restitution of Lithuania's independence economic structure of Lithuania increasingly has gained more features of knowledge economy. This trend is characterized by changes in the employment structure. Increasingly important role in the economic structure of the employment was taken by the services sector. According to the data of the Lithuanian Department of Statistics, the number of employed in the services sector in 1998 amounted to 775.7 thousand people, and in 2013 it reached 854.1 thousand people, i.e. increased by 10.1 percent. At the same time, employment in other sectors during the analysed period significantly declined. In 1998, 427.9 thousand people were employed in the industry and construction sector, and by 2013 this number decreased by 15.2 percent – this year there were 362.7 thousand employed persons in this sector. Even more rapid decline in employment trends have been observed in the agrarian sector; the number of employed in the agriculture, forestry and fishing sector in 1998 accounted to 285.9 thousand people. From 1998 to 2013, it decreased by more than 2.6 times and 108.9 thousand people in 2013 were employed in agriculture, forestry and fishing sector.

It is important to highlight that impact of the service sector for the employment trends increased not only in the predominantly urban but also in predominantly rural regions. In 2013, employment in service sector in predominantly rural regions accounted for 56.9%, and from 1998 to 2013 it increased by 12.9%. Changes in employment structure were similar as in intermediate and predominantly urban regions, where employment in the service sector in this period increased by 13.8% and 11.7%. While role of agriculture for income of rural people in predominantly rural regions over the analysed period remained high – employment in agriculture sector in 2013 accounted for 14.6% but from 1998 to 2013 the share of agriculture in employment structure in predominantly rural regions decreased even 2 times (Figure 4.1). So the employment growth in the service sector absorbed the loss of jobs in the agricultural sector and reduced the risk of unemployment in Lithuanian rural regions.

Growing employment levels in the service sector increased its contribution to creating the gross value added. In 2012, the share of the service sector in the gross value added created by Lithuanian economy amounted to 65.0 percent. However, the situation in different regions was different. Analysis of the regional economic structure reveals that vigorous changes related to the knowledge economy were more apparent in Lithuanian predominantly urban regions: from

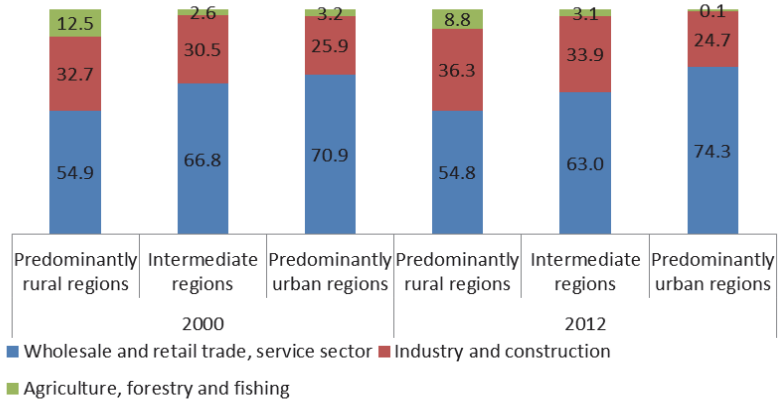
2000 to 2012, the share of GVA created by the service industry in those regions increased from 70.9 to 74.3 percent. Since 2000, the share of gross value added created by the service industry in predominantly rural regions remained rather stable and in 2012 it amounted to 54.8 percent, i.e. it was 0.1 percentage point lower than in 2000 (Figure 4.2).

Figure 4.1. Employment in service, industry and construction, agriculture, forestry and fishing sectors in the regions of Lithuania in 1998 and 2013, in percent



Source: calculations based on the Lithuanian Department of Statistics.

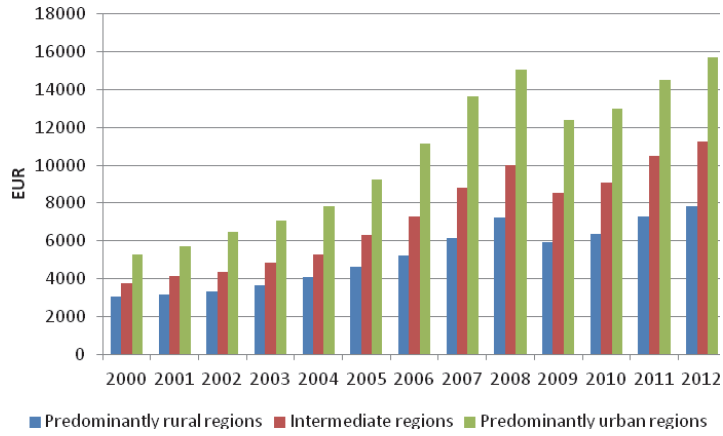
Figure 4.2. Share of GVA in the regions of Lithuania in and 2012, in percent



Source: calculations based on the Lithuanian Department of Statistics.

Despite the fact that economic structure of Lithuanian predominantly rural regions changed substantially, their contribution to the GDP declined. In 1995, 43.9% of GDP was created in predominantly rural regions, and in 2011 this number reached 30.2% only. The gap between predominantly rural and predominantly urban regions in the GDP per capita remained high. GDP per capita in predominantly urban and intermediate regions has been growing much faster than in predominantly rural regions. From 2000 to 2013 this indicator increased 3 times in predominantly urban and intermediate regions and in predominantly rural regions – only 2.6 times. GDP per capita of predominantly rural regions in 2000 accounted for 81% of intermediate regions and 57.9% of predominantly urban regions. In 2012, this ratio reached 69.3% and 49.7% only (Figure 4.3).

Figure 4.3. GDP per capita at current prices in the regions of Lithuania from 2000 to 2012, EUR



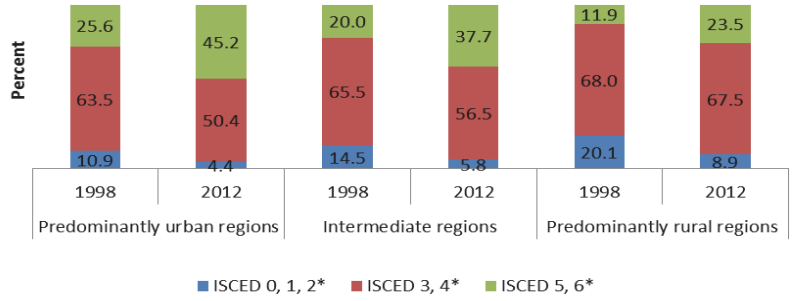
Source: calculations based on the Lithuanian Department of Statistics.

The above-mentioned differences are caused by the nature of the services being developed in predominantly rural regions. Further analysis of the economic structure in predominantly rural regions reveals that here a major part of services sector represent services with low requirements for staff qualification (retail, transport, accommodation and catering services). In 2000, wholesale, retail, transport, accommodation and catering services in predominantly rural regions came up to 37.3 percent of the service sector, while in 2012 the share of services in this group shot up to 50.9 percent. In predominantly urban regions it was lower

and stood at 44.6 percent. Public administration, defence, education, health care, and social work services were in the second place in the service industry. In 2012, as compared to 2000, the contribution of this group to the GVA created by the service industry in predominantly rural regions fell from 32.2 percent to 25.4 percent, while in 2012 this indicator in predominantly urban regions was 20.5 percent.

Mostly the types of services provided in predominantly rural regions depend on lower education levels of the rural population. Although the education level of rural citizens was growing faster, the education-related advantage of the citizens of predominantly urban and intermediate regions over rural population remained significant. In 2012, only 4.4 percent of the population in predominantly urban regions and 5.8 percent of the citizens of intermediate regions had lower education. In predominantly rural regions population with such education accounted for 8.9 percent. Citizens with the highest level of education came up to 45.2, 37.7, and 23.5 percent, respectively (Figure 4.4).

Figure 4.4. Educational attainment of the population (aged from 25 to 64) in the regions of Lithuania in 1998 and 2012, in percent



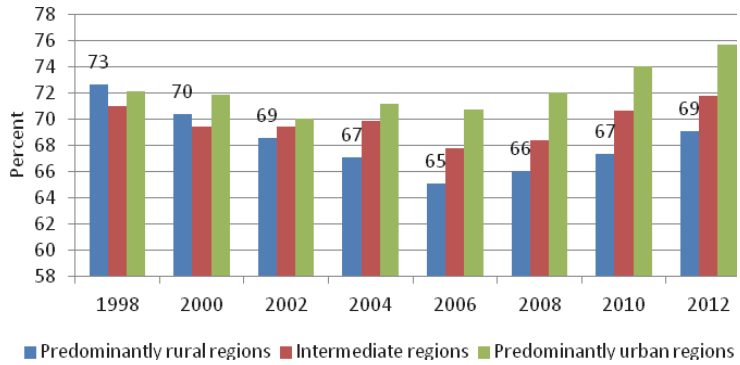
* ISCED 0 – pre-primary education, ISCED 1 – primary education or first stage of basic education, ISCED 2 – ISCED 3 – upper secondary education, ISCED 4 – post-secondary non-tertiary education, ISCED 5 – first stage of tertiary education, ISCED 6 – second stage of tertiary education.

Source: calculations based on the Lithuanian Department of Statistics.

Furthermore, insufficient educational background of the rural population was conductive to unemployment and low levels of labour force activity. Over the whole period of independence, the unemployment levels among rural citizens have been a pressing problem, which further increased during the Russian crisis in 1999 and when the global financial crisis unfolded in 2009. In 2010, the unemployment

level in predominantly rural, predominantly urban, and intermediate regions was 19.4, 12.8, and 10.1 percent, respectively. High unemployment levels in predominantly rural regions had a reducing effect on the motivation of inactive rural citizens to look for employment opportunities. It is worth mentioning that in the first year after the restitution of Lithuania's independence the level of labour force activity in predominantly rural regions was higher than in predominantly urban and intermediate areas. However, since 1998 it has been gradually decreasing, although the trends in other regional groups were contrary. A slight growth in the activity of the labour force in predominantly rural regions started only in 2006; however, the gap between predominantly rural regions and predominantly urban and intermediate regions further increased to the disadvantage of rural areas (Figure 4.5).

Figure 4.5. Activity rate of labour force (aged from 15 to 64) in the regions of Lithuania from 1998 to 2012, in percent



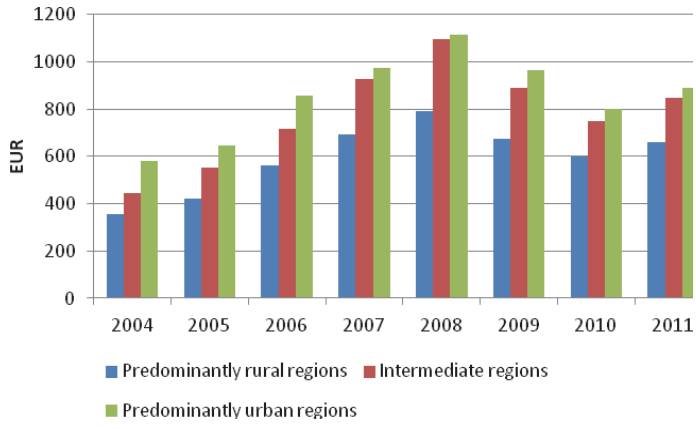
Source: calculations based on the Lithuanian Department of Statistics.

Furthermore, the lower levels of education among rural citizens resulted in lower levels of innovation in enterprises of predominantly rural regions. Companies in predominantly urban areas demonstrated higher levels of innovation. According to the data of the Lithuanian Department of Statistics, from 2008 to 2010, 40.6% of all enterprises operating in predominantly urban regions affirmed that they were involved in innovation, while innovative companies in intermediate regions accounted for 30.9%. In predominantly rural regions such companies amounted to 24.8 percent of all enterprises.

In predominantly rural regions, economic activities that were focused on businesses requiring lower qualifications led to lower incomes of the citizens of those regions. In 2004, the household revenue in predominantly rural areas stood

at only 61.2 percent of the household revenue in predominantly urban areas and in 2011 this indicator swelled to 74.1 percent. Moreover, it is worth mentioning that the gap between the household revenue in predominantly rural and predominantly urban areas was significantly reduced by subsidies, i.e. direct payments received by rural citizens engaged in agricultural activities. In the analysed period the amounts of money allocated to direct payments kept increasing and, accordingly, the support received by farmers resulted in a faster increase in household revenues in predominantly rural regions. The data of economic accounts for agriculture reveal that in 2004 the total amount of direct payments from the EU and Lithuanian budget accounted for EUR 174.3 million, as compared to EUR 355.4 million in 2011, i.e. it was 2.1 times higher. Thanks to this support, the growth rate of household revenue in predominantly rural areas was higher than in predominantly urban regions due to the bigger numbers of people engaged in agricultural activities. In 2004-2011, the revenue in predominantly rural regions increased 1.9 times, compared to 1.5 times in predominantly urban regions. According to the data of the Lithuanian Department of Statistics, in 2004 the average household revenue in predominantly rural, intermediate and predominantly urban regions was EUR 354.6, EUR 444.0, and EUR 579.0, respectively. In 2011, the average household revenue in predominantly rural, intermediate and predominantly urban regions was EUR 660.4, EUR 850.0, and EUR 891.7, respectively (Figure 4.6).

Figure 4.6. Household income per month in the regions of Lithuania from 2004 to 2011, EUR



Source: calculations based on the Lithuanian Department of Statistics.

In forecasting the future revenue level among rural population it is important to take into account that the support-based growth of household revenue is risky source of revenue due to potential policy changes. The data of economic accounts for agriculture show that even in a productive year, e.g. 2012, direct payments measured up to 50 percent of business revenue. In other years, from 2004 to 2013, they ranged from 60 to 80 percent, except the loss-making years of 2006, 2008 and 2009, when the share of subsidies in the revenue exceeded 100 percent. Therefore, to achieve the highest possible level of farm self-sufficiency, the agricultural activities in small and medium farms in particular should be gradually reorganised with a focus on the success factors of the knowledge society.

Knowledge economy is often associated with a part of the service sector that deals with research, particularly in scientific fields, and activities providing information services, such as computing, ICT, and consultancy offering advice to businesses. As a rule, the numbers of such businesses in predominantly rural regions are lower than in predominantly urban regions. In Lithuania most of the research potential – universities, scientific research institutes, and parks of scientific technologies that precondition innovation and application of scientific knowledge in practice – is located in predominantly urban and intermediate regions, just like most of the companies rendering information and consultancy services. To promote knowledge economy in predominantly rural regions, it is appropriate to boost the efficiency of knowledge use in traditional sectors [Snitka et al., 2007], and, in particular, in agriculture. In Lithuania agriculture continues to represent an important source of revenue for a large number of people living in predominantly rural areas. However, reckless industrialisation of agriculture leads to unemployment and emigration. With all rural policy efforts being previously focused on the promotion of industrialisation of agriculture, currently it is important to shift the emphasis towards as many as possible service elements being acquired by the agricultural sector. The service sector in predominantly rural regions can also be successfully developed by using local natural resources in rural tourism services.

Research conducted in Lithuania revealed that there are growing numbers of farms that are engaged in non-industrial agriculture, process their products on the farm to secure product exclusivity, create direct sales channels or render services. Such activities tend to be pursued by farmers with higher level of education and business experience. Compared to farmers who use the industrial farming model, they are more active in the field of product and organisational innovation on their farms [Vidickienė, Melnikienė, Gedminaitė-Raudonė, 2013].

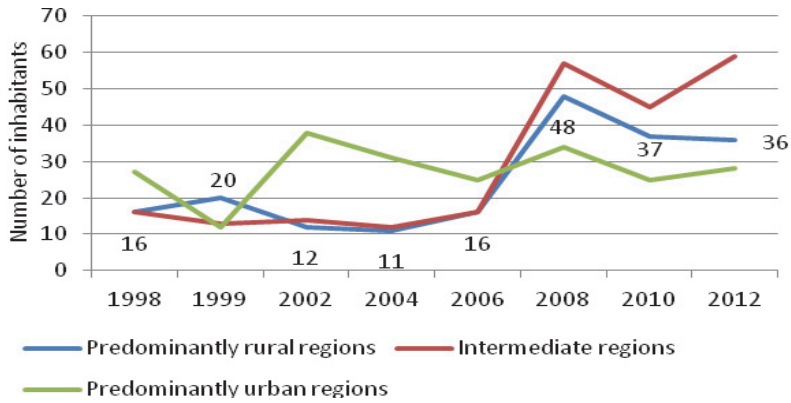
The sector of rural tourism services also showed a significant growth. In 2003, there were 355 homesteads providing rural tourism services in Lithuania, and in 2013 this number reached 620, i.e. the number of rural tourism homesteads during this period increased by 1.7 times. Nevertheless, the Lithuanian Department of Statistics is not collecting data on homesteads impact on employment and incomes of rural people, some findings on the positive impact for these indicators can be highlighted based on the results of increased variety of services provided at the homesteads and volume of assortment. From 2003 to 2013 the number of visitors of rural tourism homesteads increased 3.6 times from 76.9 to 275.8 thousand people. And gradually expanded the range of services offered. In addition to accommodation services, hosts of farmsteads are increasingly offering fishing, mushroom and berry picking, hunting, boating and water cycling, horse riding. Homesteads are equipped with baths, swimming pools, outdoor fireplaces, gazebos, greenhouses, sports courts, billiard rooms, libraries for tourist relaxation. Rural tourism homesteads also organize conferences, seminars and children's entertainment. Visitors have the opportunity to participate in community events taking place nearby the homestead site: ethnographic festivals, concerts and sport events. Some hosts also offer to taste local organic products, organize events to promote special activities, such as shows on how to batter butter, press cheese, make sausages, bake bread, etc. In this way, rural tourism homesteads benefit from tacit knowledge of local people and help to develop other local businesses.

New agribusiness management and marketing models and rural tourism services were fostered by significantly improved possibilities of the rural population to use information and communication technologies (ICT). The broadband Internet implementation in rural areas project RAIN and measures designed to increase the computer literacy of rural people resulted in a rapid increase in the use of information technologies among the population of predominantly rural regions. From 2005 to 2013 the share of rural people using the Internet increased 2.3 times and the growth rate was higher than in intermediate or predominantly urban regions. According to the data of the Department of Statistics, in 2013 rural people who had been using the Internet in the last three months accounted for 68.5 percent (of all persons aged 16-74) and this share was higher than in intermediate regions.

Furthermore, successful broadband Internet projects created possibilities for Lithuanian people living in predominantly rural areas to enjoy the advantages of a permanent job. In this regard, business activities in predominantly

rural regions could be diversified as the broadband Internet offered job opportunities no matter where the working place is located. On the other hand, it served as a stimulus for highly educated urban people to move to the rural areas. However, insufficient information about those processes prevents from making a quantitative assessment of the impact of this measure. Statistical data reflecting the extent of work from home could be an indirect evidence of the measure impact. In Lithuania there is a growing trend towards working from home. In 1998, 27.6 thousand of the employed in Lithuania were working from home and by 2012 this number jumped almost twofold and reached 52.7 thousand. Likewise, the number of persons working from home in predominantly rural regions increased 1.7 times: from 10.4 thousand to 17.5 thousand. A comparison of different regions in terms of the number of persons working from home per 1,000 employed shows that predominantly rural regions are pretty much ahead of predominantly urban regions. In 2012, there were 36 persons working from home per 1,000 jobs in predominantly rural regions and 28 persons in predominantly urban regions. However, this form of work organisation gained the greatest popularity among the people of intermediate regions, where the said indicator came up to 59 persons (Figure 4.7). Even though the numbers of persons who opt for the new forms of work are growing, it has to be admitted that such nature of work is preferred by only a small part of people.

Figure 4.7. Inhabitants working at home per 1,000 employed inhabitants in the regions of Lithuania from 1998 to 2012



Source: calculations based on the Lithuanian Department of Statistics.

In the future, business development in predominantly rural regions, to draw the maximum benefits from the factors of knowledge economy, should, firstly, rely on the platform for innovation, which emerged in the 21st century and can be described as a search for innovative methods to contribute to food security. "Food markets are becoming more differentiated on the basis of a range of socially constructed food quality criteria" [Marsden, 1998, p. 107], resulting in the emergence of new quality-food markets in addition to (and superimposed on) the existing anonymous mass food markets [Renting, Marsden, 2003, p. 393]. The factors of the knowledge society have a significant effect on their development. "A key characteristic of new supply chains is their capacity to resocialise or respatialise food, thereby allowing the consumer to make new value judgments about the relative desirability of foods on the basis of their own knowledge, experience, or perceived imagery" [Renting, Marsden, 2003, p. 398].

The new food markets should constitute segments of larger markets. For instance, direct sales can result in creating new small markets in the farm shops, farmers' farms, and farmers' cooperatives engaged in retail business, product preorder systems, etc. Such newly created markets take into account the specific features of the location, the characteristics of the needs of the consumers and producers and their interrelation. That allows to use different price levels, to reduce the costs of transaction, and to change the split-up of value added in the parts of the value chain, etc. [Bernstein, 2010, Van der Ploeg, 2010]. The shortest possible food supply chain leads to enhanced consumer confidence when the consumer has direct relationship with the farmer and buys products bypassing intermediaries. In developing direct sales, a great potential lies in a wide range of tourism measures: various fairs, exhibitions, product sales during cultural events or tours dedicated to the introduction of a special product, e.g. wine, beer, lavender routes.

