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Introduction to the volume

The eight volume within the series published by European Rural Development Network (ERDN) combines articles discussed during the ERDN Conference held in Institute of Agriculture and Food Economics – NRI in Warsaw in October 2010. During the two days meeting papers concerned with strategies, employment opportunities, local food systems and agricultural production possibilities, rural municipalities activity as well as specific measures of national and EU development programmes for rural areas were presented.

Presented articles prove that building strategy for EU rural areas development on recent days became more difficult due to new budget constrains, economic slow down observed on global and regional level and growing concern of recently used policies capability to overcome these new challenges. The problem of unemployment or inefficient use of rural labour forces appears to be critical for rural areas sustainability. Intensive development of infrastructure provides environment for rural business development but mostly connected with high knowledge or "green" economy. Simultaneously outflow of population to urban centres intensifies problem of low development capacity of remote rural areas. Related loses for local economy can be valuated in terms of lower commune incomes.

Agriculture even if it is declining sector of economy should be recognised as a major players of rural economy. Namely local food systems role are under valuated by public statistics. Different functions of agriculture are partly valuated by food production what jeopardy it continuance regardless growing demand for local food. Farms aiming at high value production may be only in slightly better position than conventional ones. However the conventional production is more exposed to international competition. This is a problem of transition economies unable to support development processes. Despite their natural potential strong external competition unable full utilization of agriculture capacity. EU rural development programmes on the other hand may effectively defend the domestic agriculture. This however requires precision definition, measures and administrative rules.

In the process of defining rural areas amplification of different characteristics results in volatility of its territorial borders. Therefore measures designed to support rural development are likely to spread beyond the intended target. In this respect measures that are designed to support certain agricultural pro-

duction are more effective. The difficulty is to make the support aiming at development neutral to market forces and insure that the local community will be final beneficiary of it. Institutions arrangements appears to be critical in this process and play decisive role in measures application. Presented research outcomes point out that decentralization of administration is a right direction to facilitate implementation of rural development programmes. On the other hand utilization of modern communication technologies by administrative bodies is still insufficient.

Special thanks has to be given to the Authors and Conference Organizing Committee for all the effort that resulted in interesting conference and presented volume.

The editor

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Contrasting prospects for new sources of rural employment in two regions of the European Union

Abstract: *Historically, the economic contribution of rural areas to regions was clear: it was the provider of farm produce and other raw materials such as coal. Rural employment was evidently based on the exploitation of natural capital. More recently this picture has been obscured by several trends such as the declining importance of agriculture in rural economies which are becoming increasingly diversified, the increasing mobility of populations and new approaches to economic development and to governance. This paper compares current employment patterns, and opportunities for/constraints on, rural economic diversification, in two contrasting regions of the EU in terms of typology, but of roughly similar size in terms of population, the Chelmsford and Braintree 'travel to work area' in Essex CC NUTS3 region (UK), and Bistrita-Năsăud county in Romania. In both regions there is a lack of jobs in rural areas. In Essex the major socio-economic response is commuting while in Bistrita-Năsăud it is international migration and/or withdrawal in self-subsistence agriculture. The former region has an economically diverse rural economy and the greatest opportunities for job creation are knowledge-based, low environmental impact businesses; the agri-food chain (but not primary production); short break tourism; home based businesses/consultancies; home-based working remote from the office; services for the ageing population; and leisure activities. In the latter, the economy is still heavily based on agriculture, and the agri-food supply chain, forestry, tourism, crafts and services for the population are the most promising sectors for job creation.*

Keywords: *rural employment, rural economy, Romania, UK, natural capital, production, consumption*

Introduction

Historically, the economic contribution of rural areas to regions was clear: it was the provider of farm produce and other raw materials such as coal. Rural employment was evidently based on the exploitation of natural capital which may be defined as 'a stock of natural resources - such as land, water, and minerals - used for production' (DFID, 1999). In some regions it still is, but elsewhere this picture has been obscured by trends such as the declining importance of agriculture in rural economies which are becoming increasingly diversified, the increasing mobility of populations and new approaches to economic development and to governance. In response to this, OECD (2006) formulated the principles of a 'new rural paradigm' which attaches greater importance to rural competitiveness, the wider rural economy, investments over subsidies, and more inclusive governance. In line with this has been a move towards a more integrated approach to rural and urban development in a regional context in place of a mainly sectoral (i.e. agricultural) approach to the former (Ward and Brown, 2009).

Alongside 'production', there has been a strengthening of the role of 'consumption' in the rural economy. The concept of the 'consumption countryside' is now well established (Lowe and Ward, 2009; Marsden, 1998; Marsden, 1999; Shucksmith et al., 2006; van der Ploeg et al. 2008). Shucksmith et al. (2006) noted that a "consumption dynamic has emerged through falling agricultural employment, increasing farm diversification, repopulation of rural areas by service classes, outmigration of young people and a widening gap between the rich and poor". This has led to new forms of commodification of the countryside for (mainly) urban consumption such as short food-supply chains, organic agriculture and ecological awareness which in turn has fostered new forms of rural tourism such as ecotourism. Many of these aspects of consumption have been internalised into the concepts of 'multifunctional agriculture' (van Huylenbroeck et al., 2007) and 'public goods' (Cooper et al., 2009). Although financial remuneration for 'pure' (i.e. 'non excludable' and 'non rival') public goods is difficult or impossible to achieve, the consumption dynamic has provided rural areas with many opportunities to add value to their economic activities.

In the light of these trends, the EU FP7 project 'RuralJobs' (www.ruraljobs.org) assessed the potential for new sources of rural employment in a representative set of case study areas across the EU. 'Rural employment' was defined as 'any income-generating activity undertaken by an individual that takes place in a rural area'. This definition covers both the self-employed and employees, and all sectors of the economy. It also covers 'teleworkers' who live and work in rural areas even if their job is nominally located in an urban centre.

RuralJobs used the driving force, pressure, state, impact and response (DPSIR) framework to show the link between 'driving forces' which affect employment and economic prosperity, and policy responses (Fieldsend, 2010a).

Economic prosperity is typically defined as the "stage in an economic cycle in which conditions of relatively low unemployment and high total income prevail, leading to high purchasing power (if the inflation rate is kept low)" (www.businessdictionary.com). Rural employment represents the state in the model. This has an impact on economic prosperity and other issues such as social cohesion, which in turn influence policy responses. These responses may be targeted either at the driving forces which in turn influence the pressures on employment, i.e. supply of labour and supply of jobs.

This paper contrasts current employment patterns, and opportunities for/ constraints on, rural economic diversification in two regions of the EU which differ in terms of prosperity, population density and accessibility to urban centres of 50,000 or more inhabitants, but which are of roughly similar size in terms of population. These are Chelmsford and Braintree 'Travel to Work Area' (TTWA) in Essex, UK and Bistriţa-Năsăud county, North West Region, Romania. A brief description of each, based on data from official sources, is as follows.

The TTWA consists of three LAU1 regions (Chelmsford Borough and Maldon and Braintree Districts) and is defined as a single labour market by Bond and Coombes (2007). In 2001 it had a population of 348,677, and it covers an area of 1313 km^2. It is located close to London (ca. 35 minutes from Chelmsford by train) and includes five towns, ranging from Chelmsford (population 97,451) to Halstead (population 10,000). Rural areas account for 37.7% of the population and 87.8% of the area. The TTWA is defined as 'high GDP - intermediate - accessible' as 100% of the population can access urban areas by car in 45 minutes or less. The population of the rural and urban areas increased by 6.2% and 5.0% respectively between 2001 and 2007 as did the percentage of people aged 65+, reaching 22.0% in rural areas and 17.2% in towns.

In 2001, rural and urban activity rates were 79.5% and 82.1%, and employment rates were 74.6% and 76.7%. Unemployment was around 3%. Of the 40,000 jobs in rural parts of the TTWA, the major employment sectors in 2007 were: public administration, education and health (24.0%); distribution, hotels and restaurants (20.8%) and banking, finance and insurance (15.7%). Although 70-80% of the TTWA is good arable land, it can be farmed with just 1.7% of rural jobs. In rural areas there are many fewer jobs per person of working age (rural jobs density in 2007 was 0.43 c.f. 0.74 in urban centres) and this difference is obscured in the employment data by commuting: 70% of rural workers commute over 5 km to work, and 12.6% commute over 40 km.

Bistriţa-Năsăud county area covers an area of 5355 km² and in 2009 had a population of 317,205, of which 119,334 lived in rural areas. The urban centres and (2009) populations are Bistriţa (84,471), Beclean (11,574), Năsăud (10,906) and Sângeorz Băi (10,912). As less than 50% of the rural

population can access Bistriţa (or any other major city) by car in 45 minutes or less it is defined as 'low GDP - predominantly rural - remote' in the RuralJobs typology. The towns are located in the centre of the county while the NE (mountain) and SW (hilly) areas are entirely rural. The rural population declined by 1.4% between 2002 and 2007 while the urban population increased by 1.0%. Rural society is both elderly and ageing: 65.6% of the rural population was of working age in 2008, compared to 63.1% in 2002, and 76.7% in towns in 2008. International migration is important, but there are no reliable registered figures on its extent.

In 2002, rural activity rate was 73.2%, employment rate was 67.5% and unemployment rate was 5.7% (c.f. 66.3%, 56.6% and 9.7% in towns) but the rural data are largely due to the high level (72.6%) of agricultural (self) employment in total rural 'employment' and are therefore misleading as semi-subsistence agricultural households do not register as unemployed. In terms of 'formal' rural employment, of the 13,792 employees in 2007 the main sectors were education (20.2%), manufacturing (15.1%) trade (13.1%), and health and social care (8.2%). In 2002 in some communes (especially close to Bistriţa) up to 38% of employees commuted to work, mainly to the towns, while in others the figure was just 2%.

Methodology

The source material for the case study research consisted of (a) information gathered from the interviews with local actors/key experts, (b) quantitative data sets and (c) previously published (mainly local) studies. Approximately 20 interviews were conducted in each case study area, and interviewees included representatives of (a) decision makers (elected representatives of administrative units relevant for the case study area); (b) local government experts; (c) other experts (e.g. academics, consultants); (d) community organisations / NGOs; and (e) the business sector (e.g. Chamber of Commerce, Farmers' Union).

A SWOT analysis was constructed from the results of field research. The internal audit i.e. the strengths and weaknesses, was based on the 'assets' of the case study area, i.e. the driving forces which are internal to the DPSIR loop. The asset does not necessarily need to be within the territory. 'Proximity to an airport' may be a strength (S) even if the airport is not within the territory. Also, the status of an asset relative to a neighbouring territory may also be relevant. For example, 'unattractive landscape' may be a weakness (W) especially if that in the neighbouring territory is particularly attractive. The external audit, i.e. the opportunities and threats, was based on factors which do, or which are likely to, affect the rural employment rates in the case study area. Opportunities (O) could be the basis of the 'new sources of employment', while threats (T) are factors which are leading to a decline in employment in rural areas.

From the comprehensive lists of strengths, weaknesses, opportunities and threats, the most important factors in each category with respect to rural economic prosperity and employment were identified for use in the SOR (Strategic Orientation Round) analysis. Here, the importance regarding the employment development potential of each interaction between each strength and weakness on the one hand, and each opportunity and threat on the other, was quantified on a 0 and 3 to scale, and for the most important interdependencies an 'operational objective' was formulated. Where possible, two or more (similar) operational objectives were merged and then the remaining operational objectives were clustered into a set of 'strategic orientations' which could be the focus for future rural employment strategies.

Results

The results from the two case study areas are presented separately below.

The Chelmsford and Braintree TTWA, Essex, UK

The research identified several opportunities for rural job creation in the TTWA and very few threats. Hence, from the SWOT analysis seven opportunities and only three threats were shortlisted for the SOR analysis (Table 1). From these, the following main routes to rural employment creation in the TTWA were identified. Some effort is made here to quantify their potential based on published data but the information is incomplete as local strategy documents do not include rural employment projections.

- Knowledge based, low environmental impact businesses, mainly in the service sector (O1). In English 'Rural 80' LAU1 regions (such as Maldon District) the percentage of employees in Knowledge Intensive Business Services (KIBS) increased from around 7% to 8% between 1998 and 2005 (CRC, 2008). In 'Rural 50' regions (e.g. Braintree District) the increase was from around 7.5% to over 9%. In 2007, KIBS accounted for 8.6% of jobs in the rural areas of the TTWA, compared to 8.4% in urban areas (Annual Business Inquiry data), and in rural parts of Chelmsford Borough the figure was 15.8%. The roll-out of high-speed broadband and other factors will be major stimuli for further KIBS jobs creation and a 20% increase over the next ten years will generate around 700 rural jobs in the TTWA in KIBS alone. This is only a proportion of the range of jobs covered by the 'knowledge based, low environmental impact businesses' label.
- Agri-food chain (O2). The increase in agri-food chain employment estimated by Collison (2009) would, calculated on the same basis as below for tourism, give a net balance of 940 new jobs in rural parts of the TTWA by 2020. Within this there is likely to be a further decline in employment in primary production, which currently accounts for around 11% of jobs in the agri-food chain in the East of England region. The increases would occur in the areas of processing, logistics and retail/catering.

- Short break tourism (O3). Briggs and Pratt (2007) outlined a strategy for tourism in the Essex NUTS2 region which is consistent with the ideas expressed by the interviewees in this study. The strategic aim of the strategy was to create an additional 7,000 jobs over five years. A crude estimate based on a pro-rata allocation according to population would be 570 new jobs in rural parts of the TTWA. The strategy would be based partly on marketing and partly on an improved quality of the 'offer'.
- Home based businesses/consultancies (O4). Whereas with Home-based working remote from the office the person is an employee of a company which may be based in an urban area, Home based businesses/consultancies are located in the rural area. Their contribution to rural employment is likely to be similar to that described for O1 but of course they are not dependent on a supply of commercial accommodation.
- Home-based working remote from the office (O5). Home-based working ('teleworking') cuts both office expenses and CO_2 emissions from commuting. Whilst it can be pointed out that these are not necessarily 'new' jobs, they can have many impacts on rural areas which are similar to those of new jobs. For example, through having less need to travel out of the village to work, home-based workers may make more use of local services such as shops.
- Services for the ageing population (O6). The official population data show a clear increase between 2001 and 2007 in the percentage of the population above working age and Audit Commission (2010) states that in Essex by 2021 there will be 75% more over 85s than there were in 2009 and that over a quarter of the population will be over 65.
- Leisure activities (O7). Many processes, including an improved work-life balance associated with home working and an increase in the population of the active retired will contribute to a continuing increase in the demand for leisure activities. This can be further enhanced by the provision of a broadly-based, high quality 'offer'.