Development of local food markets and implementation of innovative patterns of trade are particularly relevant in relation with Lithuania due to its farm structure with dominating small farms, which emerged after the restitution of Lithuania's independence. At the beginning of 1996 there were 147.6 thousand farmers in Lithuania. According to the size of land owned by the farmers, farms under 5 ha accounted for 27.7 percent, 19.9 percent of farms owned 5.1-10 ha of land, farms with 10.1-20 ha came up to 14.4 percent, 3.8 percent of farms held 20.1-30 ha of land, and only 2.0 percent of farms were larger than 30 ha. In 1996, the average farm size was 8.7 ha [Aleknavičius, 2008]. Small landownership has prevailed during the whole period of independence. Before Lithuania's accession to the EU, the agricultural census of 2003 counted 272 thousand farms

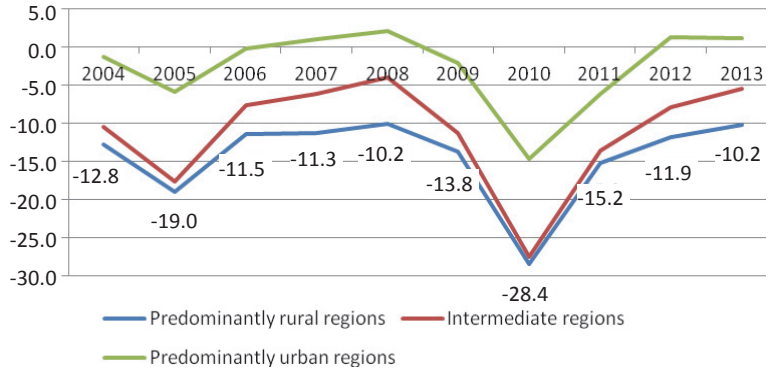
(farmers' farms, companies, and family farms). In point of fact, 62.0 percent of all the farms owned less than 5 ha and the average farm size in Lithuania was only 9.3 ha of agricultural land. The agricultural census of 2010 revealed that the number of farms had increased and reached 364.4 thousand of farms engaged in agricultural production. Changes in the structure resulted in an increase in the average farm size to 13.8 ha and 199.9 thousand farms (i.e., 54.9 percent) owned over 1 ha of agricultural land. However since the census in 2003, the number of farms with under 1 ha shrank by more than 26 percent. As compared to 2003, the biggest drop in numbers was among farms with 2-5 hectares and 5-10 hectares of utilized agricultural land (37% or 49.8 thousand farms and 30% or 17.3 thousand farms, respectively).

Projects aimed at social innovations, which are particularly important in less dense predominantly rural regions, could also contribute to the development of the knowledge society in Lithuanian predominantly rural regions, as the main problem incidental to the process of providing services is related to the shrinking numbers of consumers resultant from population decline.

After the restitution of the independence, Lithuania has lost its population. In 1996, the population of Lithuania stood at 3.6 million, while in 2012 this number dropped by 17.1 percent and was under 3 million. Predominantly rural regions lost this important resource in terms of knowledge economy faster than predominantly urban and intermediate regions. From 1996 to 2012, there was a 22.4% reduction in the population of predominantly rural regions compared to 7.8% in predominantly urban regions and 18.6% in intermediate areas. A faster population decline in predominantly rural regions happened for two principle reasons: the policy of industrialisation of agriculture and farm consolidation intended to help farmers in acquisition of modern machinery, pursued after the restitution of independence in Lithuania, and the possibilities to enjoy the benefits of free movement of workers within the EU, which emerged after the EU accession. During the whole period from 2004 to 2013, net migration per 1,000 inhabitants in predominantly rural regions was negative and ranged from 10 (in 2008 and 2013) to 28 (in the recession year of 2009).

The values of net migration in intermediate regions were also negative, but in terms of population decline they approached predominantly rural regions only in 2009. By comparison, predominantly urban regions managed to preserve a positive value of net migration in some of the years (Figure 4.8).

Figure 4.8. Net internal and international migration per 1,000 inhabitants in the regions of Lithuania from 2004 to 2013

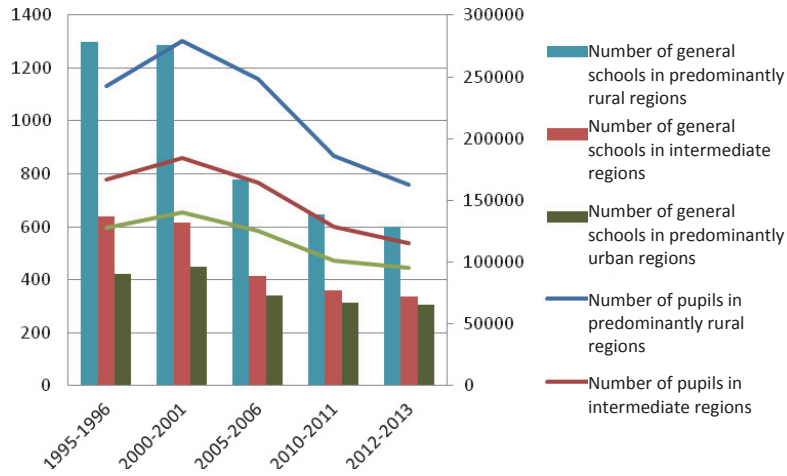


Source: calculations based on the Lithuanian Department of Statistics.

Population decline represents a highly unfavourable factor under the circumstances of knowledge society as it results in growing cost of service. To reduce the costs of providing services, local authorities tend to concentrate the provision of services in several institutions of the region and abandon small loss-making service access points. Small outermost towns are affected by such developments in the first instance. The said processes were illustrated by the data on service provision locations after of the restitution of Lithuania's independence held by the Lithuanian Department of Statistics. In small towns, the numbers of pre-school institutions drastically reduced. In 2012, their number stood at only 18 percent of that in 1991, i.e. it shrank more than fivefold. Furthermore, due to a significant decrease in the numbers of students, local authorities failed to keep some of the secondary schools. In 2000, the numbers of students, which were growing during the first years of independence, started to decline in all regions. In predominantly rural regions the decline rates were particularly rapid. In 2012, the number of general education students in predominantly rural, intermediate and predominantly urban regions stood at only 58.3%, 62.8% and 67.9% of the student number in 2000. That consequently meant that small schools were closed and the total number of schools decreased. In 2012, the numbers of schools in predominantly rural, intermediate and predominantly urban regions accounted for 46.6%, 54.6%, and 67.7% of the total number of schools in 2000, respectively (Figure 4.9).

The number of libraries under the authority of the Ministry of Culture, which were located in towns with less than 3,000 inhabitants, gradually reduced: from 1990 to 2012 it shrank by 25 percent. The numbers of municipal libraries were also declining: in towns with population under 3,000 they decreased by 5 percent.

Figure 4.9. Number of general schools and number of pupils in the regions of Lithuania from 1995 to 2013



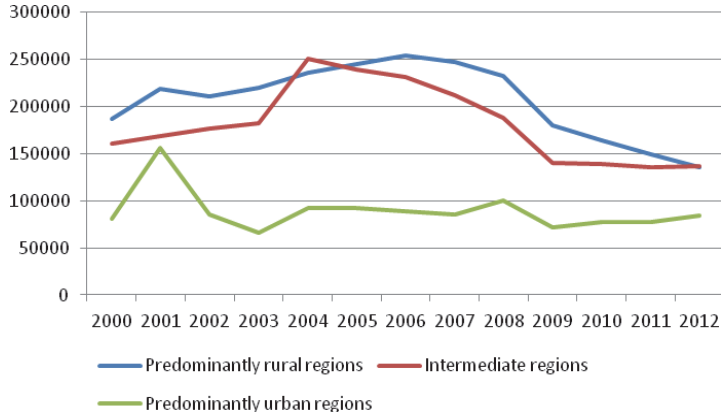
Source: calculations based on the Lithuanian Department of Statistics.

Due to the decreased availability of services in the area where they live, people were forced to go to bigger towns and cities. However, the population decline had a limiting effect on the availability of transport services to local population. From 2000 to 2012, Vilnius region was the only one to retain the passenger turnover in urban/suburban services and in 2012, as compared to 2000, passenger transportation in this predominantly urban region even increased by 3 percent. During the same period passenger turnover in intermediate regions fell by 15 percent and in predominantly rural regions it shrank by 27.1 percent (Figure 4.10).

The decreasing availability of essential services in the area where rural people live and consequently compromised quality of life are also described in the research lately published by Lithuanian scientists. Research reveals that due to the recently prevailing trend of a decrease in the number of all types of schools of general education the students experience difficulties with reaching the school and benefiting from non-formal education [Ratkevičienė, 2008]. Children who live

a longer distance away from school are less active in different sports, art or other out-of-class activities. Students who live closer to their school are in a more favourable position in choosing a preferred project team or an out-of-class activity. This, in turn, reduces the possibilities of the former students to develop their competencies required for social mobility among other things [Juodaitytė et al., 2012]. These days due to the lack of day centre facilities parents of school-age children face a number of difficulties with children care after school.

Figure 4.10. Passengers-kilometres by road of local (suburban) traffic route in the regions of Lithuania from 2000 to 2012, thousand passengers-kilometres



Source: calculations based on the Lithuanian Department of Statistics.

The lack of adequate public transport services becomes an impediment for rural population who want to see a doctor. Most people of predominantly rural regions, especially older persons or people with health problems would hardly reach a health institution, if at all, if they did not receive help from relatives, neighbours or other persons. Impediments to availability of outpatient services for patients arriving from a different area are also caused by the organisational procedures applied at the health care institutions: waiting lists for an appointment with health care specialists, queues at the health centres and doctors' offices, waiting lists for medical exams – all of those are among the main impediments of organisational nature. The said problems are related to working hours, which are often too short and inconvenient for the patients, and a lack of specialists, in predominantly rural regions in particular [Tamutienė, 2011].

Insufficient market size in predominantly rural regions holds back the establishment of private service companies. Low numbers of customers are the principle reason for the lack of main services that can make the life of rural population easier. Research shows that companies providing personal services, such as sewing, hairdressing, etc., are again in demand in rural areas [Jasaitis, Kriaučiūnienė, 2010]. A feasibility study of community business opportunities in Pakruojis region conducted by Aleksandras Stulginskis University (ASU) scientists in 2012 revealed that predominantly rural regions suffer a shortage of different services: landscape maintenance, help with providing fuel for their houses, garden work, transport, etc. [Study of community business opportunities in Pakruojis region, 2013].

The only service group, which enjoyed a growing trend in predominantly rural regions, was social services provided by municipalities at the homes of elderly and disabled persons. However the growth in the numbers of users of such services is related to the increasing numbers of elderly and disabled persons and thus the general level of service provision was not improving.

With the view of all the said problems, it is obvious that it is necessary to look for innovative ways of service provision in predominantly rural regions of Lithuania, which would make the services cheaper and readily available unlike the currently used centralised methods. Innovations are required in many areas: old people, the disabled, children, and health care, education system, personal and transport services, etc. Social and organisational innovation should not lie with public authorities alone: local communities should be encouraged to take an active part in such innovation process. Innovation projects can be initiated by people living in rural areas representing consumers' interests, who are unsatisfied with the existing accessibility and quality of service provision, and by service providers, e.g. rural teachers, librarians or medical staff, who are losing their jobs due to the decrease in numbers of service centres or financing.

4.4. Concluding remarks

To understand, why issues of knowledge society are currently challenging the development of predominantly rural regions and the mission of rural policy, requires the awareness that society is not a static entity, but an ever-changing one. Rural people of Lithuania, today, live in a society different from that of generations past. Despite the fact that over the last two decades economic and social system of Lithuanian rural areas has changed substantially, rural policy and support measures not always reflected the fact that society has entered into a new stage of evolution.

Approaches to Lithuanian rural development policy in the first decade of the 21st century were incomplete to push predominantly rural regions toward knowledge society. A more comprehensive agenda needs to go beyond information dissemination, trainings and discrete initiatives to include additional approaches.

These approaches should involve greater recognition of tacit knowledge and support rural economy and community transformations by new forms of partnership, coordination and participation, dealing with local perceptions, fostering innovations and social capital building. A failure to understand this may result in rural policy decisions that are no longer relevant to today's needs, much less tomorrow's. Moreover there seems to be a general need for ***further*** information and research relevant to rural policy strategies in knowledge society. Policy makers lack information on the best practices and skills to transform current rural development paradigm based on old model of thinking.

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Chapter V
Rural development in Hungary after the EU accession

5.1. Introduction: past rural development programmes

Apart from improving the competitiveness of agriculture, ensuring sustainable management of natural resources and public goods, the main objective of rural development programmes is to raise the quality of life and to reduce the negative effects of migration processes in rural areas [Potori et al., 2012]. The combined result of the preliminary assessment of the rural development programmes is that the estimated effects are of low level but in most of the cases they are significant [Fertő és Varga, 2013; Michalek and Zarnekow, 2012; Molnár et al., 2011]. The total budget of the rural development programmes (SAPARD, ARDOP, NRDP, NHRDP[11]) from 2004 to 2013 was EUR 6.7 billion, which exceeds the gross annual output of the Hungarian agriculture (the gross annual output on average for 2004-2013 was EUR 6.1 billion) (Table 5.1). Based on the classification the share of measures aiming at increasing directly the competitiveness of agriculture and food industry, maintaining and improving the rural environment accounted for 40-40 per cent, respectively; while those for improving the quality of life in rural areas accounted for 13.5 per cent.

The objective of Special Accession Programme for Agriculture and Rural Development (SAPARD) 2001-2004 was to prepare the agricultural and rural development schemes in the accessing countries for the EU accession. This was the first programme in which the implementation – together with the financial

[11] Special Accession Programme for Agriculture and Rural Development, Agricultural and Rural Development Operational Programme, National Rural Development Programme, New Hungary Rural Development Programme.

administration and posterior audits – was decentralised, i.e., carried out by the Member States; therefore, an accredited Paying Agency (the Sapard Agency) had to be established also in Hungary. The objectives of the Hungarian SAPARD promised complex programme-based developments concentrating on sustainability, integration and human resources development. The implementation, however, focused on the classical, intensive and competitive agriculture and neglected the social aspects, innovation and diversification of rural economy [Nemes, 2003].

Table 5.1. The EU co-financed Rural Development Programmes in Hungary, 2004-2013

Axis	Public resource		Payments	
	EUR million	per cent	EUR million	per cent
I. Competitiveness	2,934.6	43.6	2,131.0	43.0
II. Rural environment	2,338.1	34.7	1,949.1	39.3
III. Quality of life in rural areas	1,205.4	17.9	668.2	13.5
Technical Assistance	256.2	3.8	212.1	4.2
Total	6,734.3	100.0	4,960.4	100.0

Note: Data of SAPARD, ARDOP, NRDP and NHRDP as of 25 February 2014.

Source: Ministry of Rural Development (MRD), Agricultural and Rural Development Agency (ARDA).

From among the eight measures of SAPARD only three could be implemented as planned. These focused on development of agricultural enterprises (39 per cent), on development of processing of agricultural and fishery products (28 per cent) as well as on development of rural infrastructure (23 per cent). Implementation of more than 2,500 projects allowed financing of purchase of machinery of 76 thousand kilowatt, construction of grain storage capacity of 190 thousand tonnes, renewal of livestock farms for 88 thousand cattle and 450 thousand pigs as well as maintenance or renewal of some kind of architectural heritage in 124 villages. However, in the history of the Hungarian rural development a significant change occurred having an effect up to now regarding the local rural development institutional network at micro-regional level (SAPARD regions), the change in the way of thinking regarding the local networks, the strategy, the rural development officers employed, the problems, the development, the local and central budget. The other important institutional result was the SAPARD Office, which founded the base for the Paying Agency, the Agricultural and Rural Development Agency (ARDA) to be established later.

In Agricultural and Rural Development Operational Programme (ARDOP) 2004-2007 the Priority of "Establishing competitive raw material production in agriculture" accounted for the largest share (58 per cent). The Priority of "Modernization of food processing" accounted for 14 per cent, the "Development of rural areas" (Priority 3) amounted to 25.5 per cent. The measures of ARDOP supported mainly the modernisation and the upgrading of the technical conditions in agriculture but also, to a certain degree, contributed to an increase in the rural incomes, renewal of buildings and improvement of the human conditions of production. The results of ARDOP are the following: purchase of machinery of a total of 128 thousand kilowatt, the construction and renewal of livestock farms for 26 thousand cattle and for 343 thousand pigs. Agro-environmental and afforestation measures account for 82.9 per cent in the National Rural Development Programme (NRDP) 2004-2007. The measures of the NRDP raised mainly the awareness and had an opinion forming effect as well as contributed to the improvement in the environment and the quality of life in rural areas. About 35 thousand farmers received subsidies from the NRDP measures annually. The agro-environmental measures used two-third of the budget by providing subsidies to 24 thousand farmers for environment-friendly production. The total area affected was 1.5 million hectares.

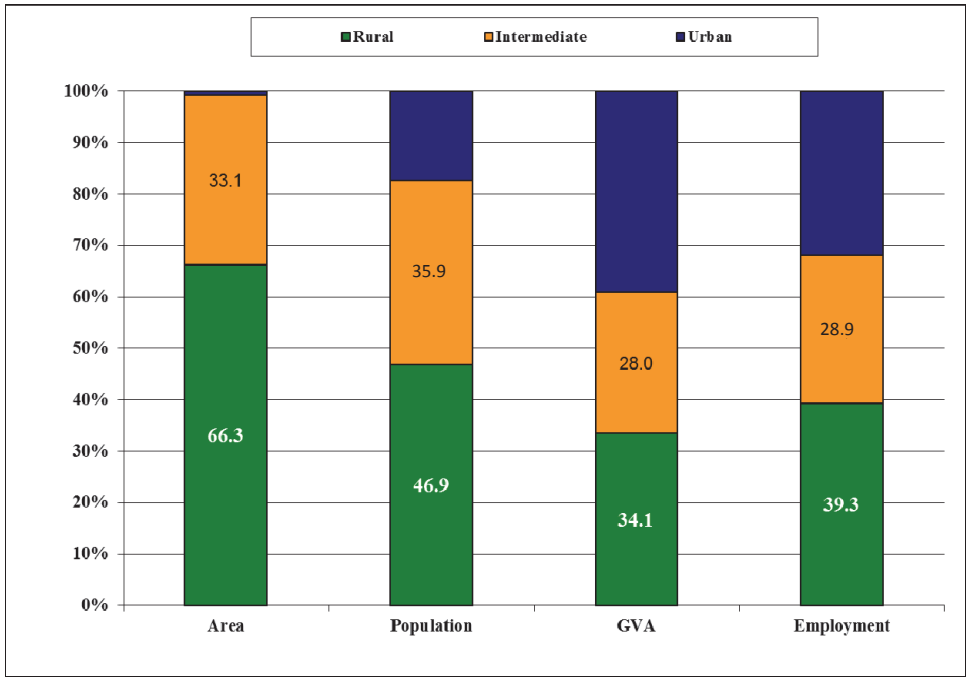
The Darányi Ignác Plan, launched as the implementation programme of the National Rural Development Strategy (NHRDP) 2007-2013, fundamentally focused on investment promotion and on increasing those environmental services, which generate agricultural surplus income. The budget of the programme was provided to measures for increasing directly the competitiveness of food processing (51.2 per cent), maintaining and improving the rural environment (32.4 per cent), as well as improving the quality of life in rural areas (13.1 per cent) and implementing the objectives of LEADER (3.3 per cent). The main measures account for three-quarters of the funds, of which two measures, that is, the modernization of farms and the agro-environmental payments, accounted for half of the total budget. In the NHRDP – despite the fact that two measures, i.e., the modernization of farms and the agro-environmental measures, accounted for half of the total budget – with its more diversified structure 11 of the most significant measures account for three--quarters of the total budget [MRD, 2013a].

5.2. Present state of rural areas in Hungary

Rural areas in spite of the large amounts of grants obtained remained in a disadvantageous position regarding the economic and social conditions. The Hungarian rural development helps to reduce the economic and social tensions

deriving from the low economic activity, unemployment and low income levels of the population in rural areas. Two-thirds of Hungary's territory is rural areas, where nearly half of the total population (46.9 per cent) live. The rural areas generate a third of the total GVA (gross value added) and provide employment for 39.3 per cent of the workforce (Figure 5.1). In spite of this, only a few people in rural areas can find jobs providing a living. The role of agriculture in direct employment is decreasing also in areas of agricultural dominance.

Figure 5.1. Main characteristics of rural areas in Hungary, 2011

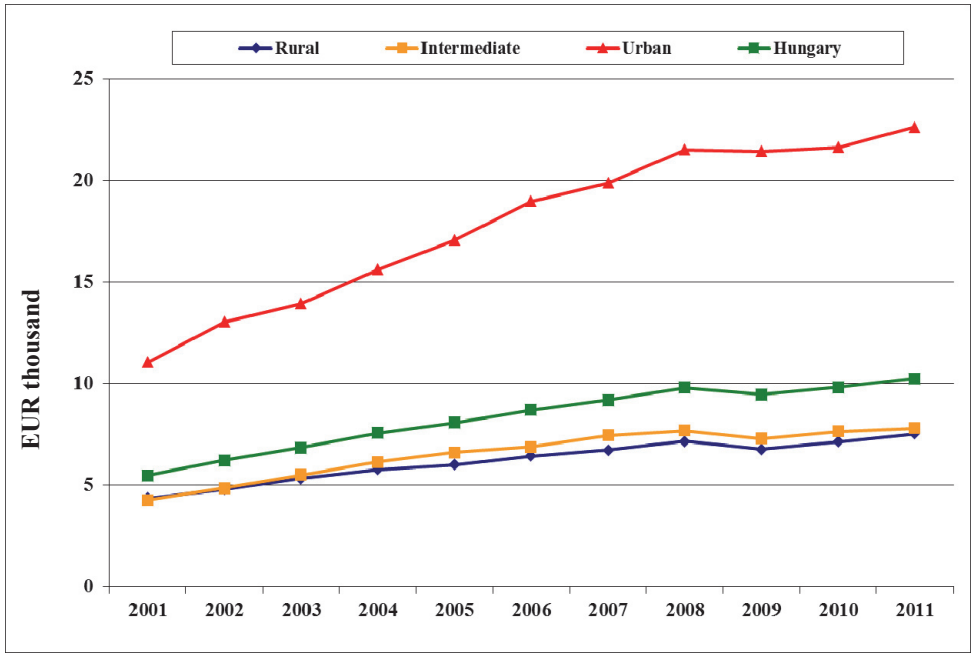


Source: Eurostat.

Due to the continuous development of infrastructure, the expansion and the improvement of basic services during the past decade, the regional disparities are reduced, the characteristic differences in lifestyle between rural and urban areas are increasingly disappearing, while the development of some rural economies – depending on the conditions – vary a lot. Beside the production resources and the distances from the markets the roles of the local retail stores, human and social capital, entrepreneurial culture, retail network and local governments are becoming more and more significant.

In recent years, the economic backwardness of rural areas has not diminished. The difference in GDP per capita (Figure 5.2) indicates well the economic backwardness. In rural areas the value of the index of 2011 is EUR 7.5 thousand per person, that is, it does not reach three-quarters of the national average (EUR 7.7 thousand per person) and is only one-third of the value of the index of Budapest (EUR 22.6 thousand per person). The growing backlog of the rural areas is shown by the economic inactivity of the rural population as well.

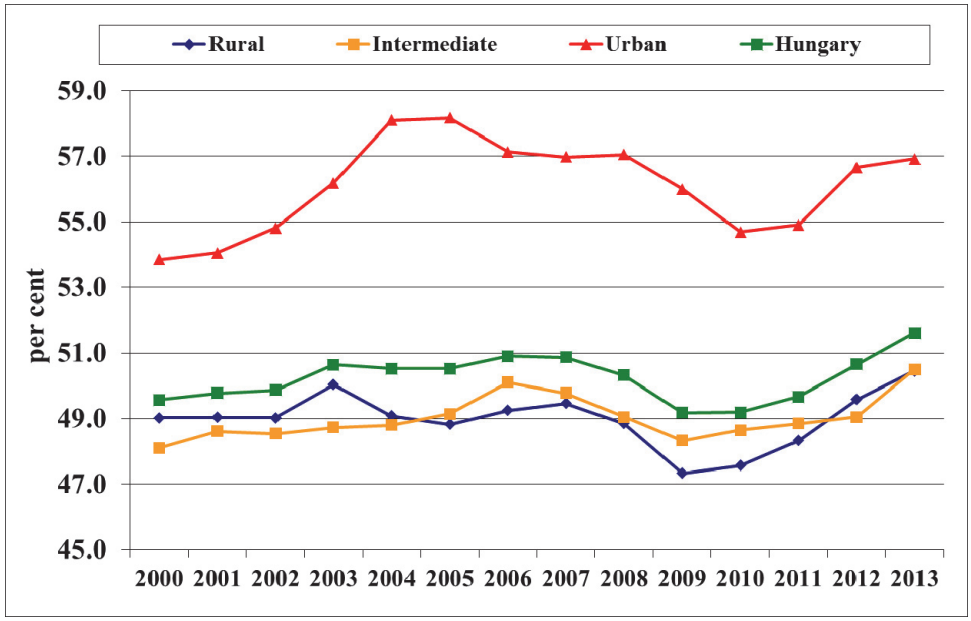
Figure 5.2. GDP per capita in rural areas in Hungary, 2001-2011



Source: Central Statistical Office, Hungary (HCSO).

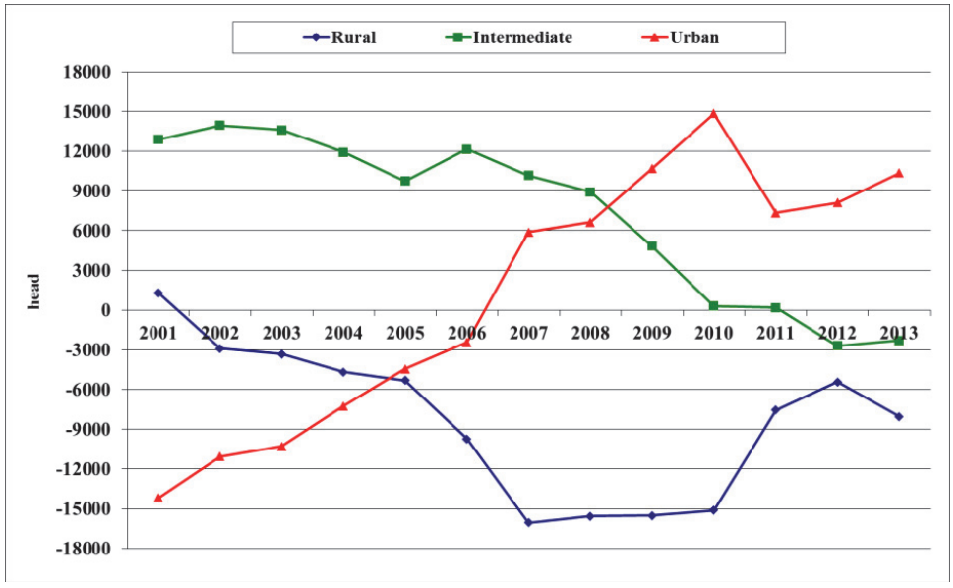
In Hungary the level of employment – similarly to the EU – is the lowest in rural areas (Figure 5.3). In the Hungarian rural areas the value is by 10 per cent lower than in the EU27. The employment rate especially in the eastern, north-eastern and southern-Transdanubian rural areas of the country is extremely low.

Figure 5.3. Rate of employment in rural areas in Hungary, 2000-2013



Source: HCSO.

Figure 5.4. Internal migration in rural areas in Hungary, 2001–2013



Source: HCSO.

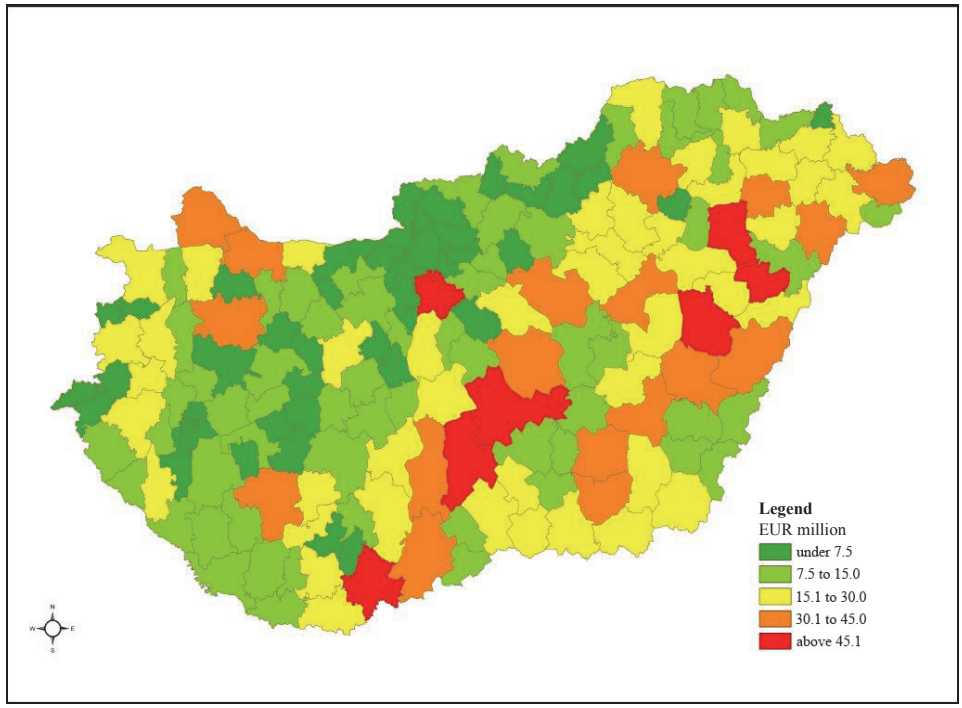
In rural areas agribusiness traditionally plays a major role in the use of labour and income generation. This indicates the sector's contribution to gross value added, which from 2000 to 2010 decreased in rural areas from 9.3 per cent to 6.6 per cent, but it is still nearly twice the national average (3.6 per cent).

The index of 2011 in rural areas increased again. The increased employment in agriculture in recent years was primarily due to the simplification of the legal and tax background of casual employment and tightening labour inspections, this means that, this was a result of the "whitening" of illegal black employment.

5.3. Main results of the National Rural Development Strategy (NHRDP)

The implementation of the programme was basically determined by the general economic environment. By evaluating the investments implemented through subsidies of Axis 1 of the NHRDP the market-oriented use of the funds seems to be extremely risky since the economic depression. By summarising the NHRDP subsidies by micro-regions (the average amount is EUR 16.7 million per micro-region) we can see that the northern regions of Hungary and the regions of Transdanubia have received a smaller share and the majority of the funding has flowed into the regions of the Great Plain. Regardless of the location, the more prominent regions of the Great Plain, with traditional agricultural activity, have an outstating resource absorbing capacity (Figure 5.5). The main reason is that the subsidies from Axes 1 and 2 of the NHRDP flowed into those micro-regions where there was a large number of farmers with large land area (over 50 hectare) and livestock (over a thousand Livestock Units). The relationship shows a strong correlation ($R = 0.72$).

Figure 5.5. The NHRDP subsidies by micro-regions in Hungary, 2007-2013



Source: own work based on the data of ARDA.

5.3.1. The NHRDP AXIS 1

Based on the AKI evaluation (2014), due to the compliance with the EU regulations, investments were mainly required for renovating and upgrading the existing outdated and depreciated capacities rather than for new technologies increasing the value added and expanding sustainable agricultural employment. The concentrated production increase raised also the demand for labour. The better capacity use improved the economies of scale and increased productivity. The farmers of various land size categories received subsidies of similar amounts (Table 5.2).

Table 5.2. Main measures of Axis 1 of the NHRDP
by farm size categories, 2007-2013

Measure*	Less than 50 hectare		50 to 500 hectare		More than 500 hectare		Total	
	EUR million	per cent	EUR million	per cent	EUR million	per cent	EUR million	per cent
Training and extension	15.9	75.9	4.1	20.2	0.7	4.0	21.1	100.0
Subsidies to young farmers	113.0	94.5	6.7	5.5	0.0	0.0	119.6	100.0
Machinery, technological devices	80.4	32.5	83.7	34	82.6	33.5	246.7	100.0
Crop production facilities	52.6	45.8	21.9	19.1	40.0	35.1	114.4	100.0
Modernisation of livestock farms	242.6	38.2	117.8	18.5	274.8	43.3	635.6	100.0
Horticulture development	41.5	60.2	19.3	28.2	8.1	11.7	68.9	100.0
Infrastructure development	50.4	64.9	12.6	16.1	14.8	19.0	77.8	100.0
Main measures of Axis 1	596.7	46.5	266.3	20.7	421.5	32.8	1,284.4	100.0

* Entitlements by farms.

Source: MRD (2014).

The results of the main measures [MARD, 2013b] of Axis 1 are as follows (as in March 2014):

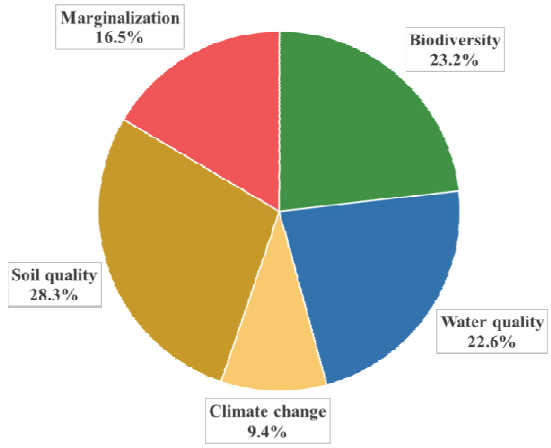
- In the frame of the measure of extension services about 14 thousand farmers and forest owners up to three times per year use this service for EUR 700 (29.2 thousand approved applications for subsidies of EUR 500 on average). From the training and information activities 54.7 thousand farmers used the information service and 80 thousand people received professional training. 3.3 thousand young farmers benefited from agricultural restructuring subsidies.
- In the measure of modernisation of agricultural holdings the aid provided for purchasing machinery and technologies not requiring construction of buildings (8.6 thousand approved applications for subsidies of EUR 31.5 thousand on average) improved the age structure of the machinery and encouraged the purchase of energy-saving technological devices. Subsidies were financed also for the modernization of the post-harvesting facilities (522 approved applications for subsidies of EUR 165.2 thousand on average).

- In the frame of the measure of modernisation of the facilities of livestock farms (2.3 thousand approved applications for subsidies of EUR 428.9 thousand on average, in the cases of poultry farms 46 approved applications for average subsidies of EUR 176.3 thousand) livestock farmers could benefit from the complex infrastructural subsidies. Earlier there was a flow back of the subsidies due to rejection.
- In connection with the subsidies provided for horticulture (219 thousand approved applications for subsidies of EUR 291.1 thousand on average) facilities for horticultural activities were implemented. In addition to mechanisation (4.4 thousand approved applications for subsidies of EUR 24.4 thousand on average) the improvement of the plantations (210 approved applications for subsidies of EUR 103.3 thousand on average) also increased the efficiency of the sector.
- The value increase of agricultural products (635 thousand approved applications for subsidies of EUR 433 thousand on average) resulted in improved competitiveness, restructured production structure and developments in the fields of food safety and energy saving.
- The measure of infrastructure development covered irrigation, melioration and construction of buildings of regional water management (377 approved applications for subsidies of EUR 199.3 thousand on average) and of agricultural roads (159 approved applications for subsidies of EUR 247.4 thousand on average).

5.3.2. The NHRDP AXIS 2

Based on the impact assessments the payments financed for various environmental projects in Axis 2 of the NHRDP contribute to increase in agricultural incomes on 1,760.8 thousand hectares by providing environmental services for the whole society [Körtáj Tervező Iroda, 2013]. The main objectives of the measures are to support the sustainable development of rural areas, preserve and improve the environment, reduce the environmental impact of agricultural origin, provide environmental services, and strengthen agricultural practices based on sustainable use of natural resources. The land use for environmental purposes concentrates mainly on maintaining the soil quality (28.3 per cent), conserving biodiversity (23.2 per cent) and preserving water quality (22.6 per cent) (Figure 5.6).

Figure 5.6. Land use by environmental objectives in Hungary, 2007-2013



Source: SZIE, 2013.

Table 5.3. Main measures of Axis 2 of the NHRDP by farm size categories, 2007-2013

Measure*	Less than 50 ha		50-500 ha		More than 500 ha		Total	
	EUR million	per cent	EUR million	per cent	EUR million	per cent	EUR million	per cent
Agri-environmental measures	133.0	19.5	261.5	38.5	285.6	42.0	680.0	100.0
LFA	30.0	42.4	31.9	44.7	9.3	13.0	71.1	100.0
Natura 2000	10.7	26.2	20.4	50.3	9.6	23.5	40.7	100.0
Main measures of Axis 2	173.7	21.9	313.7	39.6	304.1	38.4	791.9	100.0

* Entitlements by farms.
Source: MRD (2014).

On the basis of the impacts further efforts are required since biodiversity is significantly reducing and without subsidies maintaining the agricultural land (2.8 million hectares) and forests (964 thousand hectares) of high nature value is not possible. At the national level, due to the reduced nutrient inputs, substantial improvement of the quality of surface water could not be measured. The dynamics of afforestation reduced significantly; therefore, in the fight against climate change no major result could be reached. However, an important result is that the main measures of Axis 2 allocated significant incomes

to the small and medium-sized enterprises contributing to strengthening environment-friendly production, which complies better with environmental requirements (Table 5.3).

The results of the main measures [MRD, 2013b] of Axis 2 are as follows (as in March 2014):

- The agro-environmental measures of the NHRDP introduced agro--environmental target programme groups, which are connected to valuable nature conservation areas, such as arable land, grassland, plantations and wetland; 14 thousand farmers receive payments for 1,084 thousand hectares of land. The commitment of agro-environmental measures of the NHRDP is approximately one-third larger than that of agro-environmental measures of the NRDP (EUR 207.4 million instead of EUR 155.6 million).
- In the NHRDP as a continuation of the NRDP 13 thousand farmers benefited from the subsidies of LFA for 298 thousand hectares of land. The measure favours small farms, since the average area payment decreases.
- For grasslands of NATURA 2000 the current approach does not allow a complex individual compensation, taking into account the local natural values. At present, more than nine thousand farmers receive specific minimum payment (EUR 38 per hectare), which affects 256 thousand hectares of grassland.
- The measures of forestry can play an important role in meeting the requirements of the new challenges. From the NHRDP up to now afforestation reached only 19.3 hectares. Agroforestry systems were claimed for only 200 hectares, but forest-environment payments were claimed for 5.2 thousand hectares; the measure of restoring forestry potential involved 1.9 thousand hectares. For the forestry entitlement of NATURA 2000 the first payments were made in 2013, which affected 92.1 thousand hectares.

5.3.3. The NHRDP AXES 3 and 4: Rural development in the spirit of LEADER

In addition to payments from the central budget aimed directly at actors in the agricultural and food sector (Axes 1 and 2), the purpose of rural development policy is generally to improve the quality of life in rural areas, diversify rural economy, and increase the value added by production (Axis 3). The achievement of these goals is actively facilitated by a new network of LEADER[12] rural development local action groups (LAGs) established at micro-regional

[12] The acronym 'LEADER' stands for: *Liaison Entre Actions pour le Developpement de l'Economie Rurale* (European Union initiative for Rural Development).

level. By linking central supports and local opportunities these organisations, established to create programmes, organize the society and develop projects, which were supposed to ensure sources are exploited as efficiently as possible. In the EU's rural development policy for 2007-2013, LEADER and its local institution acted as a horizontal axis over the entire Pillar II. The Commission extended the system of local programming and decision-making also to mainstream measures and therefore enabled LEADER to implement the goals of all three axes. At the same time, many argued 'mainstreaming' led to higher level of bureaucracy in LEADER and caused deterioration of innovation and participatory organization [Shucksmith 2010, Huelemeyer and Schiller, 2010].

The 'LEADER approach' has been having an effect on the Hungarian rural development since the early 2000s. First, local planning process of SAPARD Programme, and later 14 local rural development action groups of an experimental LEADER programme prior to the EU accession would help preparation [Fazekas és Nemes, 2005]. Between the accession and 2006 the number of action groups supported by AVOP LEADER+ programme raised from 14 to 70, covering a total of 944 settlements. Under that programme EUR 17.7 million were disbursed to improve the income earning and employment potentials and enhance rural living conditions and infrastructure[13] [ARDOP, 2010].

During the planning period of 2007-2013 the programme expanded even further; 96 LAGs were formed involving a total of 3,021 participating settlements (that is 96 per cent of all Hungarian settlements and 47 per cent of the total population of Hungary), virtually covering the entire rural area of Hungary [Hungarikum Konzorcium, 2010]. Like many other Member States in the EU, Hungary did not extend/mainstream the LEADER approach and assigned LAGs to implement only some measures of Axis 3. On top of that, the so-called 'LEADER axis' unknown in the EU was added as an extra package of measures with separate funds and rules, but with objectives similar to that of Axis 3, allowing more space for local initiatives, community building, and local decisions.

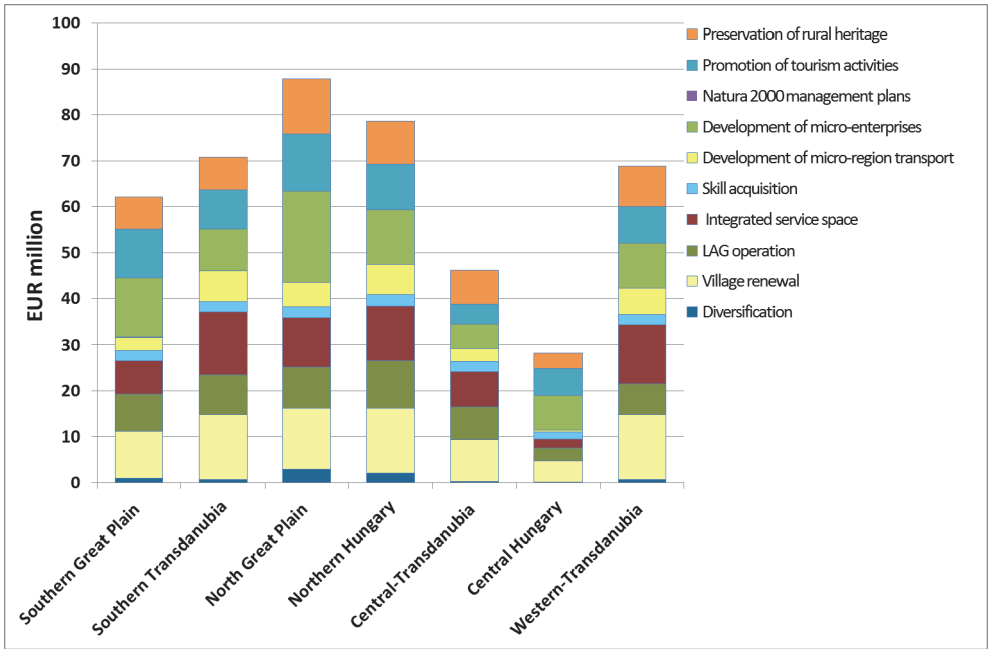
After all, the share of resources allocated to Axes 3 and 4 amounted to 17 per cent (12+5 per cent) of the entire NHRDP, the rest was for agri-food business. That means that in addition to direct payments the vast majority of the rural development budget was also targeted to subsidize agricultural producers. It comes even more imbalanced if tie-ups and disbursement of payments are also considered. By the end of February 2014, the vast majority of funds allocated to Axes 1 and 2 had been tied up and two-thirds and four-fifths had already been

[13] Verified community expenditures between 2006 and 2009.

paid out [MRD, 2014]. In comparison, only half of the funds made available under Axis 3 and as little as a third of LEADER resources had been spent effectively by the end of the planning period. The main reason behind this is the low--efficient operation of network of rural development institutes, the causes of which are discussed in more detail below in sections analysing the organization's operation.

Recognised LAGs took part in the implementation of four measures[14] issued under the NHRDP Axis 3, and under these titles some 7,500 projects were granted funds in a total value of EUR 425.9 million. Within the framework of *Village Development* using nearly a third of funds, Southern Transdanubia (especially in Baranya county), accommodating a large number of small villages[15], and Western--Transdanubia, utilized most of the resources, as 46% of projects are related to these two regions[16] (Figure 5.7).

Figure 5.7. Main measures of Axis 3 of the NHRDP by regions, 2007-2013



Source: MRD (2014).

[14] These Axis 3 measures are called 'non-horizontal' measures.
[15] Applications were received from settlements with population below 5,000 and population density below 100 person/km^2.
[16] It does not apply to the scale of sources though, the two regions won 36.5 per cent of village development funds.