Whilst the major opportunities for rural employment creation in the TTWA are described above, the list is by no means exclusive. Others were identified during the interviews (such as electricity generation from nuclear or wind energy) and raising the wealth generating capacity of rural communities will increase demand for trades/services in other sectors including construction and public services. Building on these opportunities is also the most effective strategy for countering the identified threats to rural employment and only two of the latter merit further comment here:

- Competition from urban-based supermarkets etc. (T1). The decline in rural services such as shops, pubs and post offices is widely documented and, as one interviewee observed, another ten houses in a village will not keep a shop open.
- Economic recession. (T2). Although rural businesses in the TTWA have proved to be relatively resilient to the effects of the recession (EEDA, 2009), there is concern that government spending cuts will lead to losses of public sector jobs and therefore services, which may have a knock-on effect on the viability of rural areas.

Table 1. SWOT analysis of rural employment in the Chelmsford and Braintree TTWA, Essex, UK

STRENGTHS	WEAKNESSES
• Attractive business location • Good accessibility to/from major markets and service centres • Pleasant place to live and visit • Large stock of redundant farm buildings • Many potential entrepreneurs in the area	• Poor rural transport infrastructure • Low broadband speeds • Urban-centric economic planning and development strategies • Lack of affordable housing • Poor educational and skills profile of the local workforce
OPPORTUNITIES	**THREATS**
• Knowledge based, low environmental impact, businesses • Diverse demand for agri food products • Demand for short break tourism • Home-based businesses / consultancies • Home based working remote from the office • Demand for services for the ageing population • Demand for leisure activities	• Competition from urban based supermarkets etc. • Economic recession • Competition in low added value manufacturing

Source: Fieldsend, 2010b

The opportunities, and to a lesser extent threats, to rural employment described above are the context for Strategic Orientation 1 'Promote new business activities in rural areas' (Table 2). Employment creation can be maximised by exploiting the strengths of the area. For example, home-based working is assisted by the territory being a pleasant place in which to live. Strategic Orientations 2 'Develop rural skills, infrastructure and services to support rural businesses' and 3 'Improve and valorise rural areas as places to live, work and play' focus on further developing the strengths and mitigating the weaknesses of the rural areas in the TTWA to support employment creation and also on strengthening the recognition amongst local actors of the importance of these. The potential for knowledge-based job creation, for example, depends on the availability of high-speed broadband access.

Table 2. Strategic orientations for rural employment creation in the Chelmsford and Braintree TTWA, Essex, UK

SO1. PROMOTE NEW BUSINESS ACTIVITIES IN RURAL AREAS

- Promote the establishment, growth and sustainability in rural areas of businesses (incl. home based businesses/consultancies) with low environmental impacts, particularly in the knowledge based services, tourism and leisure, and agri-food chain sectors
- Promote, particularly in the public sector, arrangements which allow employees to spend a greater proportion of their work time working from home
- Promote the co-location of retail with other businesses (such as tourism and leisure attractions) and services (e.g. healthcare) to create rural service 'nodes'
- Encourage farm diversification projects which lead to sustainable, low environmental impact, preferably knowledge-based, rural employment

SO2. DEVELOP RURAL SKILLS, INFRASTRUCTURE AND SERVICES TO SUPPORT RURAL BUSINESSES

- Promote the universal coverage of Next Generation Access Broadband for future rural business and household needs via all available technologies

- Improve transport links (including more shared options such as community transport schemes) to improve access to jobs and education/training, to rural service 'nodes' and for leisure/tourism activities
- Improve rural delivery of education and training, including entrepreneurship/business skills, to reduce the dependence on low-skilled jobs and/or urban centres
- Provide substantially more affordable homes in rural areas so that residents of all ages have the option of living and working in their community

SO3. IMPROVE AND VALORISE RURAL AREAS AS PLACES TO LIVE, WORK AND PLAY

- Promote rural areas as a place for high quality, short-break tourism and leisure on the basis of their good accessibility from urban centres and their built, cultural and natural heritage including their biodiversity, coast and estuaries
- Promote rural areas as a source of high quality, healthy foods (at all points in the supply chain from primary production to retail) and related services (e.g. restaurants)
- Improve service (such as healthcare) delivery to the locality or to the home, where possible via new forms of integrated delivery
- Increase flexibility of spatial planning to promote more economic activities with low environmental impacts in rural areas, for example via more small serviced office units and live/work units, more tourist activities/accommodation etc.

Source: Fieldsend, 2010b

Bistriţa-Năsăud county, Romania

On the basis of the information summarised from the interviews and focus group meetings with local and county-level stakeholders, a SWOT analysis was elaborated which listed the most important internal and external factors regarding rural employment in Bistriţa-Năsăud county (Table 3). The contents of Table 3 were used as the basis of the SOR analysis.

The improvement of both physical and IT infrastructure were seen by interviewees as the most important factors in increasing the level of employment in the rural area, because it contributes both to maintaining the younger and more skilled population and to attracting foreign investors and tourists to the area. Of course they constitute an important background to the increase of the level of occupation in the rural area, but in itself infrastructure development cannot ensure sustainable employment for a larger part of the rural communities. In many communes projects for the improvement of the infrastructure have been carried out, but these have created rather specific short-term jobs, almost exclusively for men.

Local actors have emphasised that backwardness can also be a benefit for local agriculture; meaning that traditional peasant farms produce more 'natural' products, which are more tasty that the ones sold in the supermarkets. This could be a basis for eco-farming, as people anyway use few pesticides and chemicals (not because of ecological awareness, but because they cannot afford to pay for them) and the level of mechanisation is anyway very low. It is also easier for a household to develop agro-tourism in a more traditional environment.

Table 3. SWOT analysis of rural employment in Bistriţa-Năsăud county, Romania

STRENGTHS	WEAKNESSES
• Agricultural potential (Livestock, horticulture and wine regions, fisheries, beekeeping) • Natural resources, reserves (mountain and environmental tourism) • Farms and hostels (rural tourism, agritourism, equestrian tourism) • Historic and cultural resources (cultural tourism) • Demographic resources in the northern part of the county	• Inadequate physical infrastructure • Lack of sustainable development strategies and visions at the level of many communes • Few jobs for young people with higher education in rural areas • The problem of storage and marketing of the agricultural production is not resolved • Farmers have not the necessary knowledge to attract European funds (EAFRD)
OPPORTUNITIES	**THREATS**
• EU and national funds for the improvement of physical infrastructure (roads, utilities etc.) • EU and national funds for the development of the non-agricultural sector in the rural area (development of services for the rural population) • EU and national funds for the development of agricultural services (inputs, equipment, consulting) • EU and national funds for the development of agricultural production marketing, processing and logistics of agric. products • EU and national funds for the development of touristic infrastructure	• Many firms reduce their activity and release personnel because of the economic crisis. • Incapacity of local actors to create partnerships in order to attract funds and implement projects together. • International labour migration of the young people can lead to the depopulation of the villages. • Low domestic interest for rural tourism and local products • Unfavourable taxes and legislation for the business environment

Source: Vincze et al., 2010

The major strengths that can lead to the boost of rural employment were considered to be the agricultural potential and the natural resources, which make the area suitable for rural and mountain tourism; these were the factors ranked highly by all experts regardless of their institutional and territorial background. Forestry and the wood industry also present high potential. Demographic resources were also considered to be an important strength of the case study area.

Weaknesses that could cause the most serious problems are the low level of development of the physical infrastructure, followed by the low supply of skilled jobs for the young people in the rural areas and the lack of development strategies and positive attitudes to sustainability in many communes.

Opportunities that can and should be used are the programmes of infrastructural and agricultural development (national and EU funding). The emphasis should be put on the development of the whole food chain and to introduce new services in the local agriculture as counselling in order to help those who intend to develop an activity in this economic sector. The capitalisation of the local brands (apple, plum, wine) seems to be a solution for the local professionals in order to develop an agriculture that is based on the specificity of the region.

The literature review and analysis of statistical data makes clear that agricultural employment has to be reduced in order to increase the productivity and competitiveness of agriculture. Agriculture cannot be a source of employment growth, but from crop production workforce could migrate towards stock breeding, food processing and other upstream and downstream activities linked to agriculture. The extension of agricultural services, counselling, etc. could retain some of the younger and more skilled people in the countryside, if farmers would be ready to pay for such services.

Table 4. Strategic orientations for rural employment creation in Bistriţa-Năsăud county, Romania

a. Strategic measures creating the conditions for economic diversification in the rural areas of Bistriţa-Năsăud county (and thus, contributing indirectly to employment creation)
SO1. DEVELOP PHYSICAL and ICT INFRASTRUCTURE. Rural economic activities are currently hindered by the low accessibility and the low development of infrastructure. ICT infrastructure could also contribute to the development of the digital economy, which could provide jobs for highly educated people. By infrastructural development temporary jobs would also be created while the works are carried out (road construction, etc.).
SO2. IMPROVE THE LEVEL OF EDUCATION AND SKILLS. The quality of basic education in the rural area should be improved. Vocational training should be more accessible for the rural population and better connected to labour demand.
SO3 STIMULATE THE SETTLEMENT OF YOUNG AND MIDDLE-AGED POPULATION IN RURAL AREAS. Cheap houses and terrains for constructions could be provided for urban young people with jobs in the towns, or for the teachers and the physician(s), if they accept to live and work in the communities.
b. Strategic measures directly contributing to employment creation in the rural area of Bistriţa-Năsăud county
SO4. DEVELOPMENT OF PUBLIC SERVICES IN RURAL AREAS. A limited number of jobs (30-40 at the level of Bistriţa-Năsăud county) could be created in the field of public services (health, education, social assistance to the elderly), mostly in remote rural areas.
SO5. DEVELOP ADVISORY SERVICES TO LOCAL PEOPLE AND TO THE LOCAL PUBLIC ADMINISTRATION FOR ACCESSING THE EU RURAL DEVELOPMENT FUND. For the present (2007-2013) and upcoming (2014-2020) programming periods around 20-30 jobs could be created in private consultancies, financed partially by the beneficiaries and partially from the RD funds.
SO6. PROMOTE, ENCOURAGE AND DEVELOP AGRICULTURAL PRODUCTION AND MARKETING. These measures would not create more jobs compared to the present situation of subsistence and semi-subsistence agriculture, but would maintain agricultural jobs and increase their quality.
SO7. CREATE A RURAL TOURISM NETWORK which could provide around 20 jobs.
SO8. CRISIS SITUATION MANAGEMENT. Rural communities are often faced with natural disasters, such as floods, droughts, land slips, etc. Around 10 crisis management specialists could be employed by associations of communes.

Source: Vincze et al., 2010

From the above, two sets of strategic orientations were formulated (Table 4), one directed towards the creation of the conditions for economic diversification in the rural areas, which addresses the factors restricting the potential for rural job creation in Bistriţa-Năsăud county, and the other, directly contributing to rural employment creation, targets the sectors where potential for rural job creation is the highest.

Discussion

The RuralJobs research has illustrated markedly different attitudes towards the 'consumption countryside' in the two regions studied. The 'Pleasant living environment' perceived by interviewees in Essex, UK contrasts sharply with the view in Bistriţa-Năsăud county that "Romanians do not like going to the countryside". These differences suggest that the relative importance of 'production' and 'consumption' as drivers of rural job creation also differ across the EU.

The opportunities for rural job creation identified in the TTWA are consistent with evidence from the literature. Regarding knowledge-based employment, Hepworth et al. (2004) noted that accessible rural areas in the UK are emerging as important spaces of the knowledge economy, as places where 'knowledge workers' increasingly live and start up businesses, and as places where [such] industries increasingly locate. With respect to 'teleworking', according to CRC (2009) one third of people working from home live in rural areas. The UK government is keen to promote home working as a response to road congestion and global warming. A study by the UK Chartered Management Institute (cited by Taylor, 2008) predicts that by 2018 the majority of businesses will be based from home. Sixty five per cent of businesses expect working from home to be commonplace and 73% suggest that work-life balance will be the key to job choice. According to Taylor (2008) this trend is most advanced in rural areas. Concerning services for the ageing population, National Housing Federation (www.housing.org.uk) research suggests that the number of over 65s living in rural England could increase by 39% between 2008 and 2020. Many will be relatively wealthy. They are not just an increasing market for leisure and other services, but will create a significant increase in demand for rural health, care and support services, particularly if the Audit Commission (2010) recommendation for the adoption of innovative approaches to home-based delivery linked to other services is followed. Employment in Knowledge Intensive Public Sectors (KIPS) has 'increased rapidly' over the period 1998-2005 (CRC, 2008), with the greatest growth of KIPS plus KIBS jobs occurring in 'Rural 50' (24.3%) and 'Rural 80' (22.1%) regions of England, and further increases in this major sector can be expected.

A significant driver of these trends is a desire to live in the countryside. Terluin and Post (1999) strongly stress the importance to rural economic prosperity of recognising the value of local amenities, amongst which they list unspoiled nature, attractive landscapes and historic villages. Bosworth (2010) described the process of 'commercial counter-urbanisation' in the north east of England. Up to two thirds of new rural firms are created by people moving from urban to rural areas and for each self-employed in-migrant an average of 1.9 additional jobs were created. This process, which may also be termed 'Rural Renaissance', is fundamentally different from counter-urbanisation in that the rural area is the place of both residence and economic activity.

Notwithstanding the above, it is an exaggeration to suggest that rural has changed entirely from being a place of production towards being a place of consumption as rural areas retain, and always will, an important production role, not least through agriculture. Furthermore, the extent of this change differs between regions of the EU. In many rural parts of Bistriţa-Năsăud county, semi-subsistence farming is still, in terms of employment, the main economic activity. The RuralJobs research demonstrates that there is a strong local desire in the New Member States (NMS) to retain or to attract people to live in rural areas and to set up businesses. In the case of Bistriţa-Năsăud county this includes migrants returning from working abroad and to 'stimulate the settlement of young and middle-aged population in rural areas' is a strategic orientation. However, the consumption of natural capital by residents is not yet seen as a driver of in-migration by local actors. They still perceive rural development in terms of the traditional sectors.