Nearly one-fourth of EUR 113.7 million paid to *micro enterprises* was translated into businesses in the North Great Plain region, and both Northern Hungary (18%) and the South Great Plain (16%) regions had relatively high shares of support. EUR 98.9 million were allocated to encourage *touristic activities*, of which EUR 21.1 million was used in the North Great Plain and EUR 15.9 million were spent in the Northern Hungarian region. In the latter region Borsod-Abaúj-Zemplén and Szabolcs-Szatmár-Bereg counties received most of the funds. EUR 87.4 million were allocated to *preserve rural heritage*. The shares of the South and Western-Transdanubian regions were the highest among the 1,450 projects. In terms of the amounts of grant allocated the Western-Transdanubian as well as the North Great Plains regions were the most successful.

5.4. Impacts of LEADER-type rural development projects

LEADER-type development projects primarily set qualitative objectives such as improvement of quality of life, strengthening of local participation and local networks, and expansion of local development capacity. Accordingly, long-term impacts of the programme are very difficult to measure and various organisations (World Bank, OECD, EU, FAO) have been working on elaborating indicators for measuring the impacts of LEADER-like programmes for decades, without apparent success so far. Also, the EU regularly conducts ex-ante, mid-term, and ex-post evaluations based on a CMEF [DG Agriculture and Rural Development, 2006], yet there is no common understanding and consensus on how to measure the impacts of such programmes effectively[17]. Some authors argue the problem is not merely of methodological nature, but derives from the principles of the methodology applied: the impacts of a participatory-based policy aimed at qualitative changes should be measured on a participatory and self-evaluating basis, but these methods fail to comply with the expected criteria of transparency and comparability and mostly cannot be aggregated [High and Nemes, 2007].

There have been no systematic experiments conducted in Hungary to measure long-term impacts of LEADER-like rural development programmes; attempts were limited to isolated sociological investigations, doctoral dissertations, and other research confined to certain subjects or geographical regions. AAM Group [2013] studied the impacts of the NHRDP Axes 3 and 4. The primary source of data was the database of Tax and Customs Authority

[17] The most successful attempt ever is the detailed qualitative measurement methodology developed for ex-post evaluation of LEADER II in report of ÖIR [2003].

(NAV), and they also used their own calculations, questionnaires, and qualitative analyses. The calculations related to quantitative analyses were governed by the Guideline of the European Evaluation Network[18]. Three monitoring indicators were analysed in detail: (1) gross value added (GVA), (2) number of jobs created (FTE – full-time equivalent), and (3) labour productivity. The most clearly described results were achieved with respect to the 312 measures on supporting micro-enterprises along Axis III, of which GVA and FTE are highlighted below.

In terms of GVA micro-level analyses of business associations showed that in supporting micro-enterprises (312 measures) each EUR 1,000 added EUR 339 (34 per cent) to the GVA value of beneficiary enterprises on average (a total growth of EUR 9.75 million). Payments to private enterprises translated into even more significant growth, as the turnover from sales in the targeted group in 2012 was 54 per cent higher than that of the control group. As far as full-time equivalent is concerned, the micro-level analysis showed that each EUR 10 thousand payment under the 312 measures increased employment by 2.7 FTE unit on average, resulting in a total FTE growth of 832.5 in the country.

5.5. Institutional impacts

One of the key achievements of rural development programme in Hungary as well as other EU countries is the institutional network (including allocation of tasks and system of co-operation) founded at various administrative and regional levels during programme implementation. This institutional network as well as the knowledge and network of connections accumulated within can ensure that Hungary will prepare and implement the policy for the forthcoming planning period 2014-2020. Recently, in line with the relevant EU directives, there were five key institutions responsible for rural development policy: (1) Managing Authority at the Department for Rural Development at the MRD; (2) Agricultural and Rural Development Agency (ARDA); (3) National Agricultural Advisory, Educational and Rural Development Institute (NAKVI); (4) 96 LAGs and related working organizations; (5) Hungarian Rural Network. There are overlaps and deficiencies in the operation of the institutional network. Each institution suffers from plenty of problems and there are especially

[18] The guide is available under the following link: https://webgate.ec.europa.eu/myenrd/app_templates/filedownload.cfm?id=699C6181-0006-31E9-DDFD-E9C9FFC0E30A.

many challenges in their co-operation. As a detailed analysis of these institutions would go beyond the scope of this study, only some general statements are discussed below.

One of the biggest problems is the lack of trust and problems in communication, administration, and co-operation within and among institutions both in horizontal and vertical relations. Hitches in the communication between Managing Authority and ARDA, and strong influence of interests outside the policy often caused that relevant legal regulations were delayed or published half-finished. Thus, there were lots of changes, even during the course of implementation. Not only had the rules of application management, accounting, and evaluation changed continually, but so did the responsible managers working in central institutions. Meanwhile, Rural Development Programme Axes 3 and 4 became a battlefield of various approaches (strategic thinking, administration, control, transparency). It led to lack of stability, which is the worst scenario for executors at low levels.

Among the institutions, coming to existence over the past decade, LAGs and their local development agencies have been playing a significant role in rural development. This micro-regional level institution was a new element in the Hungarian system and defrosted mostly unexploited development capacities and resources. It is deemed a remarkable social innovation and has achieved one of the greatest results in rural development since the accession to the EU, penetrating the entire rural Hungary. There are many good examples and the best practices worth mentioning[19]. Certainly, not all LAGs and local development agencies perform at the same standard. There are no comprehensive and comparable pieces of information on the professional work and effective results of LAGs. Some simple indicators of the central monitoring system are limited to control the fulfilment of centrally-allocated tasks and results of claim management and do not provide valuable output for further in-depth analysis (and in fact, these data are mainly inaccessible). Some LAGs performed self-evaluation and two LAGs conducted peer-to-peer evaluation, but they remained isolated attempts. Consequently, there are no reliable measurements, examinations available in this matter.

A comparative international study, conducted in 2012-13 as a bottom-up initiative, supported by the MNVH on the implementation of LEADER-type rural development in Hungary (Transleader 2013[20]), identified problems in the following three areas: autonomy, multi-level governance, and quality rural development.

[19] Thematic 'Best practice finder' on MNVH's website: http://www.mnvh.eu/jogy.
[20] Studies, papers, publications prepared under Transleader and results of workshops related to the Hungarian research are available on the following website: http://transleader.webnode.hu.

The autonomous operation, stable and independent financing, and free and competent decision-making of LAGs were either lacking or very limited in Hungary. In the period of 2007-2013, the Managing Authority intervened in LEADER associations' organizational frame, internal operation, and financing on many occasions upon formation and at later stages too. This practice gave birth to most of the problems in the implementation phase. Autonomy was impaired, for instance, in financing of LAGs. Efficient work requires stable and predictable financing. LAGs' operational budget was cut several times in the Hungarian system; there were problems in pre-financing and very strict accounting rules that kept changing all the time in the course of matters. Autonomy in inviting local applications was also questioned. According to LEADER's model LAGs have their autonomy in inviting local applications, calling applicants' attention to provide corrections, and selecting projects worth supporting based on the content of application. However, usually MVH and Managing Authority made decisions on local applications and often revised and changed local decisions.

Horizontal and vertical communication, sharing of tasks and responsibilities among institutions at different administration levels (multi-level governance) is a key factor in rural development. Hungary struggles with many problems in these areas too, a part of which derive from our political culture and another part from mutual distrust among actors working at different levels of execution. Improvement would require adequate financial and human resources, training, accountable responsibilities, and provision of competencies in decision making at all levels (from Managing Authority to LAGs) in order to replace subordination with partnership in the relations between institutions.

The twofold task of LAGs (quality rural development with social animation, network building, project generation, etc.) and administration (claim management), has become imbalanced and administration got a much greater share in Hungary. LAGs' tasks rather focused on managing applications and allocating funds, taking over duties from the Paying Agency. Due to the high level of control and regulation of LAGs' operation (organization, tasks of work organizations, rules of central accounting and reporting, accountable operational costs) LEADER-like rural development in Hungary managed to exploit opportunities in autonomous regional programming and execution at a level far below that experienced in the European practice. Principally LAGs would be responsible for generating and selecting projects in the interest of creating and implementing an independent strategy, involving and mentoring local actors, launching and coaching independent regional projects, and implementing national and international co-operations.

Theoretically local regulations provide space for these tasks, but limitations in the range of operational costs and the fact that most human resources are focused at application management encumber efficient execution.

5.6. Conclusions

The rather modest result of the Hungarian rural development programmes is that over the last ten years their application contributed to reduction of migration from rural areas. The rural development subsidies created opportunities for developing the rural economy, environment and society, helped to preserve the environmental values, induced community initiatives and mobilised the rural society. The main shortcoming of the programmes is that instead of encouraging sustainable developments to be implemented by creative ideas, the programmes only relieved the symptoms. In rural areas the developments were determined by social constraints and basic infrastructural needs rather than by the need for economic development. A further lesson is that investments also in this sector are basically encouraged by the market and rural development by itself is not able to stop the unfavourable regional processes and the lagging behind of the disadvantageous areas. In order to develop the underdeveloped rural areas and the agricultural economy suffering from competitive disadvantages a great number of fields can be identified, the equal treatment of which might simultaneously remedy the problems of both the sector and rural areas.

The challenge of rural development in the next programming period (2014-2020) is to reach a simultaneous increase in value added and in job creation as well as to enhance the development of the underlying human resources. Enterprise and economy development based on innovative ideas and projects are required as well as cooperation in the implementation.

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Chapter VI
Economic and social changes in the Czech rural areas after the EU enlargement[21]

6.1. Introduction

The period of ten years, when the Czech Republic (CR) joined the European Union, is the result of processes which took place before now and emerged from the fundamental political, economic and social changes after 1989. Everything is related almost to everything in the social reality. That is why it is necessary to search the chain of events, if the statistical and empirical data allow, which caused the particular changes implicated in the society. Even the topicality is not possible to see severally. We can claim that the CR joining the EU brought the complex of various influences. Some of them are unambiguously positive ones; the others are evaluated constrainedly or rather negatively. It is impossible to weight many of them; the simple parameters would be misrepresented, because the findings are not immediate but successive and they are not distinct at present. Every electoral term shows the projection of governmental policy to the state economy as well as the living standard of particular social groups. In any case, after the CR joined the EU the economic and social life of inhabitants, including the rural population, is more varied and colourful; it includes the before unknown occasions as well as risks. Social structure is markedly different, what is appreciated and positively evaluated by the more prosperous social groups. Less successful groups consider this fact as the systemic malfunctioning of the state and the government. Alternating popularity of right wing and left wing parties is a certain proof for it.

[21] The information introduced in this paper resulted from completion of a project of IGA No. 20131036, Faculty of Economics and Management at the Czech University of Life Sciences, Prague "Involving citizens of rural communities in public life".

6.2. Political turn as the premise of economic and social changes

Sociological research findings displayed that the most appreciated changes after 1989 were "the end of Communist Party dominance", "withdrawal from Marxism-Leninism ideology", "the end of nomenclature practice to install only communists to the leading positions", "the possibility to say one's own opinion", "the possibility of political and civic rehabilitation". The lowest positive evaluation is given to the demonstration of political struggle and state administration, existence of many political parties and movements, action of Civic Forum, contradictory opinions and activities of people's committees. There exists a certain discretion in the attitudes, resulting from aggressive assertiveness of former Communist Party members. They did not want to give up their advantages at all, eventually they did so, but only under pressure and unwillingly [Majerova, 1990, 44-45].

Standard function of democratic institution, rotation of political parties influence and power, their rise and downfall by the decision of electors struggled slowly in the post-socialistic countries, influenced by the corruption of governmental groups. Imperfect and often purposely deformed legal system made possible and, to a certain extent, always supports the maintenance of non--transparent environment, which is advantageous for some groups of politicians and entrepreneurs. The term "political entrepreneur" labels the man, who by the influence of politicians, creates the space for the economic activities of private persons. Lobbing has the vague and indistinct rules. By law it is difficult to recognize, what is legal and non-legal activity. Democratization processes are on different levels of development in particular post-socialistic countries.

Political parties' development is surveyed by the tens of political science investigations in the Czech Republic [Linek, 2012, 2014; Mansfeldová and Kroupa, 2005]. The Czech political system is indicated as a relatively stable in the context of post-socialistic countries. Nevertheless, voters have lost their trust in right wing parties in the last ten years (especially after their corruption scandals) and support for left wing parties grows (including communists) and expectation lie in the new parties (at present especially ANO). From the regional aspects, more left wing oriented are such regions of the CR, where persists the problems connected with unemployment of inhabitants. The high rate of unemployment is linked to the other indicators, e.g. worse socio-demographic development of the region, lower life standard, higher rate of criminality, including gambling, drug abuse and alcoholism.

Anticipated traditionalism of the Czech countryside is not supported by the empirical data. Similar trends of political support appear, in general numbers, in rural areas as in the average of the whole Republic. Lower voter turnout is more typical for the countryside.

6.3. Transformation incidence in the economic sphere

Transformation of economic subjects pursued the logical sequence, which starts by the clearing of ownership relations, restitution of nationalized and collectivized property, continues by privatization of enterprises and tending to their functioning on the principles of market economy. It means, the economic subjects were transformed in such shape, which could face the growing inner as well as external competition. The results were the uncertainty, which enterprises will be successful in the competition, higher demands on the skilled labour force and qualified management – able to think strategically and tactically at the same time. Being managerial, experience from socialistic large-scale agriculture, was not altogether convenient in the new economic conditions. On the other hand, social capital, created in the past, came across also in transformed enterprises. Part of agricultural managers from co-operatives as well as state farms was actively concerned and was able to adapt themselves to the new conditions.

Rural areas were disadvantaged from the beginning. The employment of population was kept regardless of economic results; large-scale agricultural enterprises were depending on massive state subsidies. Natural regional differences were steadily balanced by the state budget. Some of them persist until now. Agriculture, formerly the significant branch of national economy, gradually subsided to be a source of working stations. Share of persons permanently working in agriculture rather decreased between 2005 and 2009. Then the share stayed quite steady and variation proceeded only about one or two hundredth of percentage.

Table 6.1. Share of employment rate in agriculture in the total number of workers in the national economy

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013
Share (%)	3.16	3.08	2.96	2.87	2.84	2.64	2.63	2.62	2.63

Source: Green Report of the CR 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, UZEI.

Employment of rural population remains one of the main problems at present. Less than 4% of workers is occupied in agriculture, including forestry and fishery. Since 2009 this share has not changed, it ranges from about 1 to 10 percent.

Table 6.2. Employment in the national economy – agriculture (including forestry and fishery)

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number (thousands)	202.3	189.4	181.7	176.3	165.7	153.8	151.2	145.8	149.2	149.6
%	4.3	4.0	3.7	3.6	3.4	3.1	3.1	3.0	3.1	3.0

Source: Employment and unemployment in the CR according the records of VŠPS (2004--2013), ČSÚ.

Employment almost does not drop in the state enterprises (where it is indeed low). Average evidence numbers of persons fall in the other entrepreneurial types, more significantly in the firms of corporate bodies, especially trading companies and co-operatives. In private firms the average evidence number of workers falls by about 9%.

It should be noted that the rate of unemployment in rural areas in 2005--2011 relatively increased (Table 6.4).

Table 6.3. Employment in agriculture (without related services and hunting) 2004-2012 (thousands)

Entrepreneurial types	Average evidence number of workers (individual persons)							
	2004	2005	2007	2008	2009	2010	2011	2012
Firms of corporate bodies	110.8	106.9	101.7	98.2	92.6	86.8	82.4	78.7
including:								
- State firms	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.2
- Co-operatives	37.0	34.5	31.3	29.6	27.3	25.0	23.7	22.4
- Trading companies	73.5	72.1	70.2	68.3	65.0	61.6	58.5	56.1
Private firms	30.2	29.7	28.7	28.2	27.6	27.4	27.2	26.7
Total	141.0	136.6	130.4	126.4	120.0	114.2	109.6	105.4

Source: Green Report of the CR 2004, 2005, 2007, 2008, 2009, 2010. 2011, 2012, UZEI.

Table 6.4. Unemployment in rural areas (registered rate of unemployment)

Year	2005	2006	2007	2008	2009	2010	2011
%	5.9	8.4	6.9	5.8	8.9	10.2	9.0

Source: Green Report of the CR 2005, 2006, 2007, 2008, 2009, 2010, 2011, UZEI.

Of course, employability of some social groups is rather difficult. Transformation of enterprises in the countryside, including agricultural farms, creates the competitive environment in the labour market. It can better support people more educated, more flexible and willing to resign from demands concerning the working place, including salary. According to Matl and Srnova, [2012] "in the level of incomes there exists the significant difference between countryside and towns. Rural inhabitants draw 91.8% average of gross income and 92%, and 8% of net income. Markedly deeper deficit manifests in comparison with the inhabitants of big cities (84.2% and 86.0%, respectively). The incomes and expenses of rural households are also connected, to a large extent, with the lower salaries in agrarian sector.".

6.4. Contemporary development of rural space

The accession of the CR to the EU can be regarded as an important milestone of rural areas development. The Czech countryside became a part of the European countryside, which battles with the analogical problems, of course in the framework of national specifics of particular countries. About 80% of European area is of rural character. The Common Agricultural Policy (CAP) gradually includes rather broader conception in the basic documents. According to Matl and Srnova, [2012, 27] "the rural development is partly the ingredient of the CAP. The goal is to increase competitive advantage of agricultural production, but also to support farm diversification in the rural localities and improve the quality of rural life". National development priorities and thematic ranges for utilization of the EU structural funds after 2013 in the CR conditions include [Matl and Srnova, 2012, 37]:

- increasing competitive advantages of economy,
- development of backbone infrastructure,
- increasing the quality and efficiency of public administration,
- support of social integration, combating poverty and system of health provision,
- integrated area development.

First two points can be considered as economic premises, without their performance the rural development cannot continue. Both of them lay, of course, in the social sphere. Competitive economy helps to increase the employment of inhabitants, create financial sources for households and contribute to economic stability of rural municipalities. It means not only improvement of material life conditions but also increase in the quality of life in the villages. Direct connection between quality of life and social relations is hardly provable. However, the satisfaction of inhabitants and their willingness to actively participate in the common tasks is measurable.

Development of backbone infrastructure is considered as the most important tool of regional development. Accessibility to and mutual interconnection of separate localities as well as their interconnection with centres implicates the transfer of persons, materials and products. High quality travel connection saves financial sources and facilitates the daily life of inhabitants. It means not only transport (road construction and maintenance, reconstruction of concourse), but also projects, which can improve the living environment (infrastructure of sewage and its purification, supply of drinking water, thermal insulation of public buildings, etc.). Preferred ranges cover the housing construction and maintenance, reconstruction of lighting, but also landscape arrangement – regeneration of water flows, flood--protection, revitalization of landscape, outplanting of greenery, etc.[22].

Ranges "increasing the quality and efficiency of public administration" and "support of social integration, combating poverty and system of health provision" depend on the presumptions, which are either facilitated or complicated by the social system function. Qualified staff for administration is easier to find in the bigger municipalities and towns. Socio-demographic structure of rural space is less favourable. Efficiency of public administration depends on the human capability, communication skills, flexibility, willingness to learn new things and other presumptions. Rational and sophisticated system of public administration functioning is possible to be created. But its mechanical application is not possible without consideration to local social structure. Operation and effectivity will always depend on the quality of human potential.

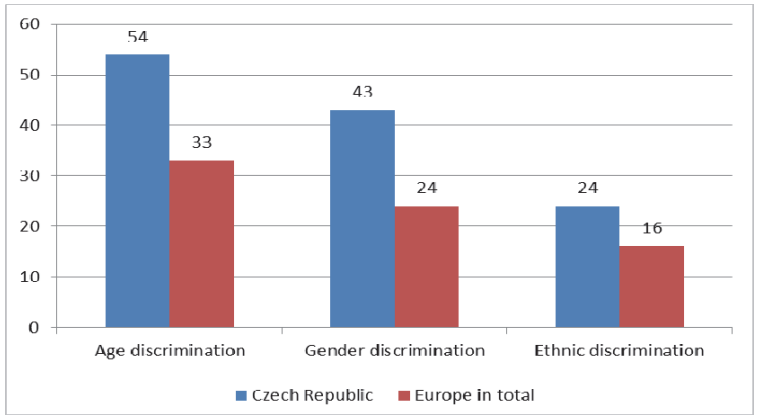
Social exclusion and inclusion, combating poverty and system of health provision is a broad thematic range, which is embedded in economic factors, its results trench upon social structure shaping and particular elements are mutually conditioned. Causes of social exclusion can be various accordingly to social groups. More frequently we talk about social exclusion linked with ethnicity,

[22] Freely according to Mátl and Srnova [2012, 37].

religion, cultural patterns of behaviour or inadaptability to the rules of law existing in the CR (regardless of nationality or religion). However, for the Czech countryside the social exclusion connected with ageism is a more significant threat[23]. "Ageism can be understood as a process of systematic stereotyping and discrimination of people due to their age, just like racism and sexism relate to colour of skin and gender. Old people are categorized as senile, rigid in their thinking and manners, old-fashioned in morals and skills…" [Pešák, 2007]. Some authors see sources of social exclusion rather in the elements of social structure than in the personal malfunctioning of individuals. "Social exclusion is often perceived as the breakdown of some from the following systems: democratic and legislative (civic integration); labour market (economic integration); social state (social integration); family and community system (personal integration)" [Mareš, 1999].

In the framework of the research project "European Social Survey" (ESS Survey), supported by the Ministry of Education, Youth and Sports arose the publication summarizing values, attitudes and behaviour of chosen countries. The Czech Republic is also included [Vlachová, 2013]. Experience with age discrimination were investigated by some questions (in detail see the aforementioned publication). From the answers it results that in the CR, similarly like across the whole Europe, ageism is the most widespread form of discrimination compared with the ethnic and gender discrimination.

Figure 6.1. Share of persons who have experienced the chosen forms of discrimination (%)



Source: Vlachová, 2013.