The RuralJobs research has reaffirmed that most if not all sectors provide employment in rural areas. However, the research has also demonstrated that natural capital still strongly characterises the profile of rural employment and underpins the central contribution of rural areas to the functioning of the regional economy. But this effect can now go far beyond the 'traditional' rural sector of agriculture. There are in fact four drivers of rural employment which arise from the exploitation of natural capital. These consist of two groups of two, from which we derive the name 'Rural Europe 2+2+', of which the first-level differentiation is between the 'production' and 'consumption' roles of rural areas.

There are two components of the 'production' role of rural areas:

- Production based on renewable resources. Foremost amongst these is land, which is used by the agri-food and forestry supply chains in a renewable way for the production of food, feed, fibres and fuel, and increasingly for new uses like pharmaceuticals. Other renewable resources include sunlight, wind, water and tidal power.
- Production based on non-renewable (depletive) resources. These include coal, gas, oil and other minerals including sand and gravel, clay, limestone, granite and marble.

Thus the 'production' role of rural areas is particularly relevant to the agri-food and energy supply chains, but also provides raw materials for construction and other sectors.

The two components of the 'consumption' role of rural areas are as follows:

- Consumption by non-residents of the territory including visitors. This is primarily via tourism and leisure but also includes the consumption aspects of agri-food chains such as geographical appellations, local products, animal welfare, environmentally-friendly production methods etc.

- Consumption by residents of the territory. This is a commonly overlooked driver of rural employment, but natural capital is an important factor in encouraging people to remain in, or relocate to, rural areas. Many people who locate to rural areas for 'consumption' reasons are entrepreneurs who set up their own businesses and create jobs (Bosworth, 2010), as opposed to those that move from towns to rural areas to take up semi-subsistence farming, where the driver behind the move is production. The wealthy retired can also create jobs by being a market for leisure and care services.

The 'consumption' role of rural areas is therefore relevant not just to the tourism sector but also to several others such as KIBS and (KIPS) including health and social work (see also Jauhiainen, 2009).

Clearly there are interdependencies between the four components of Rural Europe 2+2+. For example, between the production and consumption facets of the agri-supply chain, between the consumption facets of the agri-supply chain and tourism, and between consumption by residents (in terms of general 'quality of life') and leisure.

In both case study areas, the proposed strategic orientations include measures to promote new business activities in the sectors identified as having potential for growth. However, the importance of creating the conditions to allow rural economic diversification is also recognised. Rural employment creation depends on an integrated development approach which takes full account of other capitals through measures such as skills development, support for innovation and better transport and communication links. Shucksmith et al. (2006) show that while in the richest Member States of the EU there is little evidence of significant urban-rural differences in quality of life, the poorer Member States of the east and south rural areas have a much lower level of perceived welfare and quality of life, particularly in the (then) candidate countries including Romania and Bulgaria. Clearly, for the oft-mentioned "new values placed on rural space" to be fully mobilised in the NMS for the benefit of rural employment, big improvements in the rural quality of life are necessary. Consequently, rural employment policy must be part of an integrated strategy designed to address the constraints associated with low population densities, rather than a purely sectoral (i.e. agricultural) policy. Rural Europe 2+2+ provides a conceptual framework for such a policy.

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Role of territorial government in the development of agriculture and non-agricultural entrepreneurship in rural areas

Abstract: *The main objective of the research is to evaluate the significance of gmina local government in the field of agriculture and non-agricultural activity development in rural areas. To achieve this, questionnaires were designed and rural areas inhabitants were interviewed. The interviewees were farmers and entrepreneurs of non-agricultural business activity from rural areas of south-east Poland. The survey was carried out in 2007 and was directed to a randomly selected sample of 856 farmers – owners of individual farms – and among them there were 182 farmers - entrepreneurs. The analysis concentrated on activities of local government units realized for local development, in particular those supporting agriculture and non-agricultural entrepreneurship in rural areas. On the basis of the information gathered, we also attempted to determine those activities of local government that shall be intensified or taken in order to better use local resources for the development of rural areas and agriculture itself.*

Keywords: *local government, non-agriculture entrepreneurship, agriculture, rural areas, Poland.*

Introduction

The general message of the strategy of agricultural development is aiming at modern agriculture, i.e. agriculture that is technically and economically efficient, human and environment friendly, based mainly on family farming, integrated with the whole national economy and especially complementary in respect to other activities in rural areas (Woś 2004). Such an attitude provides for not only manufacturing role of agriculture but also social and environmen-

tal one, it also clearly connects agriculture development with the development of rural areas, the latter being determined to great extent by the increase and development of economic activity of rural area inhabitants in a form of non-agricultural entrepreneurship offering employment there.

The institutional approach has been more and more frequently used while discussing the socio-economic development of rural areas. As such, institutions - often considered as organizations and also legal norms, behavioural patterns, rules (Wilkin 2002) - have an impact on factors connected with obtaining and developing resources of a given area and create possibilities of their active use for the sake of rural area development. One of the key parts of the institutional system is local government, whose activity is of great significance in the process of rural development. Local authorities can influence local area development and thus manage it by means of various instruments such as expenditures, taxes and fees, legal regulations, marketing etc. In rural areas the role of territorial government is especially important since, as it often happens, they are the only institution to act in this field.

Agriculture and non-agricultural entrepreneurship are of key importance to the development of rural areas. Although they are not within direct management of territorial government, they should get their support. Various units attempt to influence this area of activity in a different manner. As research shows, local governments use a wide range of support instruments and forms in the field of entrepreneurship development (Zając, Kata 2004).

After the Polish accession to the EU, units of local government have been evidently more challenged in the field of new principles of competition, procedures and standards. Moreover, inhabitants and investors themselves have higher expectations concerning better quality of services provided by units of local governments. Investors in particular expect local governments would offer them on the one hand low taxes, and on the other hand customer-friendly service, partner relationship and efficient dealings with formalities. Inhabitants, however, would expect a pragmatic attitude towards solving local problems and fulfilling particular goals. At the same time, in Poland and other countries of Central and Eastern Europe, local authorities are challenged to make up for delays in the development of basic infrastructure such as roads, schools, water supply and sewage systems. There is also a new task for local governments, i.e. making local society function in the environment of the global economy. Besides, there are other challenges such as determination of conditions of business activity so that there can be a balance between the economic, social and natural spheres allowing for inhabitants' subjectivity. To make such activities successful, local governments should be able to design appropriate projects supported by local partners and certainly manage the whole undertaking efficiently (Sakowicz 2007).

Methodology

The objective of the article is to evaluate the significance of gmina[1] local government in the field of agriculture and non-agricultural activity development in rural areas. The analysis concentrated on activities of local government units realized for local development, and also determined what actions shall be taken by local governments in this field according to farmers and farmers-entrepreneurs.

The sources of empirical data were questionnaires and the interviewees were farmers of Southeast Poland. The survey was carried out in 2007 and was directed to a randomly selected sample of 856 farmers – owners of individual farms[2]. Of all the respondents, 182 of them (i.e. 21.3%) are farmers-entrepreneurs who, apart from being farmers, also run non-agricultural business activity. In the structure of non-agricultural activity, farmers deal with services closely related to agriculture (i.e. agro-tourism – 34.6% and agricultural services – 25.8%). The share of other services is 12.6%, trade – 13.7% and other – 13.3%. 48.9% of farmers run registered non-agricultural business activity, the others deal with non-registered ones.

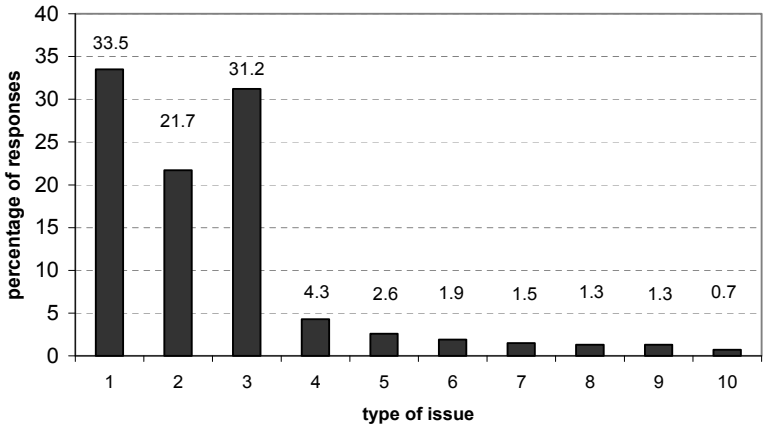
Results

Farmers in a region of dispersed farming of Southeast Poland rarely deal with the Gmina Office and local government, on average the number of visits equals six visits annually, however, the number varies and the variation coefficient is 101.8%. Moreover, what shall be emphasized is that farmers visit the Gmina Office in order to settle only current and necessary issues of administrative character such as: taxes, fees, certificates etc. They hardly ever get involved in local government activities in aid of gmina socio-economic development, and they rarely take advantage of such services that the Gmina Office and local government offer: counseling, information, trainings etc (Fig. 1).

In the questionnaires, farmers and farmers-entrepreneurs were asked their opinion on activities were successfully undertaken by gmina authorities in order to develop agriculture and non-agricultural entrepreneurship (Tables 1 and 2). It shall be noted, however, that opinions of farmers (dealing only with agriculture) on local government support for entrepreneurship is of equal importance here because such farmers being village inhabitants and food producers are potential entrepreneurs interested in the matter.

1 Gmina – the third (the lowest) level of Polish administrative division

2 The research was carried out within the scientific project ”Function of local institutions in the process of restructuring dispersed agriculture (after Poland’s accession to the EU)” financed by the Ministry of Science and Higher Education in Poland.



Explanations: 1 – taxes and fees, 2 – certificates, 3 – various current issues, 4 – social aid, 5 – counselling , information, trainings, 6 – non-agricultural issues, 7 – building permits etc., 8 – natural disaster claims, 9 – local government sessions, committees, 10 – interventions.

Figure 1. Types of issues connected with farmers' visits to Gmina Office (%)
Source: own research.

Among activities that have been undertaken so far by gmina authorities to develop agriculture, those connected with technical and social infrastructure in rural areas are most often appreciated (Table 1). Respondents, nevertheless, see also a lot of failures in this field, e.g. approach roads to farm lands, land improvement, organization of marketplace, buying stations etc. Information activity of local government is evaluated as good by every fifth farmer, and 14% farmers (12.1% farmers-entrepreneurs) positively evaluate direct aid for agriculture organized in the form of grants (used for examination of soil and seed material, for soil liming, veterinary services, biological development, and for fuel and agricultural insurance etc). Other activities are hardly mentioned by respondents. Every sixth farmer does not notice any positive activities of gmina authorities that would develop agriculture, and some respondents even claim local government is not interested in the issue. There are no significant differences in replies given by farmers and farmers-entrepreneurs, which means both socio-professional groups see gmina activities in aid of agriculture development in a similar manner (Table 1).

Improvement of technical and social infrastructure is also well evaluated by respondents operating in a non-agricultural environment (Table 2). According to respondents, local governments take advantage of possibilities resulting from Poland's membership of the EU to get financial aid in this field. Next, farmers mention the support entrepreneurs receive in a form of tax break and remission, however, the percentage of replies indicating other types of activities is small (Table 2). At the same time, 30.3% farmers do not see any local government activities in favour of entrepreneurship development. The

research also shows that, according to farmers, local governments support both agriculture and rural entrepreneurship indirectly by means of technical and social infrastructure improvement. In the field of non-agricultural entrepreneurship, governments to some extent also organize direct support such as trainings and establishment of special units in gmina offices dealing with entrepreneurship.

Table 1. Gmina local government activities in aid of agriculture development

Types of activities	% of replies*	
	farmers [N=674]	farmers-entrepreneurs [N=182]
• technical and social infrastructure	25.4	28.6
• information for farmers	20.3	21.4
• grants for farmers	14.2	12.1
• trainings	9.6	8.2
• help in filling in applications for EU funds	7.4	9.9
• tax break and remission	6.1	5.5
• natural disaster emergency help	5.3	4.4
• environment protection	3.6	4.4
• approach roads to farm lands	2.5	1.6
• land merger	2.5	1.6
• low agricultural tax	2.4	1.1
• land improvement	1.5	1.1
• organization of marketplace, buying stations etc	1.2	0.5
• none, lack of interest in agriculture	16.8	19.2

Source: own research.

Table 2. Activities of gmina local government in aid of non-agricultural entrepreneurship

Types of activities	% of replies*	
	farmers	farmers-entrepreneurs
•technical and social infrastructure	48.5	63.2
•tax break and remission	10.7	20.9
•promotion, advertising, local press	6.4	14.8
•trainings	4.7	10.4
•information for entrepreneurs	4.0	7.1
•investments in environment protection	0.4	5.5
•promotion and support for the development of tourism and agro-tourism	0.3	24.2
•geodetic designation of plots of land according to the investor's needs	0.3	8.2
•attracting external investors	0.3	7.1
•none	30.3	12.1

Source: own research.

Farmers-entrepreneurs, i.e. people who apart from farming also run non-agricultural business, evaluate local government activities to develop entrepreneurship a bit better. In this group of respondents there are more indications to

particular types of activities, and fewer showing lack of activity of local government in this area (Table 2). It can be explained by farmers-entrepreneurs' direct involvement in non-agricultural activity, and therefore their better knowledge in this matter. High percentage of indications made by farmers-entrepreneurs in the field of promotion and support for tourism and agro-tourism development can be only a proof here, which is totally neglected by farmers who do not run non-agricultural business (Table 2).

During the research, farmers and farmers-entrepreneurs were asked their opinion on activities that should be taken by gmina local government to develop agriculture and non-agricultural enterprise (Table 3 and 4). In the field of agriculture, in most cases respondents expect local government to support development of technical infrastructure, especially to improve the shape of approach roads to farm lands and to improve land. This issue is clearly seen to be the priority in the field of government activity. Moreover, farmers expect information support, organization of trainings, assistance in obtaining EU funds and establishing cooperation with Centres of Agricultural Counselling and other institutions (Table 3). Support in land merger is also mentioned by farmers, which, on the area of disperse farming, is an important issue. Farmers would also see local government in the process of organization of output market of agricultural products (e.g. by informational and promotional activities). Finally, they expect financial help in a form of grants (examination of soil and seed material, soil liming, veterinary services, biological development, and fuel and agricultural insurance) and tax breaks (Table 3).

Table 3. Activities that should be taken by gmina local government to develop agriculture

Types of activities	% of replies*	
	farmers	farmers-entrepreneurs
• technical infrastructure (including approach roads to farm lands and land improvement)	27.3	28.0
• information, trainings, obtaining EU funds	23.0	24.7
• land merger	10.8	8.8
• organization of output market of agricultural products	8.3	11.5
• grants for farmers	7.3	10.4
• promotion of local products	5.8	7.1
• lower taxes and tax remission	5.3	4.4
• legal and consulting assistance	5.2	4.9
• development of food processing market	4.7	3.8
• help farmers associate	3.9	2.7
• protection of environment	2.8	2.2
• spatial planning, mainly in the field of soil classification and forestation	2.5	2.2
• natural disaster emergency help	2.1	1.6
• limiting bureaucracy and hastening administrative procedures	2.1	1.6
• supporting ecological farms	1.3	1.1
• promotion of new technologies, innovations, progress	1.3	1.1

Source: own research.

According to farmers, there is also a need of more efficient work in the field of such basic issues as e.g. spatial planning, environment protection or administration improvement. There are no significant differences in replies given by farmers and farmers-entrepreneurs, which means both socio-professional groups see gmina activities in aid of agriculture development in a similar manner (Table 3).

Among the activities that ought to be undertaken by gmina authorities to develop non-agricultural business, farmers most often choose attracting investors and supporting new companies, as well as continuing development of technical and social infrastructure. Then, they state how important the gmina informational and promotional system is (e.g. in the field of tourism and agro-tourism), besides: training organization, legal and counselling assistance and limiting bureaucracy (Table 4). There is, however, a significant difference between replies given by farmers and farmers-entrepreneurs. The latter more often indicate activities that shall be taken by gmina local government to develop non-agricultural enterprise. The activities most often mentioned are: geodetic designation of plots of land according to the investor's needs, promotion of gmina and local enterprise, and also assistance in searching for partners, new output markets, establishing cooperation with other institutions supporting entrepreneurship (Table 4). The hierarchy of activities is also a little different as shown by the number of replies given. For example, for farmers-entrepreneurs two most important issues are support in technical and social infrastructure development and geodetic designation of plots of land according to the investor's needs; farmers, on the contrary, see encouraging external investors to run business in the gmina area as the priority.

Table 4. Activities that should be taken by gmina local government to develop non-agricultural enterprise

Types of activities	% of replies*	
	farmers	farmers-entrepreneurs
• attracting investors and support for new companies	36.6	22.0
• technical and social infrastructure	24.0	36.8
• information, trainings, legal and counseling assistance	9.2	22.0
• limiting bureaucracy	8.6	12.1
• promotion and suport for the development of tourism and agro-tourism	7.1	14.8
• geodetic designation of plots of land according to the investor's needs	5.9	28.0
• development of the area of services	3.0	11.0
• promotion of gmina and local enterprise	1.3	20.3
• assistance in searching for partners, new output markets, cooperation with institutions supporting enterprise	0.4	20.3

Source: own research.

Discussion

Development of rural areas and agriculture, also with the participation of EU financial aid, requires involvement of many units of local socio-economic environment. One of them – territorial government – at present can legally and formally act in aid of entrepreneurship development both in agriculture and its surroundings (non-agricultural enterprise). It is important, though, to make such activities accessible and useful for their direct or indirect beneficiaries.

The research shows that farmers of Southeast Poland rarely deal with Gmina Office and local government and the visits concern mainly administrative and fiscal matters. At the same time farmers, and farmers-entrepreneurs, expect local authorities support in development of agriculture and non-agricultural entrepreneurship in rural areas. According to the research, most farmers see local government's activities in this sphere, especially in the field of technical and social infrastructure. Here, activities of local government are accepted and welcomed because they are seen as the most important within the scope of local government's competencies supporting local development. Besides, the research shows that local authorities also support agriculture and development of non-agricultural entrepreneurship by means of the easiest instruments they have, i.e. low taxes, tax breaks, informational and promotional activities, trainings etc.

There are some differences between activities being realized by local governments and activities they ought to take to support agriculture and non-agricultural enterprise. First of all, the list of activities expected by respondents is a lot longer than the one including activities being undertaken by local government. A lot of expected issues deal with improvement of local administration (limiting bureaucracy, spatial planning, better informational system etc.). The other expectations are beyond direct responsibilities of local governments (assistance in searching for partners, new output markets, establishing cooperation with other institutions supporting entrepreneurship etc.).

The research also shows that farmers-entrepreneurs' evaluation of local authorities' activities supporting non-agricultural enterprise is higher that the one of farmers who do not deal with any business activity. Therefore, to attract local partners who would get involved in local development, local government should make their activities and plans more accessible. Perhaps the fact that farmers so rarely participate in various types of projects organized by local governments (eg. trainings, fairs) results from the weak information flow. Cooperation of various local partners – especially including the ones most interested in a given area of economic activity – is essential in the process of successful introduction of more complicated and indirect developmental instruments.

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Local food" from the processors' and retailers' point of view: A case study of Western Austria

Abstract: *The production of "local food" has gained importance in the public discussion during the last few years as a result of increasing general interest in food safety, as well as environmental concerns regarding food production and transport. Often-cited arguments for purchasing local products relate to their special qualities, to protecting the environment and to the idea of supporting local farmers. But what about the perspectives of other market actors? For food processors and retailers, local products could offer a means of product differentiation and hence help increase their competitiveness on markets. This paper summarises the most significant statements of nine interviews with food processors and food retailers in Vorarlberg, the most western federal state of Austria.*

Keywords: *local agricultural products, processing, retail, Austria, survey*

Introduction

Austria's provincial governments are in charge of implementing agricultural policy measures in accordance with national directives and programmes, as well as international law. It is also their responsibility to pay for or co-finance the implemented measures. The governments have some leeway in defining their priorities; and one can state that they are confident of support for their policies by a strong majority of the electorate and are willing to put this confidence to the test. In general, agricultural policies exist to meet the expectations and objectives of the population to a higher degree than would be the case in the absence of such policies. Accordingly, these policies should bring about a situation which is preferable over a situation without them. In this context, evaluation has become a standard procedure accompanying the introduction of new policies or changes to existing ones.

In 2009 the agricultural support system in Vorarlberg (the most western federal state in Austria, where agriculture is characterised by a predominant share of grassland and mountain farming) was evaluated on behalf of the provincial government (see Ortner et. al., 2009). The project pursued the aim of suggesting changes to the existing agricultural policy system in order to enhance its effectiveness and efficiency. Within the overall concept, one chapter addressed the significance of local agricultural production for the regional economy, with a special focus on local food processors and retailers. In the following sections, the most significant outcomes of this study are presented.

The demand for locally produced food has increased during the last few years in Austria, not least because of a rising public interest in food safety and the environmental impacts of food production and transport. According to a consumer survey conducted by Agrarmarkt Austria in 2008 (Schantl, 2009), the regional origin of agricultural products determines the shopping decisions of consumers to a significant extent depending on the product (e.g. within the product group "milk and butter" the origin of products is an important purchasing criterion for 64% of the surveyed consumers). The focus on locally produced food has been given a lot of attention by the various actors within the food chain over the last decade. Hence, many studies were conducted but most of them concentrated on consumer attitudes. In contrast, the main objective of the present study was to identify attitudes, expectations, problems and perspectives regarding "locally produced agricultural products" from the point of view of processors and retailers. Conclusions could help to improve and intensify the vertical cooperation between agricultural producers, processors and retailers.

Methodology

Expert interviews were chosen in order to answer the above questions. According to Atteslander (1995, p. 173) experts are persons who have special experiences and knowledge with regard to the matter of interest. The survey followed the principles of a non-standardised questionnaire. According to Dorandt (2005, p. 66) typical characteristics of expert interviews are directness and non-standardisation. In other words the interviewees articulate their opinion, attitudes and knowledge openly without a detailed, predefined questionnaire. The questionnaire was half-structured, i.e. the interviews followed a loose outline in order to assure that all topics were addressed during each interview. Minor adaptations to the questionnaire helped respond to the characteristics of individual enterprises. The conception of the questionnaire was based on the main marketing aspects: product, price, promotion and distribution. For the selection of relevant enterprises, the Economic Chamber of Vorarlberg was asked to provide an appropriate list with potential interview partners. From this list enterprises with relevance for the local economy (e.g. number of employees, sales volume) were pre-selected in a first step. The final selection of enterprises took also into account the most important agricultural product groups of Vorarlberg (e.g. dairy and beef). Finally, nine interviews with representatives of the following branches could be arranged.

- 2 Meat processors (beef, veal, pork, lamb)
- 2 Fruit processors (fruit juices)
- 2 Retailers
- 2 Milk processors (dairy, cheese)
- 1 Marketing organisation for local products in Vorarlberg

With one exception, all interviews were conducted face-to-face between 15th of July and 11th of August 2009, lasting 45 minutes on average.

Interview Results

The following presents the most significant outcomes of the interviews. It should be noted that due to the case study character the interview results do not necessarily reproduce the opinions and attitudes of the entire food processing and retail sector of Vorarlberg. Nevertheless, some interesting conclusions can be drawn and should be reconsidered by all actors within the production chain in order to improve cooperation amongst them.

"Local food – regional production"

At the beginning of each interview, the interviewees were asked to express their spontaneous associations concerning the term "local food." As expected, the responses showed a wide spectrum of connotations but most of them could be merged to fit the dimensions of Table 1. An interrelation between a product and its geographic origin was expressed by all respondents and can be seen as one major aspect of local food. However, the specified associations were quite different. Some put the term "local food" on a level with the federal state of Vorarlberg (administration) while others associated natural or historical borders (e.g. Montafon or Lake Constance, including the neighbouring regions in Germany and Switzerland). The variety of statements matches the results of numerous mostly consumer-focussed studies. For example, Hand and Martinez (2010) summarise regional aspects of agricultural products from the consumer's point of view as follows: "Some consumers think of local foods as those that come from within certain political boundaries, such as their county, metropolitan area, state, or region. Studies of consumer purchases indicate that the location of origin may be a natural geographic definition of "local" for some consumers and that consumers are willing to pay a premium for in-state products and products from within the consumers' county."

Another important dimension of local food comprises "food safety" as described by keywords like traceability or quality labelling. According to the interviewees, processors and retailers of local agricultural products know the origin of their product and can even exert influence on the local supplier in order to provide certain qualities or quantities. This results in guidelines or specifications of control mechanisms that help to provide confidence in local food. In this context a working communication between all actors in the value added chain is vital.

Table 1. Spontaneous associations of the interviewees concerning the term "local food"

Geographic origin	Food safety	Emotionality, Tradition	Quality of food	Environmental, economic, social aspects
Region	Traceability	Typical products	Authenticity of products	Processing, personnel
Origin	Confidence	Recipes	Customisation	Sustainability (agriculture, rural development…)
Location	Assured origin	Solidarity with agriculture	Fresh products	Short transport
	Quality labels	Product history	"Ländle" label	
		Personality	High quality	
		Humanity		
		Nature, valleys, mountains, Alps		
		Variety		
		Cultivated landscape		

Source: Own survey

Besides associations with geographic indications, statements expressing emotions or traditional behaviours also played an important role for the respondents. Presumably this dimension represents a means of differentiation for many processors, or of highlighting their products from the masses. Some interviewed processors and retailers had grown up on farms and still had emotional links to "their" local agriculture. Furthermore, it is believed that traditional varieties and production processes, or special recipes, are of high importance for regional agricultural products (e.g. the special variety "Riebel" corn).

Quality, and all of its characteristics, is another aspect of local food that was often addressed by the interviewees. However, the special requirements of individual processors or retailers in terms of quality depend to a large extent on the product group. Number one in this context is freshness, which was directly linked with short transport distances.

Because of the close interrelation with up and downstream industries but also with tourism, agriculture plays a crucial part within the economy of Vorarlberg for many respondents. In this context a more sustainable orientation of the economy is demanded, not least due to the environmental impact (e.g. short transport distances, less CO2-emissions). At the same time the increasing demand for regional products represent an interesting market with growing potentials.

Significance of regional agricultural products for processors and retailers

The objective of this question was on the one hand to identify motives for food processors and retailers to produce or sell regional products, and on the other to determine what share of total revenue is derived by these products. Given the different business structures of the interviewed enterprises, the answers differed accordingly and were thus quite heterogeneous.

Five persons indicated that the processing or selling of local food resulted from the historical connection of their enterprises with the agricultural sector (e.g. historical background, tradition, origin from farms). Others stated that economic aspects are main reasons for the provision of locally produced agricultural products. In this context "regionality" is used as a strategy to distinguish local food from others. Especially in our globalised world of today, where economies are linked worldwide, consumers increasingly express a demand for regionally produced food. Furthermore, the majority of the interviewees remarked that in comparison to the other parts of Austria consumers in Vorarlberg behave more "patriotically" and have a strong preference for locally produced food.

Another reason for processors to use locally produced agricultural products is the possibility to exert a certain influence on suppliers in terms of quantities, quality characteristics or the date of delivery (e.g. special offers of traditional products). For two respondents, local food contributes to a sustainable economy in Vorarlberg. And, beyond preserving and creating jobs in the agricultural sector and its up- and downstream industries, some interviewees saw local food as a guarantor for maintaining the cultural landscape. Environmental benefits from the production and purchase of local produce were also mentioned (e.g. transport distances, CO2 balance). The share of local products in terms of total revenue ranged from 10% to 60% in the participating enterprises, depending on the type of products processed or sold.

Acquisition of raw materials

The enterprises manage the acquisition of their raw materials quite differently (see Figure 1), depending predominantly on the kind of products processed or sold. With one exception, all enterprises acquire raw materials from Vorarlberg. One respondent was unable to give any specific indications concerning the resourcing market and estimated the share of local products at 20% to 25%. Taking into account the different shares of locally produced raw materials in the processed products raises an important question: What characteristics of a product (e.g. share of raw materials, value added) determine whether or not it can be declared as regionally produced food?