[23] The Czech term has not been created. Ageism can be characterized as "discrimination according to age".

Comparative research of 25 European countries did not contain any geographical or regional structure of particular countries. It is not possible to detail any opinion and attitudes concerning rural areas. We can only presume, that these data are analogically related to rural population. On the one hand, age discrimination can be more significant in the countryside, because the socio-demographic structure (especially in smaller localities) is worse. On the other hand, the seniors are not so strongly discriminated there because the smaller villages are more equal according to age (average age is higher). Age discrimination appears more often where there are contacts among social groups of heterogeneous population.

In the Czech rural areas we can define the following analytical variables: "influence of seniors on the public administration", "level of legislative protection of seniors in all ranges of their life", "stress on the departure to the place of work", "possibility to find any working place adequate to age", "self-realization in the social life of village", "keeping the social status in the framework of narrower as well as broader family" and other.

Connecting all changes, which appear during the last decennium only with the entry of the CR to the EU is not exact. Many of them are the consequence of the common Czech Republic development after 1989. Access to the European democratic principles brought much bigger demands, above all, for personal responsibility of individuals and social groups in the working sphere as well as private life.

However, it is not always is possible to overcome all difficulties, which are inherent in the concurrently developing system of public administration and legislature. Responsibility transferred on the person without the creation of a formal framework, which can guarantee fairness, justice, equal opportunities and other essential premises for functioning in the economic and social sphere, is burden not advantage and occasion to apply own abilities and knowledge.

Social life of rural population in affected, similarly as the whole society, by the complex of mutually interconnected changes and impulses of socio-demographic as well as economic character. Social status as well as material poverty come in the other level and are measured by other parameters. Former stigmas are becoming the norms (singles, illegitimate origin, divorce, personal and family debt and other phenomena). Life style changes are, without a question, connected with the size of a village. However, the rural space is also infiltrated by the following elements – "time poverty", rising of virtual contacts, decrease in physical activities and skills, relativism of values and relations.

Unchanging stays the need for personal human contacts, communication, social appreciation and approval of social status.

Less anonymous environment of rural localities provides a space for satisfying the personal as well as group social needs, however, only if there exist the legislative and moral rules for their communication and co-operation. This is exemplified by the functioning and developing villages as well as stagnant and fragmenting communities of antagonized groups.

Similarly like in the previous part of the contribution, the following can be studied as the analytical variables: "participation of inhabitants in decision-making", "frequency of suggestion of inhabitants toward municipal council", "equal representation" and "men and women in the local bodies", "readiness (or difficulty) of formation of the ballot", "percentage of election pledge performance", "involvement in the broader cooperation (LAG, micro-regions)" and other. In the personal life of rural population the most important are the following elements: "family cohesion", "frequency and character of family activities", "structure and ordering of housework in the family framework", "care for old and ill family members", "personal and material aid in the family framework" and other.

6.5. Positive and negative features of the last decennium

Development of the Czech countryside implies that the accession of the CR to the EU improved many material life conditions of rural inhabitants. Issues, which could not be realized by municipalities (build-up, maintenance and repair of local roads, repair of public space and pavements, infrastructure of sewage and its purification, thermal insulation of public buildings, drinking water supply, etc.) were financed from structural funds [Matl and Srnova, 2012].

However, the changes in socio-demographic structure of rural inhabitants will make the higher demands on the facilities and services, which are for the present defined only at the common level and are not preferred (health and social services, support for sport and leisure time activities of all age groups, education, non-profit organization, charitable organizations, etc.) [Matl and Srnova, 2012, 37]. In other words, the needs are shifted from material presumptions of rural municipalities functioning to the social level. Changing socio-demographic structure will influence the political preference and permute the social values and tasks.

Discussion about rural areas future is relatively intensive and participated by decision-making institutions, public administration as well as universities. Recent conference "Countryside 2014" summed up, above all, the material

preconditions of future rural development like unemployment, basic services for countryside – education, shopping, transport, medical care, post office, etc., reconstruction and maintaining of rural building stock (churches, rectories, castles, schools, pubs, barns, agricultural districts, etc.), support for leisure time activities, support for small and family farms and enterprises, protection of land resources, etc. [Selská revue, 2014].

However, the solution to these problems is considered in the context of comprehensive approach to the quality of rural life. Material and non-material elements are mutually conditioned and linked. Anywise, some of them seem to be marginal, their absence can destabilize rural development in the close future.

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Chapter VII
Human capital and rural economy in Romania – post-communist evolutions and trends

7.1. Introduction

The human capital consists of all forms of knowledge, skills and competencies embodied in individuals that facilitate the creation of personal, social and economic well-being [OECD, 2001]. The economic prosperity and functioning of a nation depend on its physical and human capital stock. In the new global economy, hard tangible assets may not be as important as investing in human capital. In general terms, human capital represents the investment people make in themselves that enhances their economic productivity [Almendarez, 2010].

Human capital theory rests on the assumption that formal education is necessary to improve the productive capacity of a population. The education is an investment in human capital, which proponents of the theory have considered as equally or even more worthwhile than that of physical capital. Human capital analysis assumes that schooling raises earnings and productivity mainly by providing knowledge, skills, and an advanced way of analysing problems [Becker, 2009].

Human capital can play a catalyst role in attracting other factors, such as physical capital, which also significantly contributes to per capita income growth. Benhabib and Spiegel [1994] demonstrated, on the basis of a cross country analysis, that "the levels of human capital play an important role in attracting physical capital". According to Romer [1990], the human capital directly influences productivity by determining the capacity of nations to innovate in the field of new technologies suited to domestic production. Therefore, the human capital stocks decisively affect the speed of technological catch-up of the top-leader countries upon the technological level [Nelson & Phelps,

1966] and, through that, generate the income levels growth. In this respect, the personal distribution of earnings is partly determined by the distribution of and the returns from human capital.

Starting from these theoretical remarks and from the scientific results of research works on human capital, as presented in the specialty literature, we attempt to make an analysis of the human capital stock evolution in the Romanian rural area in the last quarter of the century, after the fall of the communist regime.

The main purpose of this analytical approach is to capture the extent to which the recent evolutions of the Romanian rural human capital characteristics are able to support the knowledge-based economic growth of the rural area (that the modern economic theories consider as the most effective growth modality) and the improvement of the rural population's living standard.

The analytical approach had in view the description of the quantitative demographic phenomena (that condition the gross volume of available human capital) as well as the qualitative demographic phenomena (that describe the fundamental characteristics of the rural human capital, the educational level in particular). The evolutions in the labour market and the occupational solutions chosen by the rural labour force were investigated in order to highlight the rural human capital access and integration capacity into an increasingly knowledge-based economy. Thus, we aimed to test the rural human capital capacity to innovate and by this, to generate economic growth and improve its own living standard.

7.2. Rural human capital – structural changes in Romania

7.2.1. Demographic changes

The rural communities from Romania are subject to quantitative demographic processes (continuous diminution in the number of inhabitants) as well as to qualitative demographic processes (structural/functional changes) generated by modernization at societal level and by macro-social transformations. These transformations became a constant of the post-December 1989 period, by conjugating multiple endogenous demographic, economic and social factors and by the need to adapt to the macrosocial/macroeconomic challenges.

The rural population share in total population decreased from 45.6% (1 July 1990) to 45.1% (1 July 2013). In the demographic reductionism perspective, the diminution in the number of inhabitants is caused by the incapacity of the rural space to reproduce its own structures and is materialized into the increase in the negative values of the "natural population increase".

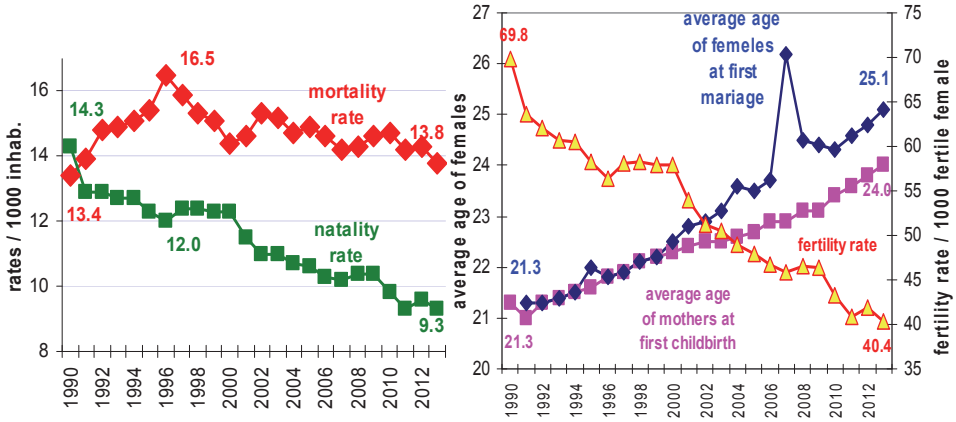
Table 7.1. Rate of natural population increase evolution

Specification %	1990	2013
Total	3.0	-2.4
Urban	4.7	-0.6
Rural	0.9	-4.6

Source: NIS, TEMPO on-line database.

The natural movement of the demographic capital has significant implications in the development and modernization of the economic and social structures specific to rural communities.

Figure 7.1. Natural movements of rural population in Romania – evolution in post-communist period



a) Natality and mortality rates b) Marital and fertility patterns of rural females

Source: NIS data – TEMPO on-line database.

The rural demographic changes were materialized into:

– *the delayed nuptiality* phenomenon: the average age of partners increased, mainly for rural women; in 2013, the average age of men who got married was 31.1 (28.2 in 2000), while the average age of women was 27.2 (24 in 2000);

– *the delayed fertility* pattern "was increasingly pronounced in the rural areas as well, while the one-child family pattern gained ground, mainly among young couples" [Mihalache, 2010: 4]; the fertility rates had a decreasing trend for all the fertile age groups (for instance, for the most fertile groups, the decrease was significant: for the age group 20-24 it decreased from 162‰

in 1990 to 81‰ in 2013; for the age group 25-29, the fertility rate decreased from 117.8 ‰ in 1990 to 77.9‰ in 2013; for the age group 30-34, it decreased from 81.9‰ in 1990 to 51.4‰ in 2013); the average age of mothers at first childbirth increased from 21.3 (1990) to 24 (2013);

– *the traditional marital stability attenuation* pattern: the increase in the number of divorces in the rural area at the background of this demographic phenomenon diminution at national level; in 1990, the divorce rate, 0.67‰, indicated the existence of rural marital cohesion (at the same time, the urban divorce rate was 2.10‰, while at national level it reached 1.42‰); in 2013, the divorce rate was 0.93‰ for the rural area, 1.68‰ for the urban area, and 1.34‰ nationwide.

From the demographic point of view, the structure by genders is maintained at rural population level, which enables a normal evolution of the specific processes from the social and economic point of view. The demographic change of the gender structure consisted in the increase in the number of rural women: in percentage terms, women accounted for 45.6% in the rural population in 1990, to reach 50.0% in 2013.

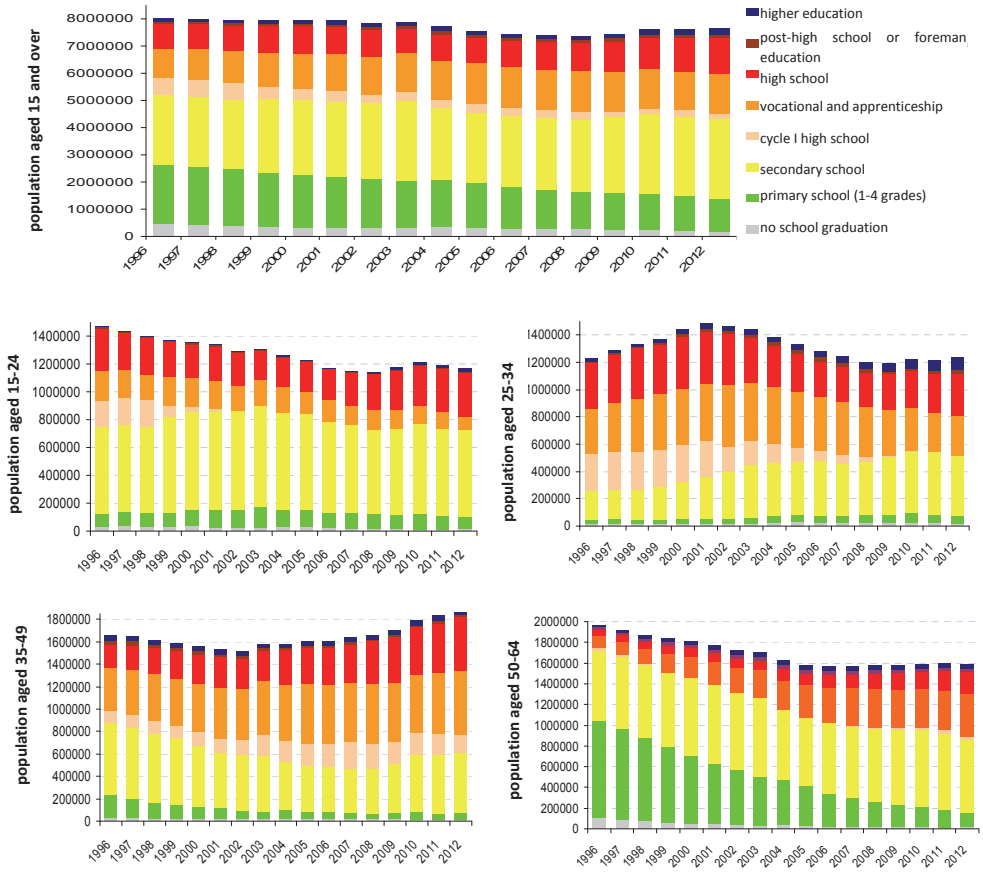
The demographic changes, materialized into the ageing of rural structures, were generated by a complex set of socio-demographic factors, the contribution of which is different according to the following characteristics:

– territoriality: the rural population in the western part of the country went through a constant "ageing" path, while the areas from the eastern part of the country experienced the same trend, with significant fluctuations;
– the feminization of old age: the women population had a faster "ageing" rate; the share of young women population (0-19 years of age) in total rural women population decreased from 15.8% (1990) to 10.8% (2013) [Popa, 2012].

7.2.2. Changes in educational structure

According to the human capital theory, the level of education is decisive for the access to the labour market and to a well-paid job. Between 1996 and 2012, the educational level of the rural population has tended to improve slowly. In the structure of rural population aged over 15 (that represents the labour force recruitment pool), the share of persons with low educational level (who graduated less than 8 schooling years) decreased from 65% in 1996 to 56% in 2012. At the same time, the specific weight of rural population with a high educational level (short and long time higher education, including master's degree and PhD) doubled in relative figures, its share in the rural population over 15 years old increased from 1.3% to 3.1% in the investigated period (Figure 7.2).

Figure 7.2. The education level of rural population aged 15 and over, by age category



Source: NIS data – TEMPO on-line database.

The analysis of the interest in education by rural population's age groups reveals a contradictory evolution in the case of rural young generation. Unfortunately, the young people (under 35 years of age) are becoming less and less interested in graduating secondary and higher education levels than older generations. In the period of 1996-2012, the number of rural people aged 25-34 who graduated a low educational level practically doubled, the share of this educational category in total rural population from the above-mentioned age group reaching 42% (Figure 2). In this way, the young population risks to endanger its access opportunities and active involvement in the labour market. We shall next test this assumption, on the basis of statistical data.

7.2.3. Migration and its implications

In the transition period, in Romania, a series of restructuring processes of the socialist economy significantly contributed to the major changes in migration flow trends. The main structural and economic adjustments in transition that contributed to the re-ruralisation of a part of the Romanian population were:

1. The restructuring of the secondary and tertiary sectors of the socialist economy, generally materialized into closing down of the socialist industrial enterprises. This had two consequences:

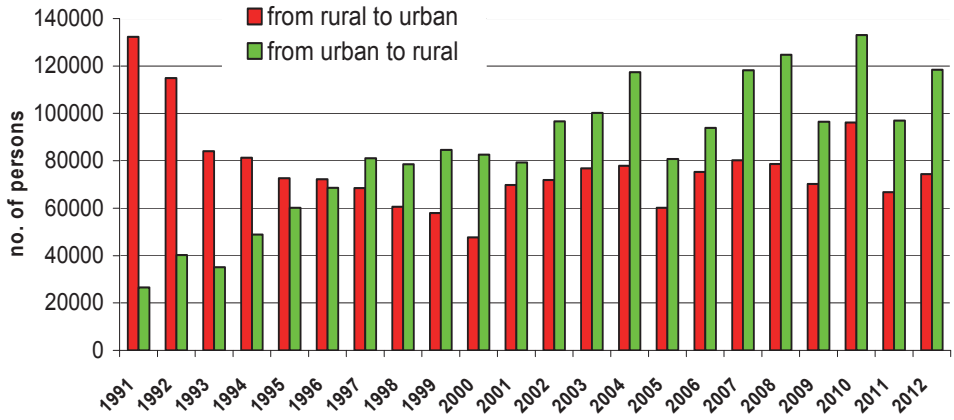
- a significant growth in the inactive population's volume by applying certain large early retirement measures [Tudor, 2011];
- a significant loss in job supply (practically, in ten years, 1990-2000, the number of employees in Romania was down by half and got stabilized at this level) in the absence of consistent initiatives for the development of new private business, on the market economy basis, which should make up for the job deficit.

2. Private agricultural land ownership right reconstitution, by which the land owners got back their right to work the small land properties on individual basis. The land reform held after the collapse of the communist regime led to the restoration of the post-second world war land situation, in which the structure of agricultural holdings was dominated by small farms. Thus, in Romania of 2003, there were about 4.5 million agricultural holdings with an average size of 3.1 ha of agricultural area per farm.

The re-ruralisation, the urban-rural migration of a part of the urban population (largely represented by inactive persons and long-term unemployed, discouraged in looking for a job due to the redundancy of their professional skills) is the consequence of the two changes in the Romanian transition period, with influences upon the rural area (Figure 7.3).

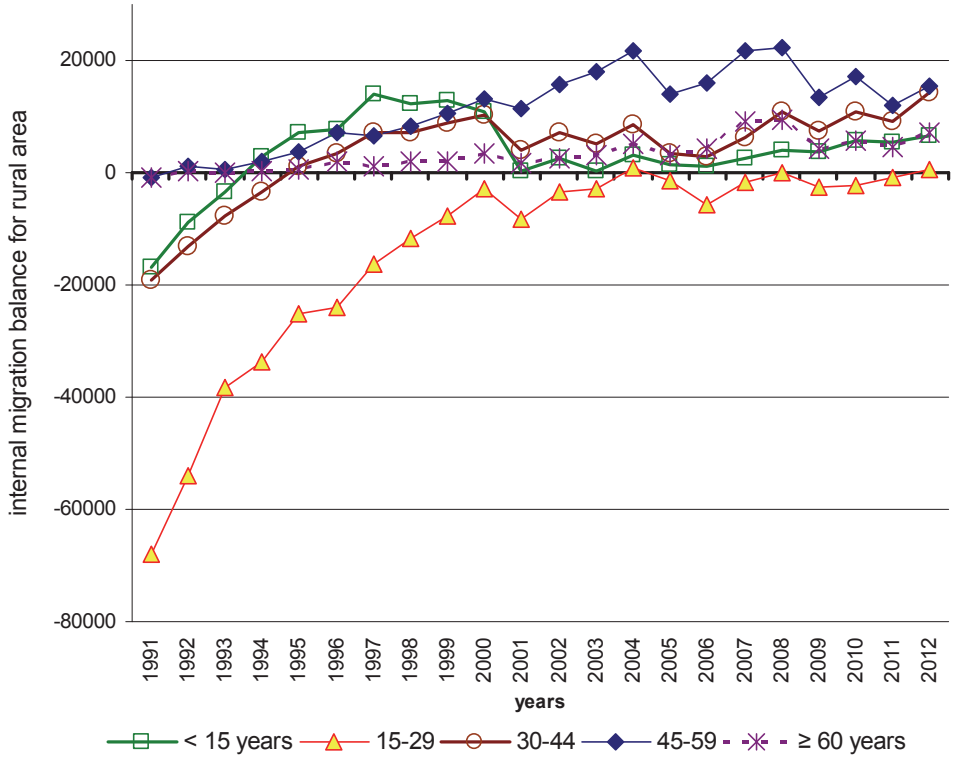
A thorough analysis of the structure of internal migration flows reveals that the rural area lost young population contingents in favour of the urban area and absorbed additional mature population contingents or population contingents at the end of its working age. The rural internal migration balance for the age group 15-29 was negative in the last quarter of the century. Throughout the socialist economy restructuring, there was an increase in the number of persons over 45 years old who established their domicile in the countryside (Figure 7.4).

Figure 7.3. Internal migration flow in the transition period



Source: NIS, TEMPO on-line database.

Figure 7.4. Domicile change balance for the Romanian rural area, by age groups



Source: own calculations based on NIS data – TEMPO on-line database.

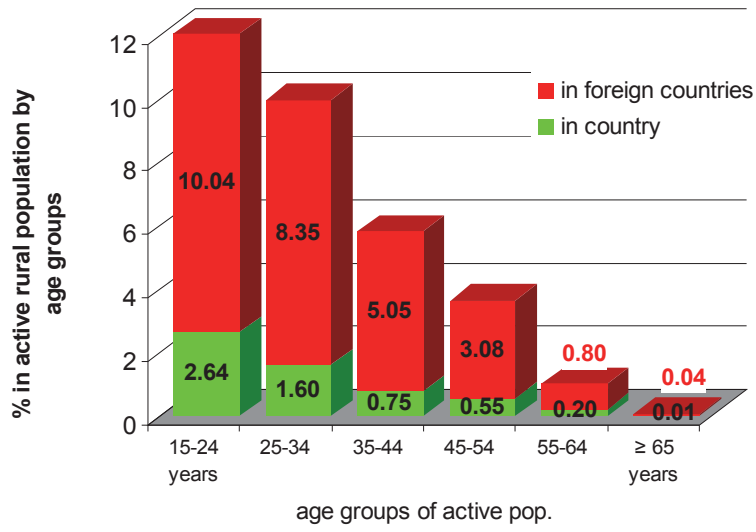
In a slightly lower percentage, younger population contingents returned to the rural areas, 30-44 age group, which resulted in an increased number of children (under 15 years old) established in the rural area. These population movements accelerated the rural population ageing effect generated by birth rate decrease.