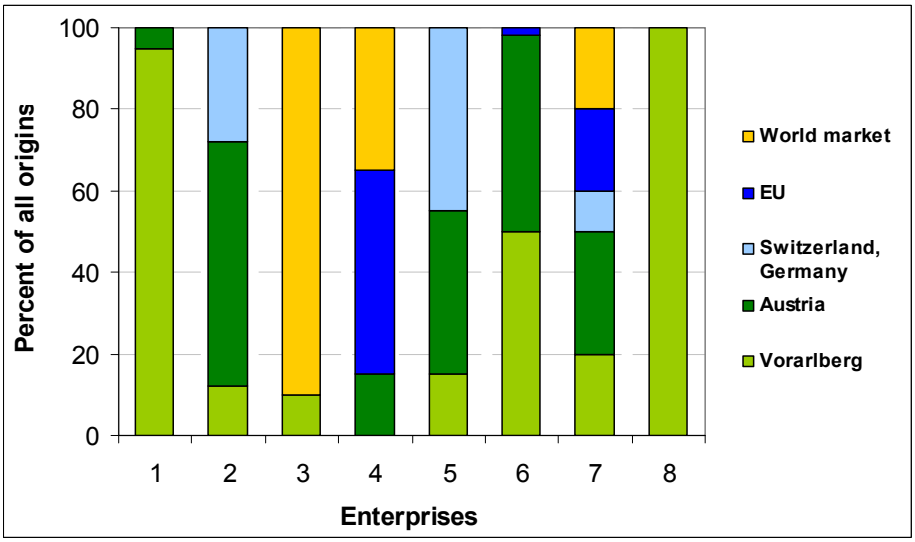

Figure 1: Acquisition of raw materials by the interviewed enterprises
Source: Own survey

Quality of local food

This question aims to assess whether processors and retailers associate special quality characteristics (e.g. guidelines, production requirements) with local produce. According to the different sectors of the participating enterprises the answers were quite heterogeneous. Basically all enterprises apply very high quality standards for all products and raw materials irrespective whether they are of regional origin or not. This applies not only for products but also for production processes. Such stringent demands result in high hygiene standards and quality management systems (IFS and ISO certification). In export-oriented enterprises the demand for high quality of regional products is rather less stringent than in enterprises with a focus on local markets. In most cases, enterprise-specific quality guidelines are applied for all products and raw materials independent of their origin.

For many interviewees local food has to be of high quality and should exceed the general quality standards of non-regional products. Depending on the product category, different Austrian quality labels and guidelines were mentioned (e.g. AMA, "Ländle" quality label). Higher quality standards of processed products may affect various fields of production and processing (e.g. animal husbandry, feeding, processing techniques). One example is the so-called "Alp pig" in Vorarlberg, which is fattened and fed with whey (by-product of cheese production) on alpine meadows during the summer season, with the meat sold exclusively in assorted shops.

It was mentioned that consumers who demand local produce do not only seek to purchase a product, like conventional milk or meat, but that they are seeking an additional benefit having special value to them – i.e. something that exceeds the fundamental benefit of food, which is essentially to satisfy one's hunger or thirst. Local products fulfil these special demands by ensuring short transport distances (environmental aspect), the traceability of the product's origin (food safety) and the support of local agriculture (social aspect), or even by communicating a unique, product-related story. The latter could refer to the manner of production (traditional recipes) but also to the story of an individual farmer. Especially for small enterprises the accentuation of additional benefits offers an opportunity to distinguish one's products from those of competitors on the markets.

"Regional" versus "organic" food

Organically produced food was associated with quality aspects by the interviewees. The comments on local and organic food are quite unanimous. It is believed that the buying motive "locally produced" is more important than "organically produced". The best alternative would be a combination of both. One interview partner stated that in comparison to local food, organic food is rather a niche product, as only a minor group of consumers regularly purchases the latter. Problems were mentioned concerning a constant availability of organic food in terms of quantity, quality and seasonality. Often foreign produce has to be used to fill the gap. This practice, described as "biotransit" by one interviewee, is opposed by the majority of surveyed enterprises.

Due to its small-structured character, agriculture in Vorarlberg is often perceived as nature oriented, environmentally friendly or close-to-organic production. The following statement reflects this opinion: "…in fact most farmers in Vorarlberg produce organically, they merely are not certified as such." This could explain the weaker awareness for organic products within the surveyed group.

Increases in the demand for organic products are predominantly seen in urban regions, especially in households with incomes above the average. It was also argued that not all products and production processes would fit in the organic scheme; and even worse, such products would undermine the authenticity of the organic idea, with non-perishable milk mentioned as an example. One interviewee cited an own study revealing that local production plays an important role for 80% of the consumers in Vorarlberg. But there are also differences between the various product categories. On the one hand bread and pastries are often purchased at local bakeries, which are embedded in the local economy. On the other hand retailers and supermarkets offer a wide range of yogurt from different producers, and consumer preference for locally produced yogurt is hardly a given. Furthermore, "variety seeking" – an intrinsic motivation to change brands within one product group – fosters changing purchasing practises.

Assortment of local food in Vorarlberg

Due to local climatic and topographic conditions, agricultural production in Vorarlberg is predominately based on milk and milk products. But what about other products? Is there a lack of locally produced agricultural product groups from the interviewees' point of view? The following section deals with this question.

Again, the answers were quite diverse depending on the product category. Because of the natural production conditions, the cultivation of cash crops plays only a minor role in agriculture in Vorarlberg. And the situation is similar for fruits, vegetables and potatoes. However, the surveyed persons did expect production potential for local farms, albeit with quantities remaining in a limited range.

The demand for meat from local production is not satisfied, with a production gap existing for pork in particular but also for poultry. This is not surprising given the grassland-dominated agriculture of Vorarlberg. But according to the interviewees there is also an additional potential for the production of regional beef. The interview partners furthermore reported poor carcass quality, which they said had been communicated to the farmers several times already but without the desired results (thus far). Hence, it can be concluded that both, quantitative as well as qualitative aspects in beef production represent potentials for farmers, and in turn also for the downstream processors and retailers. To a certain extent this applies also for small ruminants, like sheep and goats.

One critique relates to the fact that many farmers adhere to traditional production patterns (milk production) independent from market developments. In this context keywords like "dourness" or a "lack of flexibility" within local agriculture were expressed by the interviewed persons to describe the current situation. In addition, the respondents mentioned that especially older farmers were missing entrepreneurial thinking. In other words, more market orientation is demanded and also a willingness to change production patterns (e.g. meat instead of milk). But also co-operations between farmers (horizontal cooperation) on the one hand and between farmers and processors/retailers (vertical cooperation) on the other should be reconsidered and intensified.

Distribution

The interviewed enterprises adhere to quite different distribution strategies. For larger, internationally orientated enterprises importers and wholesalers were most important. However, small-scale enterprises rely predominantly on retailers, though wholesale and direct marketing are also important distribution channels for supplying the gastronomy sector in particular.

Export-focused enterprises market their products primarily in EU countries (almost 75%). Because of its geographical vicinity, Germany has an extraordinary position. Smaller enterprises are instead focussed on regional

markets in Vorarlberg (up to 60% of total sales) but also on other areas of Austria. In such enterprises the export rate remains below 10%.

Communication and promotion of local food

It is essential for the sale of local products that consumers recognise and distinguish them from other products at the point of sale (POS). The enterprises use different means of communication and promotion in order to improve the recognition of their product on the shelves. Which measures are taken in detail by the interviewed processors and retailers in order to promote and differentiate their local products is described below.

According to the answers, a variety of communication tools are used by the enterprises in order to provide information on local products. Often the product itself is used to transport the message, e.g. with special package designs. The use of individual labels, characters, captions or pictures suggests the regional origin of the products at the POS. Moreover, newspaper advertisements, direct mailings or brochures are sometimes used to provide information on regional products. In recent times the use of the internet has gained importance for spreading information, as has the use of market research in order to respond to consumer trends and market developments. Other mentioned promotional activities included tastings, exhibitions and event sponsoring.

Negative comments were heard in regard to the mass of various labels that have emerged of late. It is believed that consumers become increasingly confused and finally lose their confidence in the authenticity of labels. Depending on their appearance, labels are selectively perceived by consumers and do not always contribute to achieving the desired results.

Pricing of local produce

This question attempted to clarify whether the interviewed enterprises pursue different price strategies for local and non-local produce, and what the main reasons might be for producers and retailers pursuing a particular price policy. Despite the wide spectrum of answers, it was agreed that local products are generally located in a higher price segment. A common argument was that the higher raw material prices for local products require higher product prices to be passed on to consumers. Proportional surcharges within the production chain contribute to an additional increase of the absolute product prices (e.g. profit margins). In addition, the higher demand for quality raw materials, special production processes and recipes were mentioned as justification for higher prices.

One interview partner argued that the marketing of local products only makes sense in the premium price level because suppliers of local products are not able to compete with the prices of global competitors. But there were also other opinions. One respondent stated that regional products should be marketed at an above-average price, but not in the premium price segment, because

regional food should attract the majority of consumers and not only the small group of financially strong consumers. Another interviewee believed that because of the relatively high share of direct-marketed local food the prices for such products are often below the price levels of similar products sold in retail. Offering regional products in the lower budget segment was criticised by another survey respondent. This individual argued that low prices are often associated with lower quality in the view of consumers, and this would contradict all former efforts to promote a high quality image for local products. To summarise: higher costs for raw materials and special processing techniques or recipes justify higher prices for local food.

Problems to be solved in the future

Many responses indicated a need for creating increased awareness for local products within society at large. As in other Austrian regions, a loss of identification with the agricultural sector among the general population of Vorarlberg was perceived. Along with this development comes the belief that knowledge about, and awareness for, the integration of agriculture in society and the economy as a whole has been lost (regional raw materials – regional processing – regional sales – creation of jobs and the preservation of family farms – maintaining cultivated landscape – tourism). The mentioned positive external effects of agriculture (e.g. maintaining the landscape, generating jobs in up and downstream industries) are insufficiently perceived by large segments of consumers and meanwhile play only a marginal role in their buying decisions. Various activities (e.g. open day on farms) could be used to intensify the contact between the agricultural and non-agricultural population, to communicate the important role of agriculture within the local economy and, ultimately, to sensitise consumers on the importance of local food.

As previously mentioned, some interviewees complained about narrow-minded behaviour within many agricultural enterprises. Greater openness to new developments would help establish new co-operations between agriculture, the processing sector and retailers. Such co-operation often fails due to the existence of mutual mistrust between the different actors in the production chain.

Influenced by the alpine landscape, favoured agricultural areas in Vorarlberg are scarce and thus competition is high – not only within the agricultural sector but also between agriculture and non-agricultural stakeholders. Regions like the Rhein Valley experienced an economic boom during the last decades and provided plenty of alternative, off-farm jobs. Both developments have contributed to an accelerating drop-out rate of agricultural farms and many interviewees expect a revival of agriculture in peripheral mountainous regions. This would imply additional problems in terms of logistics for farmers and processors alike (e.g. daily milk collection by dairy plants). Two comments suggested improving the promotion of Vorarlberg's agricultural products in Austria and abroad, and that the positive image of these products should be better highlighted by all actors.

The lack of a common definition of "local food" was identified as a major problem. After all, what exactly is meant by local, or regional, produce? Certainly, the term has a different meaning to different people. Most people associate local food with the origin of the raw materials, for others the location where the product is processed or where value is added determines the character of local food. In this context the last two explanations become problematic, since products that are principally untypical for a region could be marketed as regional food (e.g. Pineapple compote). Ultimately, this only contributes to decreased consumer confidence in locally produced food. In general, it would be important to provide better information on the topic of local food, including differentiating product characteristics, production techniques and the origin of raw materials. Representatives of food retailers admitted that the limited quantities and only temporary availability of products from certain local regions are often the key reasons for offering products of non-local origin.

Expectations for the future

The following section discusses several expectations expressed by the interviewees concerning the development of local food in general and co-operations between the actors within the production chain. Some of these statements overlap with points already touched upon in previous sections.

Farmers should reconsider their opinion towards new developments on markets and in production techniques. A more market-oriented farm management and decision making process is needed in order to create an atmosphere that is conducive to seizing new opportunities, instead of maintaining a narrow-minded "milk barrel thinking" that is based on doubts. In a further step, the cooperation between agricultural producers on the one side and processors and food retailers on the other should be intensified by broadening the product range and providing a better supply of raw materials. Closer co-operation also enables better coordination towards balancing the supply and demand of regional food. For example, the question "Which products are demanded at what time?" could be answered more easily. Identified supply gaps, e.g. for organic cereals or berries, could offer interesting alternatives for farmers in Vorarlberg. This also implies a certain willingness to adapt to new structures of co-operation among all involved actors.

Quality is one important feature of local food. A clearer and more detailed specification of quality criteria ensures a common understanding of all actors within the production chain (e.g. common quality criteria for cattle carcasses or the protein content of barley). In general, communication between farmers, processors and retailers should be intensified not only to improve co-operation within the production chain but also to reduce traditional mistrust. Unfortunately, prejudices and mistrust are still widespread and are often responsible for a failure of a closer horizontal or vertical co-operation. Due to the better level of education among the next generation, a more entrepreneurial thinking is expected by the majority of the interviewees.

Some wishes pertain to the behaviour of consumers and deal with the following question: "What are the principal consequences of purchasing local food?" This means that consumers should become aware of the interrelation between local food and economic, social and environmental aspects. In various surveys, consumers have expressed a willingness to buy local food even at higher prices. However, most interviewees in the present survey doubted that this willingness was sincere, explaining that original intensions and follow-on actions are in reality two different matters altogether. However, most of the interviewees did wish that consumers would make more patriotic buying decision in the future.

A contribution to the clarification of the term "local food" is expected from politicians. This especially pertains to questions related to the origin and share of raw materials in processed foods, and to the location of processing (i.e. where value is added). Is a sausage local food if the sausage is produced in Vorarlberg but the raw material (pork) originates from outside the region or even from abroad? In addition, the interviewees addressed the topic of food control and traceability. One person posed the question: "What about the traceability of local food today and in the future?" Other expectations pertained to financial support for regional marketing initiatives, but also to the improvement of communication structures between actors in the production chain.

The majority of those interviewed expected the demand for local food to increase in the future. One reason could be the rising number of food scandals, as a loss of consumer confidence in various different product groups implies an increasing demand for food safety. In addition, new consumer awareness for environmental and social concerns would also make a strong argument for an increase in demand for local food.