The absence of non-agricultural occupational opportunities in the countryside, where more than 60% of the employed population works in agriculture, determined a part of the rural population of working age to opt for the solution of migration for work abroad, mainly to the EU countries.

In the structure of rural population involved in circulatory migration to foreign countries, it is the young active population that prevails, the largest part of those who leave to work abroad having an educational level above the rural average.

The data from the General Census of Population, conducted in 2011, reveal the fact that the access to the labour markets of other countries substitutes the employment in agriculture of the rural active population belonging to the age groups of 15-34. The rural population's reaction to the low job supply in the rural area is the *territorial mobility* of the labour supply to those areas where the business environment is more developed and the labour market is functional (Figure 7.5). The men and the women from the rural active population are equally included in the migration flows for work abroad.

Figure 7.5. Share of persons temporarily absent for work and business in rural active population by age groups, 2011

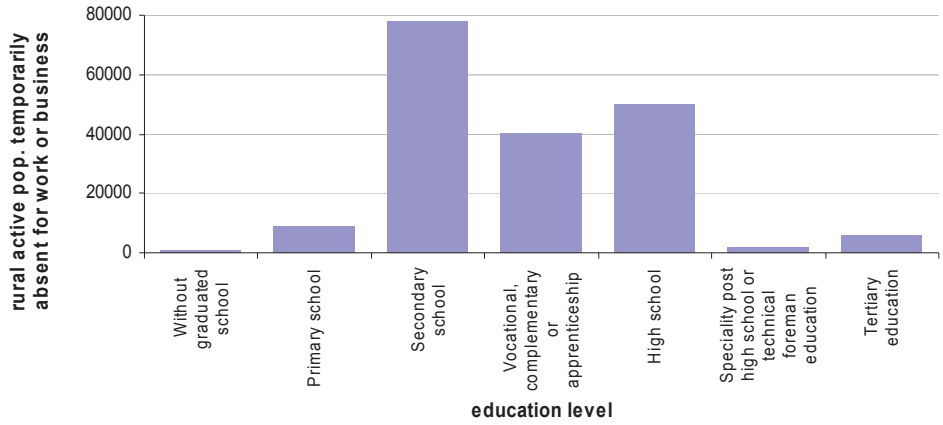


Source: INS, General Census of Population and Housing 2011.

The size of the circulatory migration phenomenon for work – both in Romania and abroad – results in a significant decrease in the young active population that effectively supports the labour force supply in rural areas. A simple statistical determination of the real available active population on the basis of the data from the last Census of Population reveals that out of the total rural active population with the domicile in Romania only 94.6% effectively supports the labour force supply at commune level, the remaining 5.4% being temporarily absent. For periods ranging from 1 to 11 months, the latter left for work or for finding a job in the country or abroad.

Furthermore, out of the young active population aged less than 35, 11% are temporarily absent[24] being either involved in occupational arrangements in the country or abroad, or looking for a job or they left for business. The 12.7% of the rural active population aged 15-24 and the 9.9% of the young active population aged 25-34 who are absent from the rural labour force supply represent a significant loss for the innovative capacity of the rural human capital.

Figure 7.6. The structure of rural population involved in temporary job migration to foreign countries by educational level, 2011



Source: NIS, General Census of Population and Housing 2011.

There is another problem linked to the rural labour migration that burdens its innovative capacity. It is determined by the fact that a large part of those who opt for migration to the foreign labour market have a higher educational level

[24] Temporarily absent – according to the Census of Population and Housing 2011, they are persons who are part of Romania's stable population, but are absent from their domicile for periods ranging from 1 to 11 months.

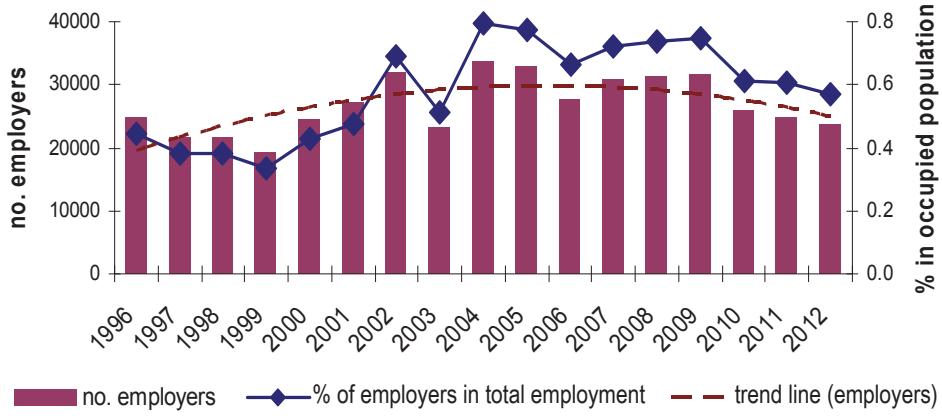
than the average rural active population. Thus, according to the data from the population census, in 2011, 53% of those who temporarily migrated to foreign countries for work have an educational level higher than *secondary school* (Figure 7.6).

7.3. Rural economy – structural changes

7.3.1. Rural entrepreneurship – structural changes

The extent to which the active population from the Romanian rural area perceives the opportunities of business development and it is able to assume the risks of business initiation and continuation had a general increasing trend in 1996-2009, depending on the stimulating action of the structural funds devoted to support the small private initiatives (start-up included). However, the statistical data reveal that the economic crisis effects have also impacted the rural business environment since 2010. As a result, in only three years (2009-2012), 24% of the rural employers withdrew from business (Figure 7.7).

Figure 7.7. Rural entrepreneurship dynamics in rural Romania



Source: own calculations based on NIS data – TEMPO on-line database.

With 2.5 employers per 1,000 rural inhabitants in 2012, the number of private rural businesses is still far from being sufficiently high so as to determine a steady and sustainable economic growth in the long run.

The incidence of entrepreneurial concerns in the rural employed population follows the evolution of the number of employers in the investigated period. After Romania joined the EU (on 1 January 2007), the business environment

became more stable and stimulating; the share of employers in the employed population increased from 0.66% in 2006 to 0.75% in 2009. We can notice an increase in the perception on the success opportunities of a new private business, which encourages people with initiative to assume the risk of initiating their own business or under partnership with other people with similar initiatives. But the Romanian rural private entrepreneurs' enthusiasm, after Romania's accession to the EU, was cut short by the economic crisis that led to the contraction of demand for goods and services. As much as 24% of the small rural firms did not have enough resources to survive after the demand contraction even in medium term and they had to close down their business after 2009.

The structure of fields in which the entrepreneurial initiative is manifested in the Romanian rural area reveals a low diversification, being dominated by the economic operators that carry out their activity in the trade sector, mainly in the retail sector. This fact is reflected in the distribution of entrepreneurial initiatives by activity sectors in 2012, where 39% of employers operate a business in the wholesale and retail sector, 21% in the manufacturing sector, 14% in constructions and other 13% in primary sectors (Figure 7.8).

Figure 7.8. Entrepreneurs' evolution by activity sector

Source: own calculations based on NIS data – TEMPO on-line database.

The mechanisms of the Romanian rural economy system are not fully functional yet, the rural business structure being still deficient in the area of services – other than retail trade – which should facilitate the development of enterprises in the primary and secondary sectors.

However, in the sixteen years for which statistical data exist, it can be noticed that there is an increase in the diversification of the economic activities of rural entrepreneurs; this diversification was imposed by the rural market needs (business growth in the sector of constructions resulting from the increased demand for village modernization and renovation as well as for other services besides trade) and by the need to add value to the local raw products and to use, as best as possible, the existing labour resources (rural industry sector).

7.3.2. Rural labour market

The modernization of Romania's rural universe presupposes the occupational empowerment of existing resources, re-allocation of economic resources and the social maturation of the institutional system. The lack of strategic consistency of the territorial approaches in Romania determined inadequate solutions for putting into value the existing economic potential. "The territory is very little put into value in adding value to economic processes" [ME, 2014].

The statistical analyses reveal that a strong contraction of the population of working age was produced in the rural areas, under the influence of massive internal migration flows from the rural to the urban areas, which characterized the first years of transition in Romania. The poor diversification of the rural economy and the perpetuation of this situation in time, associated with the agricultural land ownership reconstitution and constitution, and the emergence of the small individual farms, make the active population continue to be highly dependent on the primary sector of the rural economy, or even to increase this dependency in the regions that are not able to stimulate the development of private enterprises in the secondary and tertiary sectors on the basis of functional market economy. The rural human resources live their own history, resulting from the endogenous demographic processes of the rural area and the vulnerability of local rural economies. Labour force in agriculture is much oversized compared to the other EU Member States. The employment rate in agriculture, forestry and fisheries at national level remains high, i.e. 28.6% in 2011, compared to the EU average (4.7%), and its evolution in recent years, beginning with 2005 (31.6%), has not been spectacular.

In the more than modest conditions provided by the rural economic activities, the rural population's activity rate followed a decreasing trend, resulting in the employed population decline. Until 2002, the largest part of the employed population was found in the rural area. Starting in 2003, the largest part of the employed population is living in the urban area, i.e. 54.7% in 2013 [MARD, 2013, NIS, 2014].

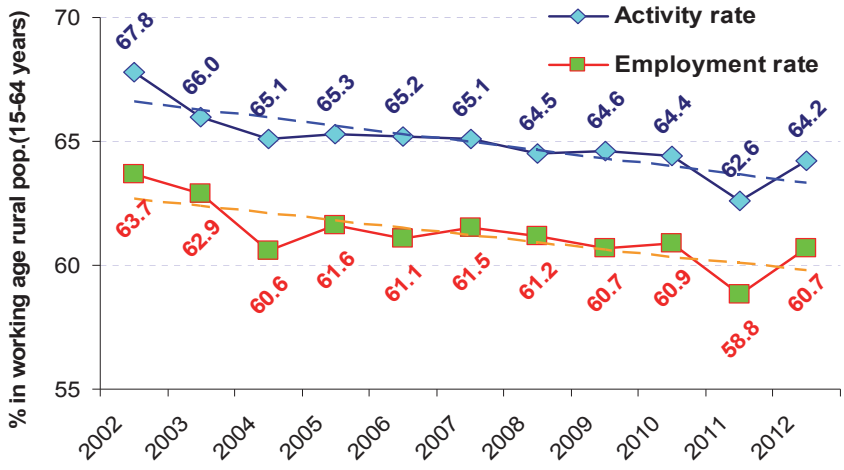
Table 7.2. Evolution of rural population contribution to the labour force, **%**

	Activity rate, 15-64 years of age	Employment rate, 15-64 years of age	Unemployment rate, 15-64 years of age
1996	75.4	71.8	4.8
2013	64.4	60.7	5.8

Source: own calculations based on NIS data – TEMPO on-line database.

The human capital characteristics and their evolutions in time have a decisive impact on access to and participation in the labour market of rural population. Due to population's ageing (Figure 7.10), the activity rate of the rural population is in constant decline. The rural employment rate also declined, due to the lack of job opportunities in both rural and urban areas (Figure 7.9).

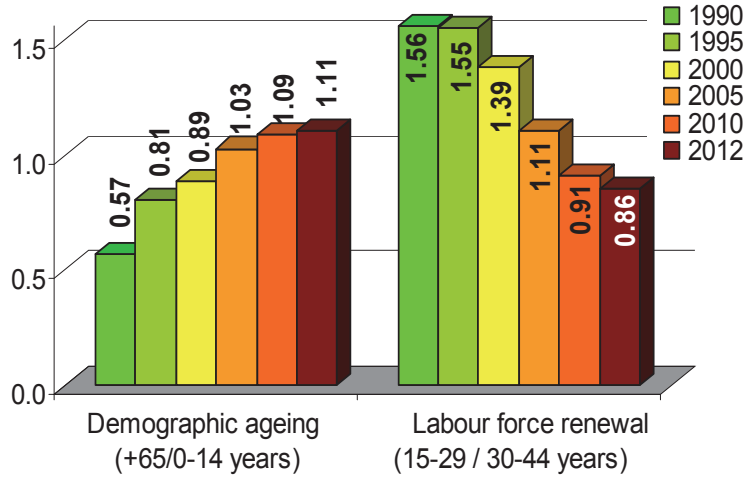
Figure 7.9. Evolution of rural activity and employment rates



Source: own calculations based on NIS data – TEMPO on-line database.

The age structure of the active rural population constantly deteriorated in the last decade, with significant influences on the innovating capacity of the labour recruitment pool. Thus, while the rural active population volume was down by 10% in 2002-2012, the number of active young persons (15-24 years of age) decreased by one-third in the same period (Figure 7.11a). Thus, we reached the present situation in which one in three active rural persons is more than 50 years old, while this ratio is only one in five people in the urban area.

Figure 7.10. The evolution of the rural demography



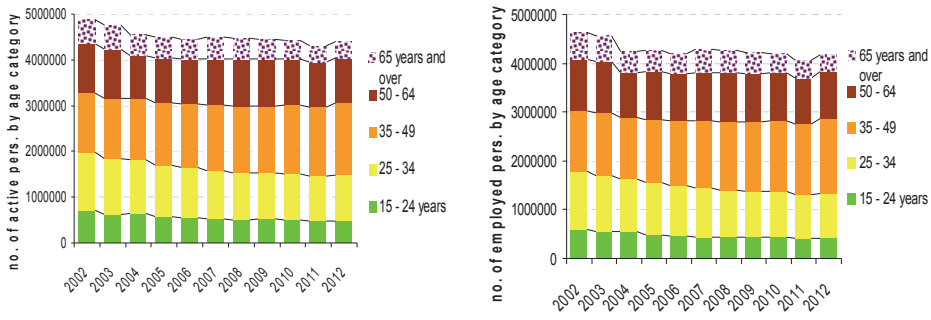
Source: own calculations based on NIS data – TEMPO on-line database.

The labour renewal resources are exhausted in the Romanian rural area; the ratio of the population at the beginning of the working period (age group 15--29) to the population in the middle of working life (30-44) experienced an accelerated decreasing trend especially after 2000 and it became less than one in 2008 (Figure 7.10). This evolution will determine an accelerated ageing of labour force itself, as in the age structure of the active population, the young people will have an increasingly lower share, while the share of the mature and old population will increase. Active population ageing has a negative impact upon the population dynamics in the rural labour market. Labour force ageing is accompanied by the decrease in the labour force innovating capacity, occupational mobility and in the capacity to assume the risk of occupational status change. All these represent risks for the implementation of new entrepreneurial initiatives in the rural area.

The rural population's occupational structure by age categories followed the active population's trend (Figure 7.11b). The statistical data reveal a disparity phenomenon with regard to the access to jobs in the age groups found at the extremes: active young persons in the 15-24 age group, on the one hand, and the active elderly people aged over 65, on the other hand. Thus, while only 84% of the active young people succeed in getting integrated in the labour market, the employment rate of the active persons over 65 is about 99.9%.

A significant employment rate is also found in the active rural population 50-54 years old (98%).

Figure 7.11. Evolution of active (a) and employed (b) rural population, by age category, in the last ten years



(a) **(b)**

Source: own calculations based on NIS data – TEMPO on-line database.

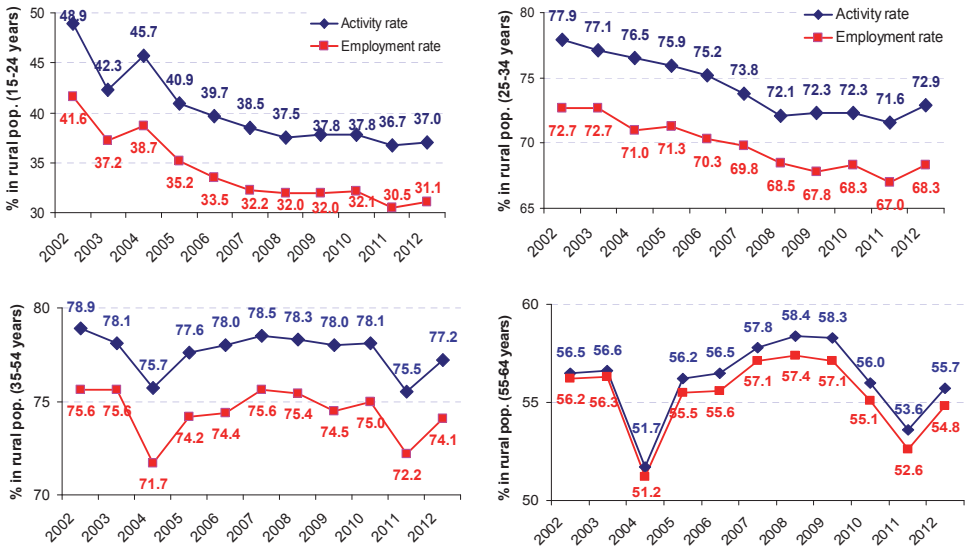
The analysis of the demographic aspects of the access to and participation in the rural labour market reveals the fact that there is a positive correlation between the active rural population's age and its opportunity to get a job. Furthermore, in the ten investigated years, there was a general decreasing trend in the access to a job for younger population. In other words, the opportunity to obtain a job for the active young population (aged 15-24) is in permanent decline, while the opportunities to get a job increase instead as the active population's age increases.

The explanations for this situation, according to the human capital theory, can be the professional training level and the compatibility between the labour force skills and the labour market requirements.

Labour market involvement of rural population differs by age groups and education level, being an important predictor for the labour market participation (Figure 7.12):

- young people, between 15 and 24 years of age, have the lowest activity rate and the trend is decreasing; they also have the smallest chances of finding a job, while the unemployment rate among them is around 15%;
- people aged between 25 and 54 are the most active in the rural labour market;
- we are witnessing a phenomenon of decreasing activity and employment rates of rural population aged 25-34; we believe that this can be explained by the short-time migration for work abroad of this category of active rural population;
- a lower education level of the age group 25-34, compared with the older generations, also causes higher unemployment levels for this age group;
- the older working active population (over 55 years old) has easy access to the labour market compared to the younger population.

Figure 7.12. Evolution of activity and employment rates of rural population by age category in the last ten years

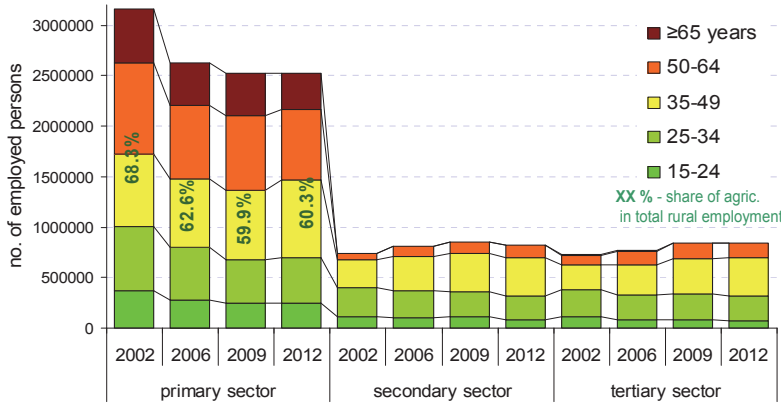


Source: own calculations based on NIS data – TEMPO on-line database.

The general tendency to get involved in the labour market also differs with the rural population's age. The activity rates of rural population younger than 34 had a statistically significant decreasing trend in the last ten years. In the population aged over 35, the participation in the rural labour market, expressed as trend of activity and employment rates, features variations linked to the economic mobility, yet the general tendency is a stable one.

The occupational structure of the population of rural communities from Romania was and continues to be dominated by the primary sector (represented by agriculture for its most part). Although the number of persons working in agriculture decreased by one-fifth in 2002-2012, the share of agriculture in labour employment is above 60% in rural Romania. In general, the young perople under 35 years of age and the persons over 50 years of age quitted from the farming activity (Figure 7.13).

Figure 7.13. Evolution of Romanian rural employment by activity sectors and age groups



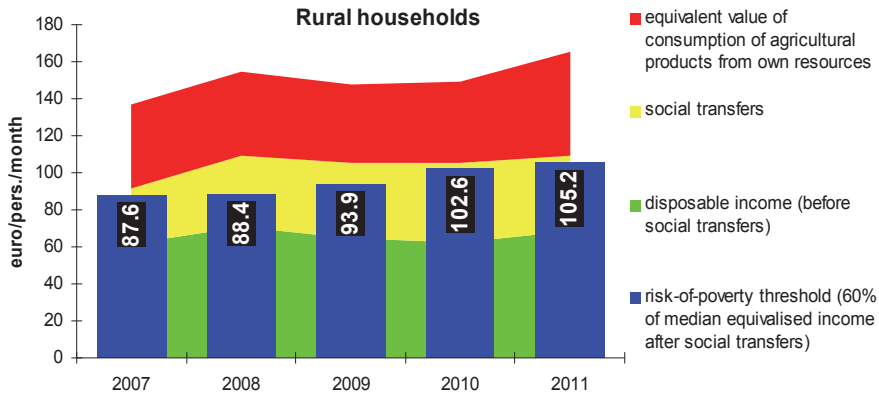
Source: own calculations based on NIS data – TEMPO on-line database.

In reality, the population working in agriculture is underemployed in Romania. According to the data of the 2010 Agricultural Census, the average number of days effectively worked in agriculture by a person employed in this sector is 47 days/person/year and most of them perform agricultural work in their own holding.

7.4. The implications of the structural changes in rural economy for the rural household's welfare

In the conditions in which the potential of remunerated job supply decreased almost by half compared to 1990, the rural household and the small peasant farm around it became the main means to cover the primary consumption needs for almost half of the country's population (45% of Romania's population currently lives in the rural area). Due to the lack of non-agricultural opportunities in the rural labour market and to the prevalence of subsistence and semi-subsistence farms, the welfare of rural households significantly depends on the self-consumption of their own agricultural products (Figure 7.14).