Respondents also predicted two important developments within food retail: On the one hand the low-budget sector (discount) is expected to gain market shares, but this development is expected to be accompanied by increasing demand for high-priced premium products as well. Thus, strategies targeting segments between these two extreme positions were viewed negatively, since these segments will experience a drop in demand. One logical conclusion from these predictions is that local foods should be placed on premium markets, not least because their higher production costs and lower supply quantities make local producers less competitive on discount markets.

In conclusion, the production of regional products and specialities provides an interesting strategy for maintaining or increasing sales volume, not only for farmers but also for downstream processors and retailers. The production and marketing of regional products requires the co-operation of different market actors. Hence, local products may represent an important element within rural development strategies.

Summary

The results of nine expert interviews in the most western Austrian federal state, Vorarlberg, revealed a lack of common understanding of the term "local products," although most interviewees did associate it with a form of "geographic specification." Specifically, the connotations were quite different among the interviews. Some associated political borders (e.g. states, federal states, provinces) with local products, while others had smaller entities or natural landscapes in mind (like the Lake Constance region or the Montafon Valley).

Another important aspect deals with the labelling of local products at the points of sale, as labelling is seen as a means of allowing consumers to differentiate local products from others. The interviewees agreed that despite the existence of various labels, local products are not as visible in the stores as they should be. Moreover, the large variety of labels sometimes confuses and overburdens consumers whilst shopping. Some respondents criticised a lack of flexibility within the agricultural sector. Furthermore, the interviewees identified seasonality as one significant barrier to expanding local products, as local agricultural producers are rarely able to meet the processors' and the retailers' quantitative demand throughout the year (e.g. the availability of fruits and vegetables in winter). On the other hand limited availability is also seen as a special attribute of a product that can be used to highlight its exclusive character (e.g. "Alp pig" meat). Based on the statements of the interview partners, local products are generally positioned in the high price segment. This often results from the acquisition of raw materials for local products, since the required raw materials are more expensive than those of bulk commodities. The majority of respondents believed that local products will gain even more importance in the future.

The production of regional food and specialities provides an interesting strategy for maintaining or increasing market competitiveness, not only for farmers but also for downstream processors and retailers. Whereas many consumer surveys reveal enthusiastic support for locally produced food, consumer behaviour at the point of sale often does not match the survey results. There are various reasons for this discrepancy, but most frequently consumers do not perceive the benefits from buying local products. Hence, raising awareness for local food among all involved groups (producers, processors, retailers and consumers) could help foster the idea of relying on local produce. Towards this end, it would be important to clearly communicate the implications for the regional economy and society, to include arriving at a more common understanding of the term "local production" and providing a clearer delineation of what qualifies as locally produced food. In addition, the survey confirms that the production and marketing of regional products requires co-operation among the different market actors. Taking all arguments into consideration, local products may indeed represent an important element within rural development strategies, especially for regions with a high share of less-favoured areas and small-structured agriculture.

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Evaluation of the National Apiculture Programme in Austria, 2004-2007: General lessons learned regarding support programmes

Abstract: *To improve production and marketing of honey, the European Commission has laid down general rules for the application of specific measures within national programmes of the Member States (Council Regulation No. 1221/1997, updated by Regulation No. 797/2004). These national programmes are part of the first pillar of the CAP and are co-financed by the EU with a share of 50%. In 2009, an evaluation of the Austrian apiary subsidy programme for the period 2004-2007 was commissioned by the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the purpose of identifying the relevance of these measures for the apicultural sector.*
The present paper is based on the study "Evaluation of the Apiculture Subsidy Programme 2004/05 to 2006/07" and comprises selected results of those programme measures which appear to be most interesting in an international context. Towards this end, application and payment data were analysed using descriptive statistics to reflect the direct effects of the programme on the Austrian apiary sector. The evaluation results permit the deduction of several recommendations having general validity for the implementation of support programmes in rural areas.

Keywords: *Austria, apiculture, support programme, subsidy, evaluation*

Introduction

Beyond its direct contribution to agricultural output through the production of honey, the Austrian apiary sector helps satisfy an important precondition for farming by pollination activities of bees. Moreover, beekeeping in Austria contributes to rural development, as the small-structured yet area-wide apiary sector provides additional sources of income that help keep rural populations in the countryside.

The European Commission has laid down a set of rules for the application of specific measures within national programmes of the Member States, for the purpose of improving production and marketing of honey (Council Regulation No. 1221/1997, updated by Regulation No. 797/2004). These national programmes are part of the first pillar of the Common Agricultural Policy (CAP) and are co-financed by the EU with a share of 50%. In 2009, the Federal Ministry of Agriculture, Forestry, Environment and Water Management for the first time commissioned an evaluation of the Austrian apiary subsidy programme for the period 2004-2007, with the aim being to identify the relevance of this programme for the Austrian apicultural sector. An additional goal was to use the evaluation results to make recommendations for the design of the next National Apiculture Programme from 2010/11-2012/13. Besides providing a general overview of the apiary sector in Austria, this paper presents the evaluation results most relevant for international interests. The entire results of the evaluation have been published in "Evaluation of the Apiculture Subsidy Programme 2004/05 to 2006/07" by Neuwirth, Hambrusch and Wendtner (2010).

Apiculture in Austria

The structure of beekeeping in Austria is characterised by numerous small and middle sized enterprises scattered over the entire national territory. Figure 1 shows a decline in the total number of beekeepers (-22%) and bee colonies (-18%) between 1995 and 2008. At the same time the average number of bee colonies per beekeeper rose from 13.8 to 14.4. Although about 22,250 apiculturists were members of a beekeepers' association in 2008, most Austrian apiarists keep bees as a leisure activity or to supplement their regular income. While only one percent of Austrian apiarists can be classified as professionals – and are members of the Austrian association of professional beekeepers (ÖEIB) – this group keeps 13% of all bee colonies. The majority of beekeepers are members of the (non-professional) Austrian association of beekeepers (ÖIB). On average, a member of ÖEIB keeps 175 colonies whereas a member of ÖIB keeps about 13 colonies in 2008.

The focal point of the Austrian apiary sector is located in Upper Austria: 45% of beekeepers and 43% of bee colonies can be found in this federal state. In terms of the density of bee colonies per km², Vienna has the highest concentration (12.3 colonies/km²) followed by Upper Austria (7.4 colonies/km²).

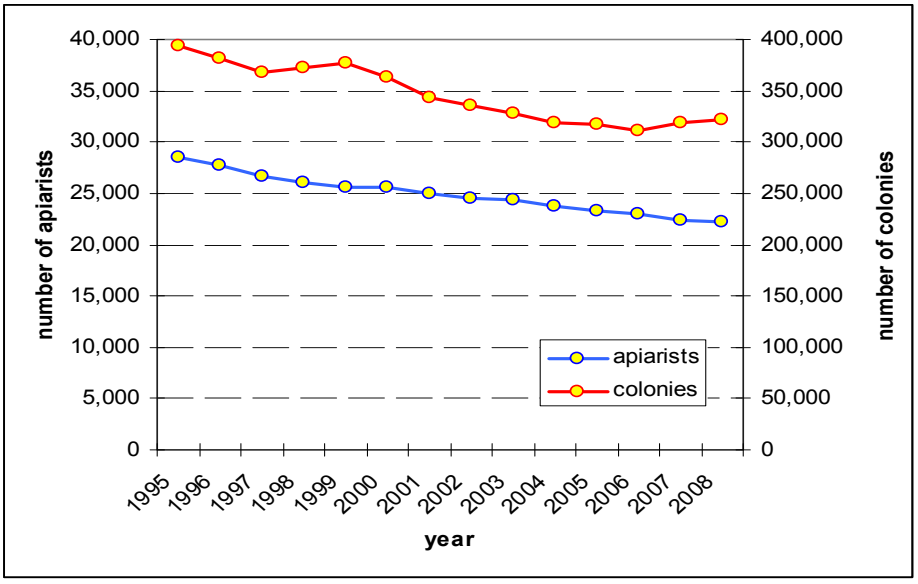

Figure 1: Number of apiarists and colonies in Austria, 1995-2008
Source: Biene Österreich (2009), Steirisches Imkerzentrum (2009)

A study completed in Upper Austria (Österreichisches Imkereizentrum, 2003) provides more in-depth and qualitative information about the structure of apiculture in this federal state. Some results, especially those regarding the age structure and overall share of female beekeepers, mirror the national situation. Interviews conducted with 3,881 apiculturists in Upper Austria came to the following results:

- Apiculture is dominated by men: only 5% of beekeepers are female.
- The average age of apiarists is 61.5 years (49% of beekeepers are between 51 and 70 years of age).
- On average, an apiarist has been active for 26 years (17% of interviewees reported keeping bees for no more than 10 years, while 15% had done so for more than 50 years).
- The main share of apiarists keeps bees for leisure, though beekeeping served as a source of income for 14% of interviewees.
- Beekeepers are mainly retirees (49%), while 20% are employees, 14% are workers and 12% are farmers.
- The bee species Carnica is most often kept (95%).

Over the five previous years, average annual honey production in Austria amounted to 6,160 tons, however a trend towards smaller harvests could be observed since 2000. The annual average yield per colony was 21.56 kg, but this figure ranged from 16.2 kg in 2008 to 27.5 kg in 2000. Statistik Austria data shows higher prices for honey under declining production. The 2008 price of € 6.15/kg was a record high in Austria.

In terms of the national supply balance sheets, Austrian demand for honey exceeds production: In fiscal 2007/2008 the Austrian apiary sector produced 5,700 tons of honey, of which 1,100 tons were exported. To meet the average demand of 1.2 kg per inhabitant, some 5,000 tons of honey had to be imported (self-supply rate 59%). The main export country for Austrian honey is Switzerland, while imports stem mainly from Germany and Hungary (Statistik Austria).

The National Apiculture Programme in Austria 2004/05-2006/07

In 1997, the first National Apiculture Programme to be co-financed by the EU was implemented in Austria, with the duration set to last one year based on Council Regulations (EC) 1221/1997 and 2300/1997. In September 2004, the new Regulation (EC) 797/2004 extended the duration to three years, with the main focus of the programme remaining on the maintenance of the nationwide beekeeping and apiary sector. A new structure in the apiary sector was also implemented: From this time forward, the new organisation Biene Österreich has acted as an umbrella organisation that includes the ÖEIB and ÖIB associations.

The contents of the new programme are similar to the first programme of 1997, but have been extended in scope and duration. The new programme contains the following measures and sub-measures:

- Technical support for beekeepers and their organisations
  - » Educational and advisory measures
  - » Investment support
  - » Support for small equipment purchases
  - » Support for newcomers
- Abatement of Varroa destructor mites by authorised experts
- Support for the restocking of bee colonies through breeding measures
- Rationalisation of transhumant beekeeping
  - » Support of on-site controls
  - » Investment support
- Improvement of honey quality
  - » Chemical analyses of honey, pollen and bee diseases by laboratories
- Research projects

Figure 2 shows the development in spent subsidies compared to the total amount of subsidies available. In the first year of the new programme period, only 64% of the available subsidies were spent, whereas in the last year all available monetary subsidies were dispensed to the beekeeping sector. Figure 2 also shows the changing importance of individual measures: e.g. while the abatement of Varroa mites was the most important measure in 2002/03, receiving 45% of subsidies, it became less important in the new programme period. On the other hand, technical support gained importance in terms of spent subsidies (from 40% in 2002/03 to 57% in 2008/09). Also worth noting is the expenditure trend for laboratory analyses: In 2002/03 only 7% of spent subsidies went to chemical analyses, but in the following years this measure received between one-fourth and one-third of all support monies.

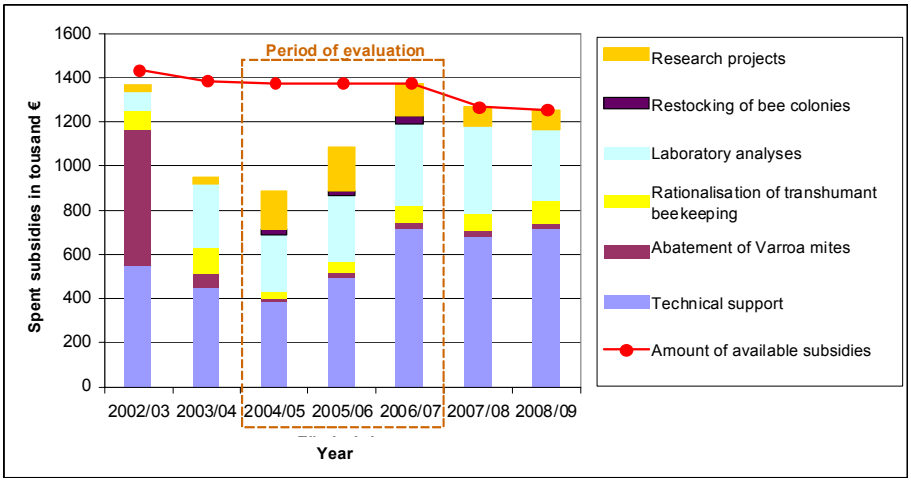

Figure 2: Subsidies spent per measure vs. total amount of available subsidies, 2002/03-2008/09
Source: AMA payment data; own illustration

Evaluation of the National Apiculture Programme

Data used and methods applied

For the evaluation of the Austrian Apiculture Programme a concept consisting of three evaluation questions was elaborated (see fig. 3). The first question highlights the direct effects of the provided measures especially the quantitative acceptance by apiarists. Whether the supported research projects met the demand on research from the experts' point of view and which scientific topics could be of interest in future are subject of the second question. The third evaluation issue concentrates on the impacts of the newly established umbrella organisation "Biene Österreich" on the Austrian apiary sector. As the last two questions seem to be relevant mainly for national interests, the further paper focuses on selected results of the first evaluation question regarding measures that have been judged to be interesting for an international readership: investment support, support for small equipment purchases, laboratory analyses of American foulbrood, trainings and courses, as well as laboratory analyses of honey.

The results of the complete study are published in "Evaluation of the Apiculture Subsidy Programme 2004/05 to 2006/07" (Neuwirth et al. 2010).

Most data used in the evaluation derived from the application and payment database of AMA (Agrarmarkt Austria). These data comprise information about the structure of supported enterprises, the number of subsidy applications filed and the amount of subsidies paid, with each category subdivided by year and federal state. The data were analysed using descriptive statistics and, if required, compared with official data (e.g. existing data on the structure of Aus-

trian apiculture). Information about the Austrian beekeeping sector as a whole originated from the Federal Ministry of Agriculture, Forestry, Environment and Water Management (BMLFUW), from Biene Österreich (the umbrella organisation of Austrian beekeepers) and from ÖEIB (the Austrian association of professional beekeepers).

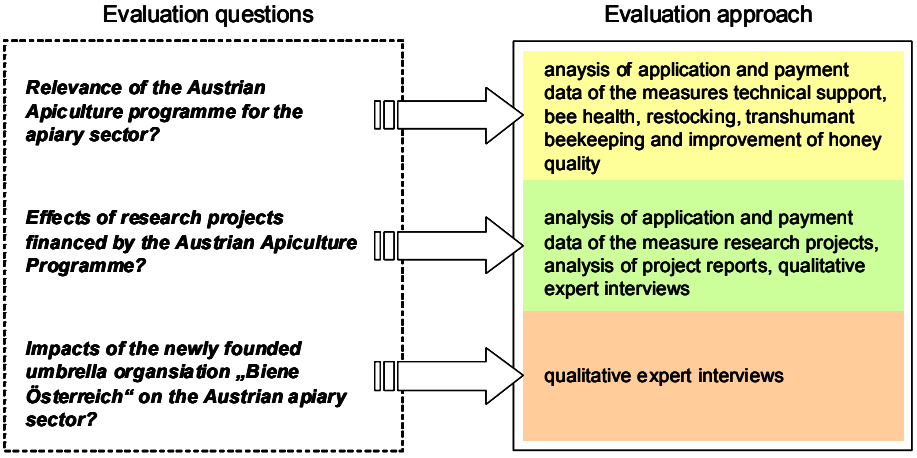

Figure 3: Concept of evaluation
Source: Neuwirth et al. (2010)

Results of the evaluation

The paper focuses on the evaluation results for the following selected measures: investment support, support for small equipment purchases, laboratory analyses of American foulbrood, trainings and courses, as well as laboratory analyses of honey.

Measures related to investments

Investment measures comprise investment support (including investment support for transhumant beekeepers), support for the purchase of small equipment and support for newcomers. In sum, these three sub-measures accounted for 22% of all subsidies spent.

The measure investment support offers a subsidy of up to 42% of the purchase price for machines and equipment having a minimum total value of € 2,000, including transport equipment, honey separators, filling and storage pots, honey liquefiers, etc. If a beekeeper participates in the Austrian Honey Quality Programme, the subsidy rate increases to a maximum of 48%. Applicants must keep at least 58 bee colonies to qualify. Within the programme period, 123 beekeepers received approx. € 287,000 in subsidies – an average of € 2,340 per applicant – in this support category.

The share of beneficiaries who participated in the Honey Quality Programme increased annually, from 79% of supported beekeepers in 2003/04 to 98% in the last year of the programme period (see Table 1).

With 184 bee colonies, the size of supported enterprises was much larger than the national average for Austrian apiarists (14 colonies in 2008), but also larger than the national average for professional beekeepers (175 colonies in 2008).

Table 1: Characteristics of support for investments and small equipment purchases (by year)

Characteristic	Investment support			Support for small equipment		
	2004/05	2005/06	2006/07	2004/05	2005/06	2006/07
No. of applications	34	46	43	73	410	651
Average no. of colonies per application	192	189	172	51	33	30
Paid subsidies in €	71,365	112,646	103,345	21,623	98,188	195,209
Average subsidy per colony	12.02	12.94	15.01	5.82	7.19	10.07
Share of participation in HQP* in %	79	89	98	100	100	100

*** Austrian Honey Quality Programme**

Support for small equipment purchases was offered for the first time in the National Apiary Programme 2004/05 to 2006/07. Participation in the Honey Quality Programme is obligatory to receive subsidies for such purchases – tools such as filling and storage pots as defined by the regulations. During the entire period, 1,100 beekeepers received subsidies worth a total of approx. € 315,000. The number of applications jumped from 73 in the first year to 651 in the last year of the programme period (see Table 1). On average, each project was awarded € 278. The costs submitted were one fifth higher than the maximum allowable costs (see Table 2).

The size of supported enterprises decreased significantly during the programme period. While the average of kept colonies was 51 during the first year, by the last year more and more smaller apiary enterprises had applied for subsidies, thus driving the average down to 30 colonies per enterprise in 2006/07 (see Table 1). Nevertheless, during the overall programme period the size of supported enterprises remained 2.5 times higher than the Austrian mean. As a trend, smaller enterprises received higher subsidies per colony.

Table 2: Average share of submitted costs vs. maximum eligible costs by federal state (in %)

Federal State	2004/2005	2005/2006	2006/2007	Total average
B	35	130	114	107
K	89	151	80	106
NÖ	96	146	90	107
OÖ	107	157	109	129
S	113	165	123	136
ST	106	137	85	105
T	93	165	109	125
V	94	115	121	119
W	-	122	119	119
Austria	**103**	**151**	**101**	**119**

Sub-measures within this category are laboratory analyses of American foulbrood in transhumant bee colonies, efforts to abate Varroa mites or other bee diseases by experts, on-site controls of transhumant bee colonies by experts, and breeding towards Varroa tolerant bees. In the programme period under evaluation, some 16% of subsidies were used for the improvement of bee health. For example purposes, only the evaluation results of the measure "laboratory analyses of American foulbrood within migrating bee colonies" are presented in the following passage.

Within the bundle of sub-measures related to bee health, more than half of the monies spent were dedicated to analyses of American foulbrood. This bacteria-caused disease occurs again and again in Austria, but the number of reported outbreaks varies significantly from year to year. Because the disease is highly contagious, spreads quickly and has a high potential for doing damage, professional apiarists are particularly affected. This is evident in the evaluation results: nearly half of the analysed specimens were submitted by members of ÖEIB. The number of analysed specimens climbed enormously in the last evaluation year (see Figure 4).

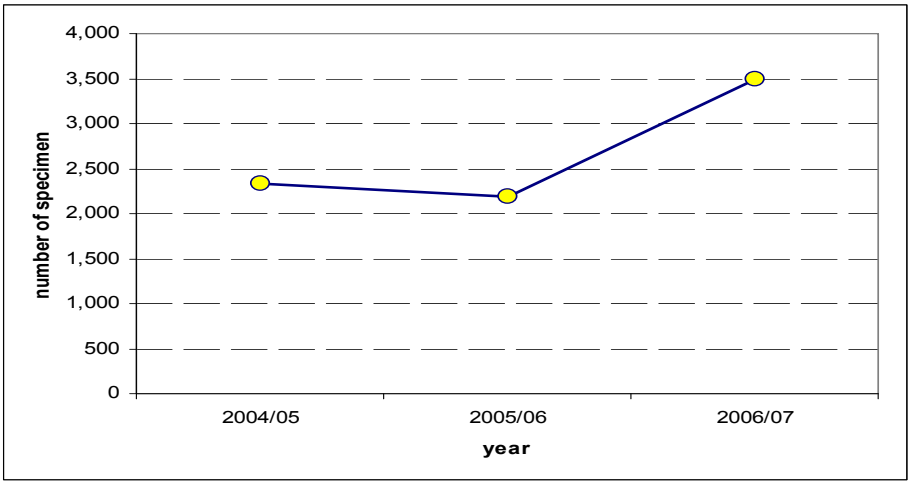

Figure 4: Development in the number of examined specimens for American foulbrood analysis (by year)

Educational and advisory measures

A main emphasis of the National Apiculture Programme between 2004/05-2006/07 was on educational and advisory measures: € 922,000, or 28% of the total subsidies, was spent on basic seminars for newcomers, advanced trainings on bee health, production and marketing of bee products, and breeding of queen bees. Allowable costs are travel costs, remuneration for expert

trainers, costs for advisory services, material costs and certain administrative costs. The rate of subsidy is 80%. Four categories can be funded through this measure:

- Seminars, trainings and courses
- Advisory services for single enterprises
- Large events, conferences and information materials
- General material costs of the umbrella organisation Biene Österreich

Nearly three-quarters of all monies related to educational and advisory measures went to training activities having two, four or eight lessons. Within the programme period under evaluation, 3,191 seminars took place. During these three years, the number of participants increased by 13%, to roughly 25,150 individuals by the last year (see Table 3). Theoretically, this equates to each apiarist in Austria attending one course.

Beekeepers showed the highest interest in courses dealing with the topic "management of colonies and enterprises", which approx. 19% of all participants attended. About 8,200 of all beekeepers who attended an educational event (or 12% of all participants) were interested in the production and marketing of bee products. Trainings related to this topic show the highest growth in the number of participants during the three-year period.

Table 3: Number of courses and participants, 2004/05-2006/07

Year	No. of courses	No. of participants	Subsidies in €
2004/05	1,049	22,213	213,850
2005/06	991	22,386	214,650
2006/07	1,151	25,148	252,902
Total	**3,191**	**69,747**	**681,402**
Change 07/04 in %	*10*	*13*	*18*

Measures to improve honey quality

The bundle of measures for improving the quality of honey comprises subsidies for physical-chemical laboratory analyses of honey specimens. The eligible analysis groups were: analyses relating to honey quality (5 different types of analysis), pollen analyses for the identification of honey varieties (2 types of analysis), analyses of residua in honey and bee products (3 types of analysis). The national programme subsidises 80% of the cost, which is a fixed flat rate charge depending on the type of analysis. In addition, eligible beekeepers were able to receive expert consultation for improving their products.

The evaluation results show an increase in the number of beneficiaries (apiarists and apiary organisations) and number of submitted specimens during the period (see Table 4). In relation to the total number of Austrian beekeepers, the share of apiarists who had their products analysed increased from 9% to 13%. Indeed, this share is a maximum because some beekeepers may have

submitted honey specimens several times during the evaluation period, and some honey batches may have been analysed more than once. Unfortunately, the data available do not allow conclusions as to the number of individuals who posted honey specimens.

Table 4: Selected characteristics of honey analyses

Characteristic	2004/05	2005/06	2006/07	Total
Number of beneficiaries *	2,203	2,444	3,049	7,696
Share of total number of apiarists (in %)	*9*	*10*	*13*	*11*
Number of specimens	3,255	4,136	4,764	12,155
Average number of specimens per beneficiary	1.48	1.69	1.56	1.58

*** the submission of several specimens per apiarist was possible**

Recommendations and conclusions

The results of the evaluation of Austria's National Apiculture Programme during the period 2004/05-2006/07 permit the deduction of the following conclusions:

- The combined measures of investment support and support for the purchase of small equipment are an incentive for beekeepers to participate in the National Honey Quality Programme and therefore support the improvement of bee product quality in Austria.
- Smaller enterprises receive higher subsidies per bee colony than larger ones. In part, this is dependent on the positive economies of scale of larger enterprises (e.g. shorter amortisation periods and a higher degree of capacity utilisation compared to smaller enterprises). On the one hand, this means that financial support for investments can be used more efficiently in larger enterprises than in smaller ones. On the other hand, smaller enterprises tend to have a higher pent-up demand for investments. The latter observation is circumstantiated by the reduction in size of supported enterprises over the course of the evaluation period.
- The need for purchasing small equipment appears to be very high, as the amount of submitted costs markedly exceeded the maximum eligible costs.
- The increasing number of specimens submitted for American foulbrood analysis – in particular during the last year of evaluation – can be interpreted in one of two ways: either the disease is spreading more rapidly, or it is an indication of the rising attention paid to the disease by apiarists and, along with it, of their stronger desire to partake in preventive efforts against the disease.
- The contents of most educational courses reveal that the demand for fundamental knowledge remains strong. Furthermore, the high participation rates in seminars focusing on production and marketing of bee products reflect a desire for product differentiation and new distribution channels among stakeholders in the Austrian apiculture sector. Future educational programmes should thus relate to the most demanded topics as a means of extending and differentiating the available supply.

- Measures for improving honey quality contribute to a rising willingness among beekeepers to have their apiary products analysed. Thus, this measure supports quality awareness for honey and other bee products.
- Summa summarum, the Austrian National Apiculture Programme between 2004/05-2006/07 is assessed to contain a well-balanced package of measures. The programme has been able to meet the various demands of a heterogeneous apicultural society and enhance the quality of bee products at the same time. The broad approach of the National Apiculture Programme is an important basis for the nationwide maintenance of sustainable apiculture in Austria.

Finally, several general recommendations for agricultural support programmes can be derived from the above conclusions about the National Apiculture Programme of Austria:

- The implementation of new measures needs time! Larger enterprises are the first to apply for subsidies, while smaller enterprises behave in more reserved fashion. Therefore, the implementation of new support measures should be accompanied by comprehensive information and advisory activities to reach all potential beneficiaries, and to ensure that interventions take effect quickly.
- For each support programme, the same questions arise with respect to the group of beneficiaries: Should bigger enterprises receive the monetary support because they are able to utilise the subsidies more efficiently? Or, should smaller enterprises profit more from financial support because they have a higher demand? Should all enterprises be targeted so that everyone gets a slice of the cake? Of course, the answers to these questions depend on the specific intervention goals – but the benefit of spreading money efficiently and effectively should make finding the answers worthwhile.
- The measures offered should create synergy effects as a means of targeting several goals with a single measure. The linkage of financial incentives to certain desirable behaviours on the part of beneficiaries seems an appropriate tool for guiding developments in the favoured direction.
- If implementation of an interventional programme is to be successful, accompanying the programme with educational measures is absolutely indispensable! The EU's call for lifelong learning should be heard and implemented in every supportive package of measures. Not only do educational measures contribute towards achieving the desired long-term effects of interventions, but broad learning opportunities are also able to meet the manifold demands and interests of target groups.

Undoubtedly, agricultural support programmes need to be multidimensional to achieve comprehensive results. This means they should comprise measures related to quality, marketing, production, innovation, investment, education, health and the environment.