Figure 7.14. The contribution of self-consumption to the welfare of rural households in Romania



Source: own calculations based on NIS data – TEMPO on-line database.

The statistical data reveal that, generally speaking, in the absence of self-consumption, the Romanian rural population would be at risk of poverty. At the level of Romanian rural households, the social transfers allow the rural population to cross the poverty threshold (in 2011, the disposable income per adult equivalent crossed the relative poverty threshold by only 4%). The same data shows that the value of consumption from own resources significantly contributes to improving the welfare of rural household members.

7.5. Conclusions

In the quarter of the century that has elapsed since the fall of the communist regime, demographic movements took place in the Romanian rural space that approximated the rural patterns to the urban ones with regard to birth rate, nuptiality, divortiality, leading to a negative natural population increase, to population's demographic ageing and feminization. In this demographic context, the Romanian rural human capital experienced both quantitative and qualitative depreciation processes, namely:

- in quantitative terms, we experienced the contraction of the available rural human capital volume due to rural population's general ageing and migration (rural-urban and/or to foreign countries) of important contingents of rural population at the beginning of their working life;
- in qualitative terms, the available human capital in the Romanian rural area is facing significant problems generated by the educational level decrease in younger generations (15-35) compared to those at the end of their working life. This situation represents a main risk for the young rural population's access to the labour market, materialized in decreasing employment rates. The rural young people's low educational and training level represents a significant constraint to business environment diversification, as the innovative entrepreneurial initiatives (that often imply the use of modern technologies) are confronted with the skilled labour deficit in the rural area.

A vicious circle was created between the rural human capital characteristics (featuring low development levels) and the rural population's dependence on agriculture, which is also maintained/amplified by the occupational migration outside the rural area of the population with a higher educational level. The implications for the rural population's living standard are negative, and the chance of improving it resides in increasing the opportunities of access to the labour market through lifelong education in parallel with stimulating rural economy diversification.

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Chapter VIII
The employment effect of the agricultural farms' diversification

8.1. Introduction

The EU Common Agricultural Policy examines agricultural farms' diversification[25] as a factor of resolution of the rural areas socio-economic problems. This analysis' aim is the assessment of agricultural farms diversification opportunities to have an impact on the labour market. The diversification possibilities were analysed to have impact on:

- the number of employment positions in rural areas;
- the labour force of rural households use;
- the diversity and the attractiveness of the employment in rural areas increase;
- overcoming of the big differences of the rural population by planning regions.

The chapter presents outcomes of the implementation of the Measure 311 of the Bulgarian Rural Development Programme (RDP) and analyses its impact on the employment in rural areas. Information presented in the paper comes from the databases of Eurostat, National Statistical Institute and Agricultural Statistics of the Ministry of Agriculture and Food.

8.2. New labour positions creation – expectations and reality

Big were the political expectations toward the family farms diversification for the rural areas employment increase. This is one of the reasons to encourage the agricultural farms diversification in the EU, through the policy for rural areas development. The expenses under Measure 311 for agricultural farms diversification, for 2007-2013, in Bulgaria have bigger relative share of the total expenses under the Programme for Agriculture and Rural Areas Development than in the EU-27 (1.5%); the EU-15 (2.2%); the EU-10 (2.2%);

[25] Farmer diversification means other employment, out of agriculture, which uses resources or production of the farm and which has an economic effect on the farm.

the EU-12 (2,2%). These expenses' share is considerably higher in Bulgaria than in other European countries, having the highest and increasing part in diversified farms (Table 8.1).

Table 8.1. Diversification of the holdings in selected countries with the biggest rural development support to the diversification of agricultural holdings

	Slovak Republic	Bulgaria	Italy	Czech Republic	Finland
Programmed EAFRD expenditure on the Measure (311) (2007-2013)					
%	4.6	4.3	4.1	3.8	3.7
EUR million	90	112	341	107	77
Share of farms with diversification					
2005	10.4	5.7	6.8	13.9	29.0
2007	16.3	5.3	7.2	15.1	27.9
2010	5.9	1.1	4.7	15.0	26.5

Source: Eurostat – Farm Structure Survey (FSS).

In Bulgaria the opportunities under Measure 311 of the RDP were over-estimated. Regarding the employment, the Measure's aim is to create 5,500 labour positions, as 5,000 of them must be full-time jobs (Table 8.2).

Table 8.2. Measure 311. Diversification into Non-Agricultural Activities. Quantified targets for the EU common indicators

Indicator	Target 2007-2013
Number of beneficiaries	4,505
Total volume of investments (in EUR thousand)	219,110
Increase in non-agricultural gross value added in supported businesses (EUR million)	25
Gross number of jobs created	5,500
Economic growth (Net Change of Value added in million units of Purchasing Power Standard)	9
Employment creation (Net additional FTE jobs created)	5,000

Source: Republic of Bulgaria. Rural Development Programme (2007-2013), December 2009, p. 185.

Analysis in Poland, the Czech Republic and Hungary for the diversification impact on the new jobs creation [Chaplin et al., 2002] shows that the diversification is not the basic source of jobs and cannot resolve the high unemployment problems and create sustainable employment, despite its impact on the local employment (Table 8.3).

Table 8.3. Diversified household enterprises effect on employment in selected countries

	Poland	Czech Republic	Hungary
Number of full-time jobs created by 1 diversified household farm	0.1	0.2	0.4
Number of part-time jobs created by 1 diversified household farm	0.3	0.02	0.02
Number of jobs expected to be created in the next three years by 1 diversified household farm	0.08	1.1	0.09

Source: Chaplin et al., 2002; authors' calculations.

Our estimations, based on the data for the created jobs by a diversified farm in Poland, the Czech Republic and Hungary [Chaplin et al., 2002: 185] and for the relative share of diversified farms in Bulgaria, show that at the most optimistic scenario, in result of the applied Measure 311 of the RDP (2007-2013) not more than half of the expected jobs can be created, i.e. not more than 2,500 jobs.

8.3. Diversification impact on the use of labour in agricultural households

The diversification impact on the degree of agricultural households labour force use is outlined as comparison of the average values of the invested labour for diversified and non-diversified economy.

The interdependence between the diversification and the degree of household farms labour force use is positive. In the EU farms with diversification the invested labour is about 2.1 annual work units (AWU) per farm, while for non-diversified it is 1.3 units. In all Member States the average value of the invested labour in diversified farm surpasses considerably the average value of the invested labour in non-diversified farms. For example, in the Czech Republic the difference is 3 times in favour of the diversified holdings and in Slovakia – 10 times [Chaplin et al., 2002]. In Bulgaria the invested labour in 2005, in diversified farms is 3 times more than in non-diversified (Table 8.4).

Table 8.4. Comparative average labour force on farms with or without a diversification activity (AWU per farm), 2005

Country	Total	Farms without a diversification activity	Farms with a diversification activity
Bulgaria	1.17	1.11	3.78
Czech Republic	3.6	2.72	10.93
Denmark	1.17	1.05	1.71
Germany	1.65	1.52	2.09
Italy	0.8	0.75	1.46
Latvia	1.07	1.02	1.62
Hungary	0.65	0.56	2.35
Slovak Republic	1.44	1.13	14.57
Finland	1.18	1.18	1.18
Sweden	0.94	0.88	1.3
United Kingdom	1.18	1.05	1.6

Source: Eurostat – Farm Structure Survey.

8.4. Opportunities for employment diversification and creation of attractive jobs in rural areas

Indicator for the diversification possibilities of agricultural farms, especially for the employment diversification, is its structural profile. The main diversification forms of family farms are: agricultural and non-agricultural mechanized services under contract; rural tourism, handicrafts; wood material processing; renewable energy production; fishery and aquaculture.

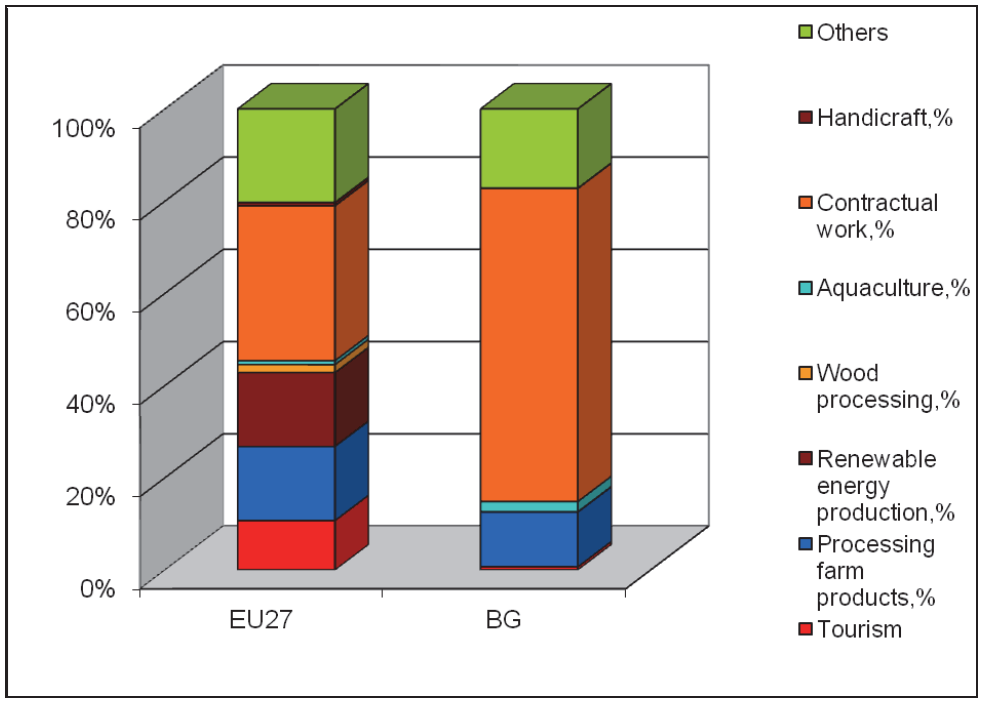
Agricultural services through a farm technique for external clients include: deep ploughing, sowing, hilling, harvesting, etc. The services of non-agricultural character are realized also through machines from the farm and include transportation, snow-ploughing, etc.

The production of handicraft goods (pottery, weaving, cutlery, leather manufacture, wood-carving) is spread mostly in definite regions, having traditions. The raw wood material processing (saw-mill) in the farm, market-oriented, does not include processing of wood material, produced at other farm.

The renewed energy production (wind, water, biogas, etc.) is less expressed. The agricultural production processing includes only the processed market-oriented production from the farm, not for self-sufficiency.

The most frequently found diversification form of the farmer's activity in the EU-27 is work under contract. 39.1% of diversified farms perform this activity. 18.7% of farms execute agricultural processing works under contract. The same is true for the renewable energy production, but this type of gainful activity is not present in all the EU-27 countries. Tourism is a practice of 12.5% of diversified farms in the EU-27. Other diversification forms – wood-processing and handicrafts are poorly represented (2.0% and 0.9% respectively) [Eurostat, Agricultural, forestry and fishery statistics, 2013]. Specific is the structure of the diversification kinds of agricultural farms in Bulgaria (Figure 8.1).

Figure 8.1. Structural profile of non-agricultural diversification of farm households in the EU-27 and Bulgaria, 2010



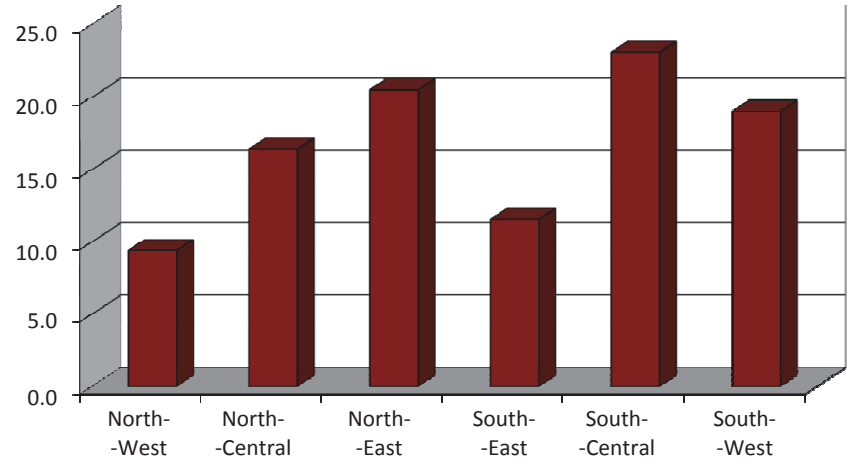
Source: Eurostat – Pocketbooks, Agricultural, forestry and fishery statistics, 2013 edition, p. 183

In the EU the biggest share is for the processing of farm products (18.7%) and the renewable energy production (18.7%), which in Bulgaria is a feebly spread diversification form (13.4%). In the EU-15 the rural tourism is relatively well--developed. In Bulgaria services under contract provided by a farm are predominant (76.8% of farms), all the other forms are poorly represented (Figure 8.1).

In the structural profile of the EU-27 diversification, the different kinds of activities are considerably represented and this gives opportunity for diversification and increase in the attractiveness of the rural population employment. In Bulgaria the diversification of agricultural farms has structural profile, which does not respond to the aim under Measure 311 of the Rural Development Programme for the diversification of activities and increase in the attractiveness of the rural employment. Therefore, the diversification of agricultural farms does not provide variable employment alternatives for the agricultural households members. Poorly represented are activities, related to the "new challenges" – production and selling of bio-energy, biomass processing (raw materials) of the proper agricultural farm and production and sale of energy from other renewable energy sources.

The particularities of the structural profile of the agricultural farms diversification in Bulgaria explain the geographic localization. The diversification activity is localized irregularly in the planning regions, its spreading in the North-West region of planning is poor (Figure 8.2), so it could not be able to diminish the labour market divergence.

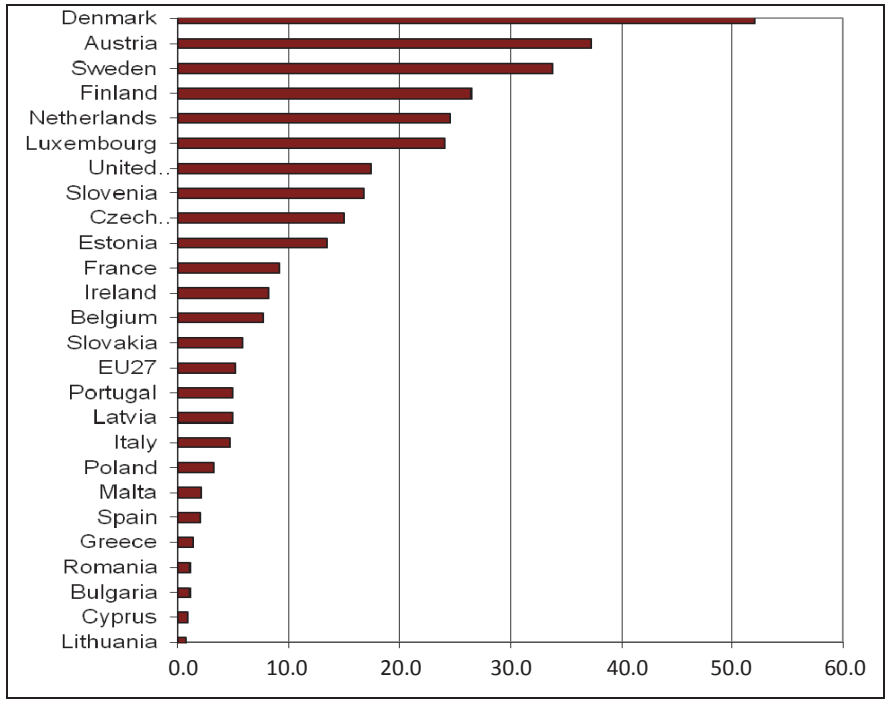
Figure 8.2. Share of holdings with diversification activity
by the planning regions in Bulgaria



Source: MAF (2005).

The full impact of diversification on the labour market in rural areas of Bulgaria will be defined from the perspectives of its spreading and development. From the Eurostat data, diversification of the activities in 2007 was noted by 5.2% of the farms in the EU-27. The diversification frequency is from 0.8 % of agricultural farms in Lithuania up to 52.0% of agricultural farms in Denmark (Figure 8.3).

Figure 8.3. Holdings with other gainful activities
(% of total number of holdings), 2010



Source: Eurostat – Pocketbooks, Agricultural, forestry and fishery statistics, 2013, p. 183.

In Bulgaria the predominant share of the small-scale farms and the age--advanced labour force in agriculture determine the low (lower than the average for the EU) and decreasing (five times for the period of 2005-2010) share of the diversified agricultural farms (Figure 8.3 and Table 8.1).

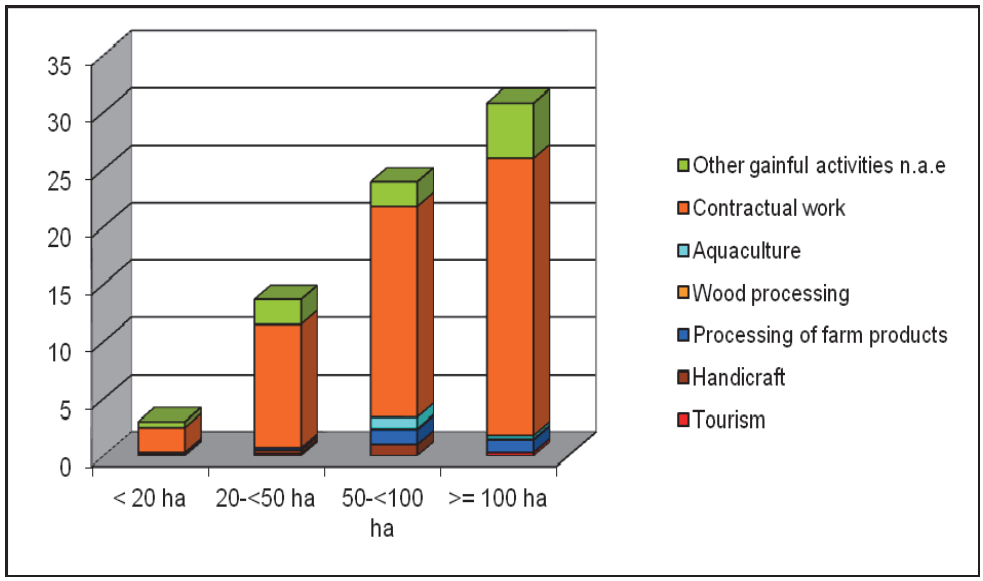
Factors defining the diversification development are the farm size, the human resources preparation and the farm localization.

The diversification net in farming is not possible for every farm. Characteristics as farm size, specialization or disposition make one or another farm more or less capable of diversification. The individual farmer's characteristics,

especially age, qualification level or motivation, are also very important [Other gainful activities: pluriactivity and farm diversification in the EU-27, European Commission, Directorate General for Agriculture and Rural Development, Brussels, 2008, LTB D (2008, 17488)].

In Bulgaria the diffusion of the diversified farms – general and by types – is in direct ratio to the physical farm size (Figures: 8.4 and 8.5).

Figure 8.4. Frequency of given diversification activities according to the physical farm size in Bulgaria

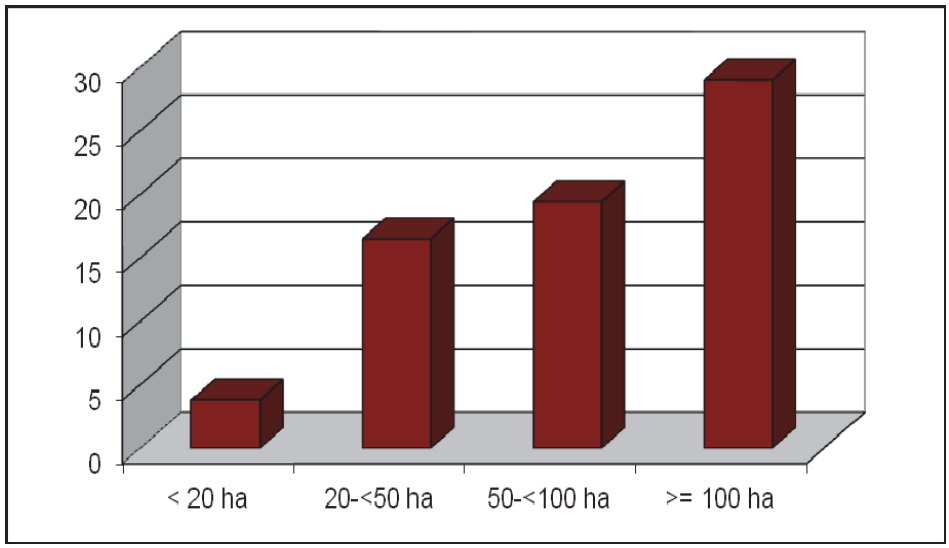


Source: Farm Structure Survey in Bulgaria, 2007, Eurostat, Statistics in focus, 16/2010.

The diversification is spread more often in the big farms. The share of family farms with diversification is – 3.8 % in farms having physical size 0-2 ha versus 29% for farms over 100 ha. The farm size has impact also on the structural profile of non-agricultural diversification of farm – the small farms have considerably poorer structural profile than the big farms.

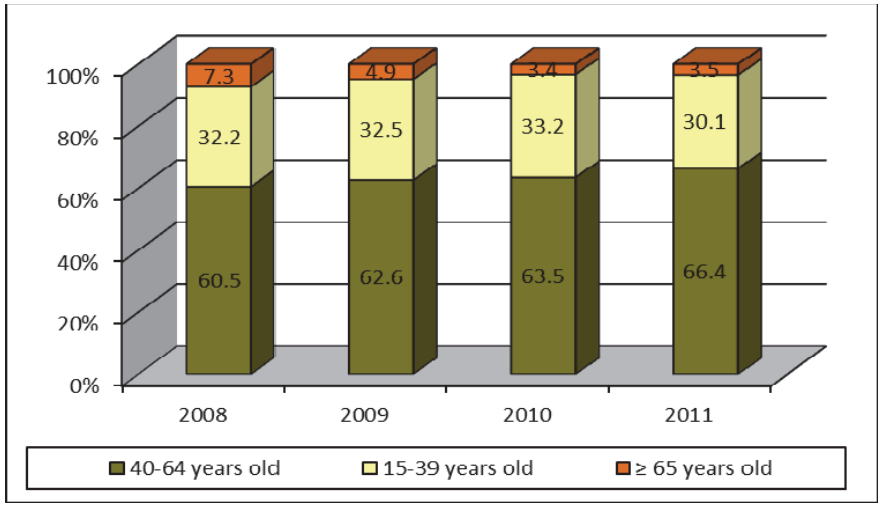
The farm localization could be a resource or a barrier for the farm activity diversification. The state of transport infrastructure plays a big role in the farmer's decision on diversification. The successful realization of non-agricultural activities is in direct relation to the overall development of the technical infrastructure in the settlement. Social infrastructure development, resources availability and consumer's demand for products from non-agricultural activities is also important.

Figure 8.5. Comparative share of farms with diversification in Bulgaria according to the physical size of a farm



Source: Farm Structure Survey in Bulgaria, 2007, EUROSTAT, Statistics in focus, 16/2010.

Figure 8.6. Agriculture, forestry and fishing, Bulgaria. Employment age ratio, 2008-2011, %

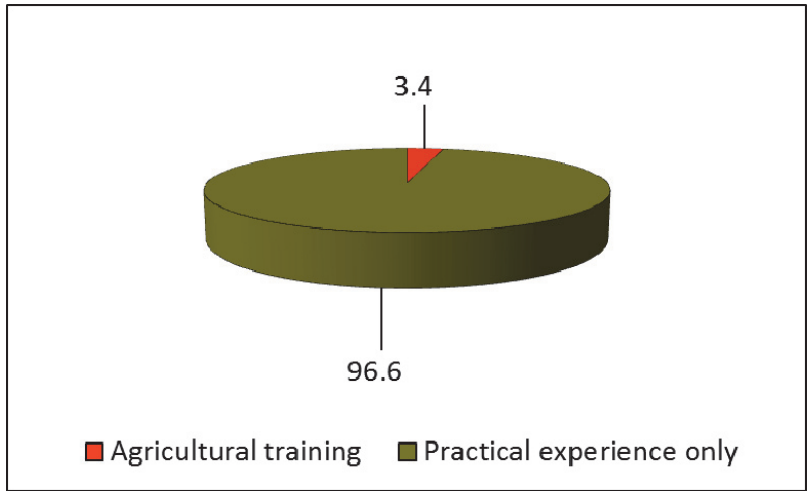


Source: EUROSTAT, Labour Force Survey.

Human resources, their qualification and skills would be a key element for the adoption of opportunities for agricultural farms diversification. The age and education characteristics of the employed in agriculture are considerable obstacles for the diversification toward non-agricultural – non-satisfying general education level and skills for non-agricultural activity. For example, the part of the farm managers up to 39 decreased from 32.2% (2008) to 30.1% in 2011 (Figure 8.6).

The share of farm managers in agriculture with practical experience only is 96.6% (Figure 8.7).

Figure 8.7. Agricultural training of farm managers, 2010, %



Source: Eurostat, Farm Structure Survey.

Some circumstances strongly limit the funds for further education of the rural population. Agricultural farmers do not have the right to apply for education under the Operational Programme "Human resources development".

The administrative capacity for absorption of the funds under the RDP's Measure 111 is missing. Only experts in the agriculture sphere work in regional structure of the National Agricultural Advisory Service. The increase in the funds for education and villages' development and renovation is a big challenge for the rural areas development policy.

The above analysis gives reason to the following conclusions related to the diversification opportunities of agricultural farms for impact on the employment in rural areas:

- The development of non-agricultural activity from the farms could not be the main source of jobs creation in rural areas.
- Agricultural farms diversification could not be able to reduce the divergence of the labour market.
- In its Bulgarian variant, the diversification toward non-agricultural activities does not justify the expectations for jobs' attractiveness.
- Agricultural farms diversification is an important factor for optimal rural households' labour force use – the amount of the invested labour in a farm is more than three times bigger.
- The opportunities of Measure 311 of the Rural Areas Development Programme for new jobs creation have been overestimated – under the most optimistic scenario the newly created jobs would be only half of what was expected.

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Chapter IX
Development and management of rural areas in Bulgaria by introducing alternative types of tourism

9.1. Introduction

"Tourism is a leading fast growing economic sector in Bulgaria with regard to currency income, share of GDP and opening of new work places" – this is the vision of the National Development Programme: Bulgaria 2020 (NDP BG2020) which is a basic strategic document defining the aims of the Bulgarian development policy by 2020. *Balneo tourism* is of paramount importance for Bulgarian tourism industry, creating suitable conditions for attracting significant tourist flow because of its specific characteristics.

Bulgaria has a positive image among both Bulgarian and foreign tourists. The survey feedback, received from foreign tourists, shows that they perceive this country as a peaceful destination with beautiful nature, delicious cuisine, with good prerequisites for spa/*balneo* and alternative types of tourism in general, with good options of accommodation.

9.2. Materials and methods

The actuality of the present survey ensues basically from the Bulgaria 2020 priorities which stipulate the opportunities for developing *balneo* tourism as part of the strategy for the sector economic prosperity. This is mainly due to its specificity – *balneo* tourism is one of the most beneficial sectors of tourism at international level. Referring to the National Strategy for Sustainable Development of Tourism in the Republic of Bulgaria 2009-2013, this type of tourism is considered appealing for the following reasons:

- Competitive power of natural potential – there are 600 mineral water springs in Bulgaria, grouped in about 240 locations. Their total capacity is about 270 million litters per twenty-four hours. Over 75% of those are warm and hot waters – at a temperature range of 37-101ºC. Almost all types of mineral

waters worldwide can be found in this country. According to its mineral content, mineral water is classified as: carbo-acid – containing over 500 mg/l of carbon dioxide; hydrogen sulphide water – containing over 10 mg/l of hydrogen sulphide; nitrogenous – with raised alkalinity, low mineralization and often rich in microelements, and radioactive water – radon mineral water. According to their temperature level, mineral springs are classified as: cold (hypothermal) – up to 20ºC; warm (sub-thermal) – 21-37ºC; warm (thermal) – 37-42ºC, and hot (hyper-thermal) over 42ºC. Most of the springs in this country – over 80%, have low total mineralization, contain solids at less than 1g per litre. Bulgaria has healing mud deposits: inorganic (of sediment and spring origin) – Pomorie, Banya (the Karlovo region), Shabla, Marikostinovo, etc; organic (of plant origin) – Kyustendil, Sodovo, etc. and turf (of high mountainous and earth origin).

- A total number of 142 resorts have been differentiated in Bulgaria – 58 of them offer *balneo* therapy, 56 – are mountainous and climatic resorts, and 28 – sea resorts.
- The climate is healthy with a healing effect in specific regions of this country.
- *Balneo* tourism creates jobs which mostly require highly qualified employees.
- *Balneo* and spa hotels are evenly distributed in this country – with no concentration along the Black Sea Coast only. Balneological centres have been set up in the interior as well as in: Devin, Velingrad, Hissar, Kyustendil, Sandansky, Bansko.
- There have been long-lasting traditions in *balneo* therapy in this country.
- *Balneo* tourism regulates the tourist season demand by improving employability during the low season.

9.3. Results and discussion

Bulgarian *balneo* resorts are a combination of perfect climate and plenty of mineral water springs. The climate is continental and Mediterranean, yet lacking the severe storms typical of northern Europe or the Sahara heat of the Mediterranean lands. The mixture of mineral springs and healing mud is beneficial to medication, recreation and a holiday break throughout the whole year. The mineral waters in Bulgaria contain various chemical components, are mineralized and of good temperature and contain gasses and microorganisms.

Bulgaria ranks the highest in Europe with respect to richness and diversity of hydrothermal waters and bioclimatic treatment. The climatic and *balneo*

opportunities have been used for ages. Flourishing Thracian settlements appeared in close proximity to mineral springs. The Romans built the big towns of Diocletianopolis (Hissar), Dezudava (Sandanski), Ulpia Pautalia (Kyustendil), Serdika (Sofia) and many others. Balneological centres were set up by the following emperors: Trajan, Septimius, Severus, Maximillian, Justinian.

Bulgaria is among the leading countries for herb variety, all with magnificent healing characteristics. This enormous diversity of natural factors, combined with modern hotels and *balneo* therapy centres, provide an opportunity for health care and medical treatment all year round.

The largest *balneo* centres are: Sandanski, Velingrad, Hissar, Kyustendil, Kostenetz, Devin, Sapareva banya, Varshetz, etc.

The Black Sea Coast resorts offering a great potential for *balneo*, spa and wellness tourism include: Albena, The Golden Sands, Riviera, Sunny Beach, St. Konstantin and Elena, Pomorie, Sozopol, Nessebar, etc.

There are also various facilities for therapy and recreation in the mountain resorts – such as Borovetz, Bansko, Pamporovo, etc. Their invaluable wealth include the stunning nature, fresh air and mineral water springs (Figure 9.1).

Figure 9.1. Basic mineral water springs in Bulgaria

Source: own compilation.

The research on tourism markets and tourist flows in this country explicitly show the actual image characteristics of Bulgaria as a *balneo* tourism destination. Nevertheless, there are no extensive studies regarding the potential of spa tourism development as a mechanism for attracting investments to rural regions

and creating jobs. In reference to the mineral water springs spread throughout the country, they are mostly found in rural areas which is a serious prerequisite for analysing the contribution of this type of tourism to the economic development of the respective regions.

As a whole, the rural regions in Bulgaria include areas of unique character and unused potential for tourism development, combining natural and cultural values, offering recreation environment in conformity with the up-to-date requirements for accessibility, bioclimatic comfort and communication connectivity. According to the Rural Development Programme 2014-2020 (draft) "municipalities with mineral water springs are considered to belong to the group of those with high density of natural resources (there are 600 mineral resources in Bulgaria). This precious tourism resource is a prerequisite for an all year round supply of tourism products of the highest interest – *balneo* therapy, spa and wellness".

Opportunities for development and management of *balneo* therapy tourism have been studied within the boundaries of the South Central Region (SCR), emphasizing the rural municipalities. The new cohesion policy plays a very important role along with the orientation towards implementing the "Europe 2020" strategy objectives, with the more active participation of regions, stressing the territorial cooperation and methods which require both good results and value added. The economic, social and territorial cohesion were examined as equal, mutually complementary and supportive components of an integrated concept for regional development, excluding sector fragmentation.

The South Central Region (Figure 9.2) encompasses the territories of the regions of Plovdiv, Pazardzhik, Smolyan, Kardzhali and Haskovo along with 57 more municipalities. The region includes the western half of the Upper Thracian valley, the southern part of Central Balkan mountain, part of Sredna Gora, the sub-Balkan fields and a big part of the Rhodopi mountain range. The region area is 22,365.1 km^2 or 20.1% of the whole country territory. Its territorial structure comprises: 48.1% of agricultural land; 45.1% of forests and urban territories – only 3.9%. According to the Regional Development Plan of the SCR for 2014-2020, "the development of tourism in the region is becoming of higher importance for the economy and employment". The region has a significant potential for diversifying and improving the regional tourism product and provided services. The favourable natural factors and the presence of a large number of mineral water springs with various medical properties, in particular, together with the historical and cultural heritage, the accumulated experience in the area of offering tourist services, and, to a great extent, the existing tourist infrastructure, contribute to

the fast development of tourism industry and to the income increase from tourism. The majority of all tourist equipment and offered services in the SCR are concentrated in and around towns and villages perceived as resorts for *balneo* therapy, with cultural and historical landmarks, as well as with resort zones and centres in the Rhodopi region.

Figure 9.2. The South Central Region of Bulgaria

Source: own compilation.

The SCR features remarkable affluence of diverse natural, cultural and historical landmarks, traditions in land utilization and mineral waters. The presence of recreational and tourist resources allows the progress and combination of various types of tourism all year long or for at least two seasons. The value added to the rural regions development on the SCR territory is to be found in *balneo* tourism striving at accumulating financial resources and contributing to the economic development.

9.4. Conclusions

According to the Water Act, the mineral water resources, which are exclusive state property, in conformity with Appendix No. 2 to Article 14, item 2, amount to 102. Twenty-two of them are located in the SCR which gives ground to their investigation and to the formulation of practically applicable results related to the management pattern of tourism points of interest, specialized in a particular sphere. The priority consideration for this type of tourism within the SCR rural areas, would contribute to reviving the economy and making progress. The implementation of this research is directly related to the European and national priorities connected with the rural regional development, tourism growth, the sustainable utilization of natural resources and the introduction of innovative patterns and management methods to the sector in question.

Summary

More than two decades since gaining independence, the report on Croatian socio-economic situation still starts with consequences of the past events: war and post-war transitional difficulties had worsened the already unfavourable demographic situation **in Croatian** rural areas that, in previous decades, were exposed to strong exodus of vital population and the natural process of depopulation. An aging population results in a decline in the overall rate of economic activity in rural areas. Reasons for the relatively slow recovery of agriculture and rural economy may be found in agricultural policies during the past period: policy goals were often set without adequate economic arguments; selected measures were dysfunctional in achieving these goals; there was considerable lack of control over spending the budget through the subsidy system. Inadequate policy instruments have been used to try to achieve domestic needs and requirements of agriculture (such as increasing productivity and self-sufficiency). Policy measures were often taken from the European legislation, without analysing their applicability under the Croatian economic circumstances. Therefore, there is a reasonable fear for the survival of agriculture under the strong competition of the common European market, especially because Croatian agricultural policy was focused on an outdated concept of direct payments, and farmers still expect from the government to organize production and guarantee purchase prices. Through several phases of policy reforms trying to gradually adjust domestic standards to the Common Agricultural Policy, Croatian farmers were now forced to accept all CAP requirements. They are, of course, concerned that they will not be able to meet the strict standards of European financing, but the majority of them still believe they have great opportunities for business survival and growth in additional (non-agricultural) activities. Within the EU market they see the possibilities for better positioning and more efficient use of agricultural and rural development support. Finally, as concluded many years ago, "Croatian accession to the EU will undoubtedly have a strong influence on Croatian agriculture". First estimations of expected consequences were not very optimistic, but benefits were expected from market enlargement, improvements in product quality and the EU funds for agricultural restructuring and rural development, as well as more organised government attitude towards agriculture and rural areas.

Agricultural holdings **in Slovenia** are analysed according to different natural conditions for agricultural production, economic development of areas and socio-economic types of farms. The effects are studied based on the analysis of income diversification of agricultural holdings and allocation of factors

of production to agricultural holdings in the years 2000 and 2010. We have identified structural changes between the years 2000 and 2010, while the changes between the municipalities with different natural conditions for agricultural production are different, mainly in the speed and partially also in the direction of structural changes in agricultural holdings. We found differences in structural changes between agricultural holdings by socio-economic types and between commercial (pure, mixed and additional or supplementary farms) and non-commercial farms (farms in the abandonment and farms with elderly persons), and in particular differences in the direction and extent of structural change. The *non-economic objectives* observed explain the relatively slow structural adjustment of agricultural holdings, while *economic objectives* explain a dependency of decision of holders of commercial farms on incomes of agricultural holdings and the inevitability of income diversification of agricultural holdings with non-agricultural employment. The differences observed in the strategies of adaptation among pure farms and other socio-economic types of agricultural households further explain the reasons for the relatively slow changes in the structure of agricultural holdings. The results are transferable to other rural areas with similar natural resources and economic development level in Slovenia.

The last decades **in Poland** have brought an increasing decline in the share of people working in agriculture among all employees. The scope of their involvement in agricultural activity is also changing. In 2000-2011, the population of permanent full-time farm workers decreased, while the number of those working only occasionally is gradually increasing. Hence, the growing group of the so-called farming population not involved or involved to a limited extent in agricultural work, staying economically inactive or looking for non-agricultural employment opportunities. The research conducted revealed that transformations in the structural distribution of the population by place of work were continuous in nature and clearly intensified after 2000. The ongoing transformations indicate that a growing number of people from farming families begin to actively seek employment alternatives, often completely giving up work on a family farm. There are trends to rationalise employment and hire only needed resources in an agricultural holding. This process is proven by a decreasing number of agricultural family members engaging in work on a family farm. This thesis is also confirmed by the dwindling importance of a family farm as a place of economic activity for those related to it, especially as the only place of work.

To understand, why issues of knowledge society are currently challenging the development of predominantly rural regions and the mission of rural policy, requires the awareness that society is not a static entity, but an ever-changing one. Rural people **of Lithuania**, today, live in a society different from that of generations past. Despite the fact that over the last two decades economic and social system of Lithuanian rural areas has changed substantially, rural policy and support measures not always reflected the fact that society has entered into a new stage of evolution. Approaches to Lithuanian rural development policy in the first decade of the 21st century were incomplete to push predominantly rural regions toward knowledge society. A more comprehensive agenda needs to go beyond information dissemination, trainings and discrete initiatives to include additional approaches. These approaches should involve greater recognition of tacit knowledge and support rural economy and community transformations by new forms of partnership, coordination and participation, dealing with local perceptions, fostering innovations and social capital building. A failure to understand this may result in rural policy decisions that are no longer relevant to today's needs, much less tomorrow's. Moreover there seems to be a general need for further information and research relevant to rural policy strategies in knowledge society. Policy makers lack information on the best practices and skills to transform current rural development paradigm based on old model of thinking.

The rather modest result of the **Hungarian** rural development programmes is that over the last ten years their application contributed to reduction of the migration from rural areas. The rural development subsidies created opportunities for developing the rural economy, environment and society, helped to preserve the environmental values, induced community initiatives and mobilised the rural society. The main shortcoming of the programmes is that instead of encouraging sustainable developments to be implemented by creative ideas, the programmes only relieved the symptoms. In rural areas the developments were determined by social constraints and basic infrastructural needs rather than by the need for economic development. A further lesson is that investments also in this sector are basically encouraged by the market and rural development by itself is not able to stop the unfavourable regional processes and the lagging behind of the disadvantageous areas. In order to develop the underdeveloped rural areas and the agricultural economy suffering from competitive disadvantages a great number of fields can be identified, the equal treatment of which might simultaneously remedy the problems of both the sector and rural areas. The challenge of rural development in the next programming period (2014-2020) is

to reach a simultaneous increase in value added and in job creation, as well as to enhance the development of the underlying human resources. Enterprise and economy development based on innovative ideas and projects are required as well as cooperation in the implementation.

Development of **the Czech** countryside implies that accession of the CR to the EU improved many material life conditions of rural inhabitants. Issues, which could not be realized by municipalities (build-up, maintenance and repair of local roads, repair of public space and pavements, infrastructure of sewage and its purification, thermal insulation of public buildings, drinking water supply, etc.) were financed from structural funds. However, the changes in socio--demographic structure of rural inhabitants will make the higher demands on the facilities and services, which are for the present defined only at the common level and are not preferred (health and social services, support for sport and leisure time activities of all age groups, education, non-profit organization, charitable organizations, etc.). In other words, the needs are shifted from material presumptions of rural municipalities functioning to the social level. Changing socio-demographic structure will influence the political preference and permute the social values and tasks. Discussion about rural areas future is relatively intensive and participated by decision-making institutions, public administration as well as universities. Recent conference "Countryside 2014" summed up, above all, the material preconditions of future rural development like unemployment, basic services for countryside – education, shopping, transport, medical care, post office, etc., reconstruction and maintaining of rural building stock (churches, rectories, castles, schools, pubs, barns, agricultural districts, etc.), support for leisure time activities, support for small and family farms and enterprises, protection of land resources, etc. However, the solution to these problems is considered in the context of comprehensive approach to the quality of rural life. Material and non-material elements are mutually conditioned and linked. Anywise, some of them seem to be marginal, their absence can destabilize rural development in the close future.

In the quarter of the century that has elapsed since the fall of the communist regime, demographic movements took place in the **Romanian** rural space that approximated the rural patterns to the urban ones with regard to birth rate, nuptiality, divortiality, leading to a negative natural population increase, population's demographic ageing and feminization. In this demographic context, the Romanian rural human capital experienced both quantitative and qualitative depreciation processes, namely:

- in quantitative terms, we experienced the contraction of the available rural human capital volume due to rural population's general ageing and migration (rural-urban and/or to foreign countries) of important contingents of rural population at the beginning of their working life;
- in qualitative terms, the available human capital in the Romanian rural area is facing significant problems generated by the educational level decrease in younger generations (15-35) compared to those at the end of their working life. This situation represents a main risk for the young rural population's access to the labour market, materialized in decreasing employment rates. The rural young people's low educational and training level represents a significant constraint to business environment diversification, as the innovative entrepreneurial initiatives (that often imply the use of modern technologies) are confronted with the skilled labour deficit in the rural area.

A vicious circle was created between the rural human capital characteristics (featuring low development levels) and the rural population's dependence on agriculture, which is also maintained/amplified by the occupational migration outside the rural area of the population with a higher educational level. The implications for the rural population's living standard are negative, and the chance of improving it resides in increasing opportunities to access the labour market through lifelong education in parallel with stimulating rural economy diversification.

The above analysis gives reason to the following conclusions related to the diversification opportunities of agricultural farms for impact on the employment in rural areas **in Bulgaria**:

- The development of non-agricultural activity from the farms could not be the main source of jobs creation in rural areas.
- Agricultural farms diversification could not be able to reduce the divergence of the labour market.
- In its Bulgarian variant, the diversification toward non-agricultural activities does not justify the expectations for jobs' attractiveness.
- Agricultural farms diversification is an important factor for optimal rural households' labour force use – the amount of the invested labour in a farm is more than three times bigger.
- The opportunities of Measure 311 of the Rural Areas Development Programme for new jobs creation have been overestimated – under the most optimistic scenario the newly created jobs would be only half of what is expected.

Bulgaria has a positive image among both Bulgarian and foreign tourists. The survey feedback, received from foreign tourists, shows that they perceive this country as a peaceful destination with beautiful nature, delicious cuisine, with good prerequisites for spa/*balneo* and alternative types of tourism in general, with good options for accommodation too.

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