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Production directions of agricultural farms located in remote rural areas of Poland

Abstract: *The strategy for rural development provides a differentiated approach to each type of rural areas. Particularly "sensitive" areas for rural development in Poland are remote rural areas, which are dominated by small farms with small economic strength. In many cases further agricultural development is very difficult or even impossible for these farms. For a lot of farms adapting to the current market situation is to determine the direction of production and the choice of management system. In this regard, organic farming seems to be a good alternative for those farms also given the significant financial support for the sector. Besides, organic farming also consistent with the paradigm of sustainable development - especially the concept of sustainable environmental development and protection of environmental heritage.*

Keywords: *remote rural areas, agricultural farms, organic farming, economic results.*

Introduction

Amongst all criteria that can be used for classification of rural areas an administrative, demographic, spatial and economic criteria can be specified. Due to administrative criteria 93% of Polish land could be defined as a rural area. In addition, according to statistical data over 50% of Poland's area is represented by Utilized Agricultural Area (CSO, 2008). It follows that agriculture is an important element of rural areas in Poland. If we give the importance of agriculture in economic and professional activity in rural areas, we can distinguish three groups of rural areas (Wilkin, 2006): an integrated (close to major urban centers of minor importance in agriculture), intermediate (high importance of agriculture, specially with large areas) and remote rural areas (peripherals). The agricultural family farms in remote rural areas are rather small in the terms of area with small economic strength. These farms are described very often as a declining farms with economic size

below 8ESU. The problem of a relatively small and economically weak farms is one of the important issues of agriculture in Poland (Józwiak, 2009).

In Poland two main zone of remote rural areas can be specified (IGiPZ Sciences, 2009). They are located in Pomerania beyond the reach of Gdansk and Szczecin and in eastern Poland - Northeastern part of the Warmia and Mazury, Podlaskie, Lubelskie, Podkarpackie, Świętokrzyskie eastern part of the province. Significance of problems of these rural areas and changes in the face of dynamic changes after accession to the EU was highlighted in publications and scientific advices (Wilkin, 2006 and Kudłacz, 2006).

Besides, the OECD studies conducted in Poland at an angle of differences in economic and social development of the regions showed that there was a growing disparity between eastern Poland and the rest of the country as well as differences within individual provinces. It should be emphasized that this is not a single area - there is a very large variation in the direction of agriculture in these areas, very generally speaking northern areas of the eastern Poland are more focused on the production of milk while the southern part is focused on crops. But even within the region there are very large differences.

Polish eastern territories are not highly agricultural areas, however they are considered traditionally as agricultural areas in which family farms lead multilateral agricultural production mostly for own family consumption – they are so-called self-supplied farms. Unfortunately, agricultural incomes are not the main source of income in these farms. In the first place are the social transfers and benefits of social protection system, pensions and income from work outside agriculture.

The way of agricultural activity in eastern part of Poland is often very traditional in its nature and very similar to the method of organic farming. For many eastern Polish farms it could be a good alternative, especially given the other advantages and benefits when compared to intensive conventional farming. Summary of basic differences between conventional and organic farming are shown in Table 1.

Table 1. Basic differences of conventional and organic system of farming

Conventional farming	Organic farming
management focused on individual production (specialized monocultural production)	whole farm management (balance of plant&animal production)
maximum production output - intensive production	optimal production output - extensive production
higher costs of production	lower costs of production
low level of production control	whole farm controlling system
use of chemicals and syntetics	high limitation or lack of chemicals and lack of syntetics
environmental exploatation and contamination	environmental protection (water, soil, natural landscape, biodiversity)
use GMO	no GMO allowed

Probable directions of rural development (according to guidelines for the strategy of rural development and agriculture) include increasing the competitiveness of agricultural production in rural areas by reducing the cost of agricultural production (not only the direct cost of the agricultural production). The straight line in response to this trend is that organic farming is characterized by a reduction in production costs compared to conventional production. Organic farming also fits in a direction for rural development with environmental functionality – increasing the value of landscape, water and soil protection, maintenance of the biodiversity. But there is a question if the organic farming could be sufficiently profitable to continue agricultural production in remote rural areas at all? The comparison of economic results of production in conventional and organic farms in remote rural areas could bring us closer to the answer.

Objective, the source of data and research methodology

Firstly the location for agricultural farms in the rural areas in eastern part of Poland was selected. The farms conventional and organic were located in 6 voivodships of that region: warmińsko-mazurskie, podlaskie, lubelskie, świętokrzyskie, podkarpackie i małopolskie. In case of organic farms only the certified organic farms were taken into account.

The analysis was based on data from two compatible systems: the Polish FADN and the AGROKOSZTY system. The survey sample included organic and conventional family farms in 2008. The selection of the survey sample of these farms was conducted purposefully, on the basis of the following characteristics:

1. In order to present the main directions of agricultural production in these farms, both conventional and organic the FADN data were used. On basis of FADN data the main directions of production in these farms were determined by the share of production value regarding crops and animal production.
2. In order to present possible competitiveness of the economic results of main production's directions of organic farms, they were compared with conventional farms.

Under the AGROKOSZTY system, the methodology used for calculating the standard gross margin was consistent with the EU rules (Augustynska, Goraj, Tarka, Pokrzywa, Skarżyńska 2000). It is the first income category, calculated by deducting from the value of production the corresponding direct costs. Moreover, records of unpaid and paid labour input related to the surveyed activity were kept in the AGROKOSZTY system, which allow to determine the corresponding labour input during the accounting year. The income from activity account was based on the Polish FADN information collected from the same farm (e.g. indirect costs, the annual average number of animals). The analysis of particular activity performed in farm concerned the total costs involved, the share of subsidies in income from activity and labour intensity.

Results

The tabular statement (table 2) shows the average data of selected conventional and organic farms. They both had nearly the same economic size and led production on the same UAA area. The differences were shown in the production results of the main crop and animal products. The average yield of wheat in organic farms was only 67% of the yield of wheat in conventional farms. The results of animal production were achieved in animal production yield of milk in organic farms was only 10% lower than in conventional.

Table 2. Survey sample for analyzing main directions of agricultural production

Specification		Average in agricultural farms	
		conventional	organic
Number of farms		1096	91
Economic size	[ESU]	4.9	4.6
Total Utilised Agricultural Area	[ha]	11	11.8
Rented UAA	[ha]	2.2	1.2
Yield of wheat	[dt]	47.5	31.8
Milk yield	[kg per cow]	3719	3352

For analyzing the main directions of agricultural production the share in the total production value was calculated. In conventional farms the main role in crop production led the groups of products 'cereals', 'fruits' and 'vegetables&flowers'. The same situation was observed in surveyed organic farms.

The presentation of the share of agricultural productions in total production which are present in surveyed conventional and organic farms was shown on Fig.1 and 2.

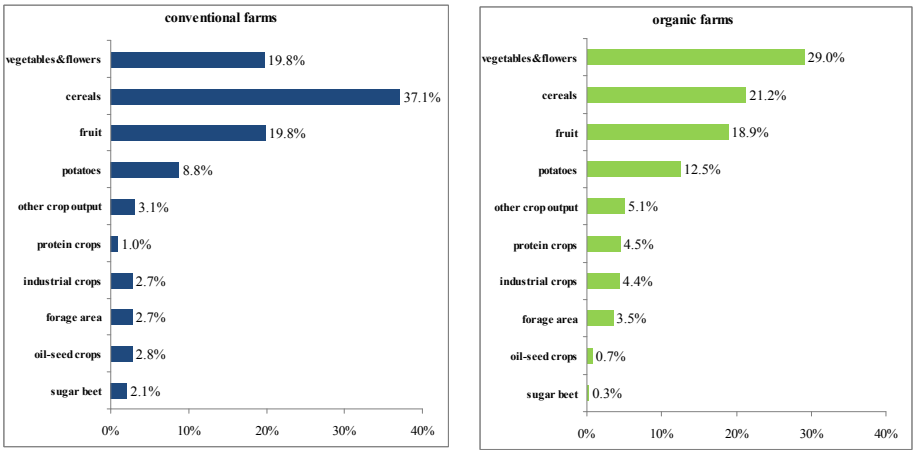

Fig. 1. Share of value of crop production in total crop production value in surveyed conventional and organic farms in 2008

In case of the animal production in surveyed conventional farms the biggest share in total production value had 'poultrymeat', 'cow's milk and milk products' and 'pigmeat'. In surveyed organic farms 'cow's milk and milk products' was the lead direction of the animal production.

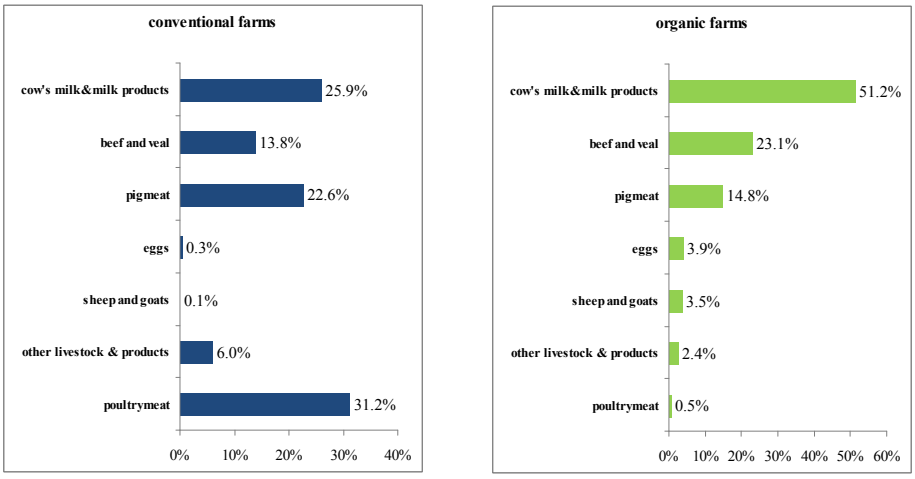

Fig. 2. Share of value of livestock products in total livestock production value in surveyed conventional and organic farms in 2008

The comparison of economic results of production in conventional and organic was based on data from AGROKOSZTY system. As a representative of cereals for analyzing economic results the winter rye and winter wheat were selected. Summary table and graphs (Table 3 and Fig. 3 and Fig. 3a) showed the production and economic results of these cereals in surveyed conventional and organic farms.

Table 3. Specification of winter rye and winter wheat production's results in surveyed farms (based on AGROKOSZTY in 2008)

Specification	Average in farms with winter rye		Average in farms with winter wheat	
	conventional	**organic**	**conventional**	**organic**
Number of analysed farms	35	19	32	14
Yield [dt/ha]	37.8	25.8	60.1	30.1
Sale price [EUR/dt]	12.7	21.9	13.0	23.7
Total labour input [hours]	10.2	11.6	15.2	16.5

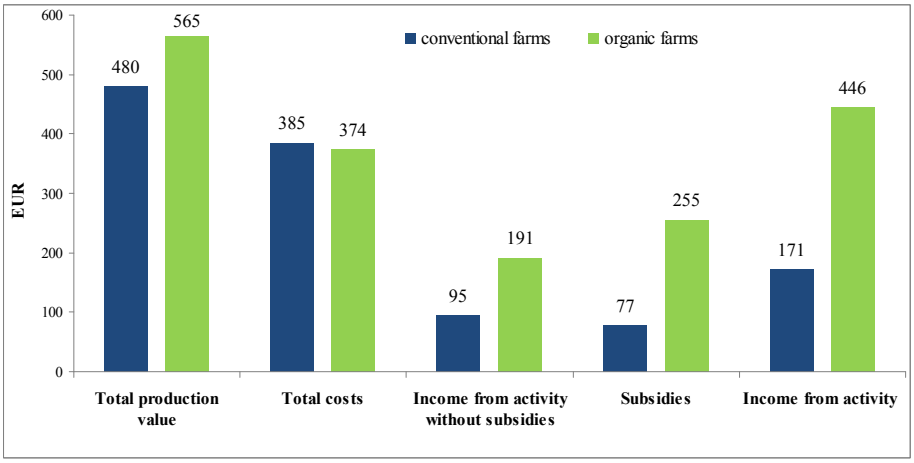

Fig. 3. Economic results of winter rye per ha of cultivation in 2008

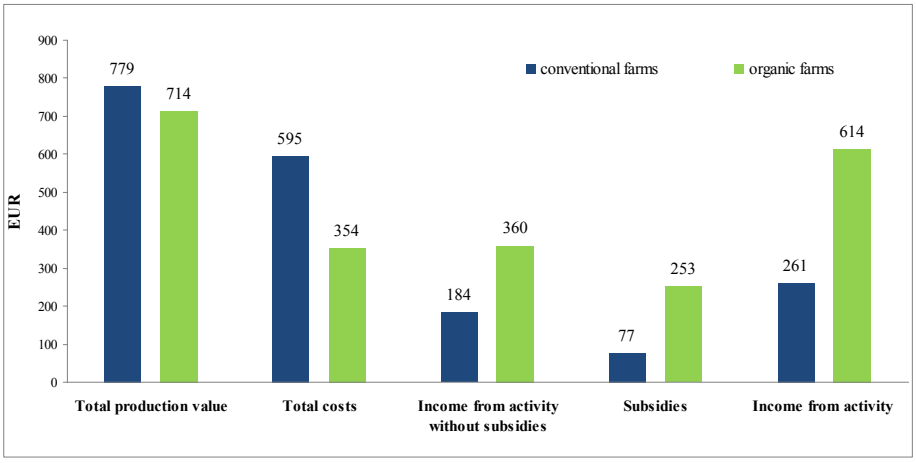

Fig. 3a. Economic results of winter wheat per ha of cultivation in 2008

The yield of organically produced cereals was much more lower than in conventional (from 40 to 50% lower) but the achieved price was about 70 to 80% higher for organic. The total cost of winter rye production was on the same level in organic and conventional cultivation. Winter rye seemed to be not so 'demanding' cultivation as the winter wheat. The total costs of conventional cultivation of winter wheat was almost twice more than costs of organic cultivation. Generally the cost of fertilizers used for conventional cultivation was the main reason of the higher cost. The income from activity (cereals production) even without subsidies was higher in organic farms but the share of subsidies was calculated from 41 to 57% of the income from activity. The total labour input was on the same level both in conventional and organic farms (see Table 1) so there was not significant differences on labour input involved in these cereals production.

The milk production was the leading animal production in surveyed organic and conventional farms. In surveyed organic farms the economic results of milk production was not satisfactory for farmers if compared to economic results of conventional production. This situation was because of lower number of dairy cows and lower milk yield. Even due to larger forage area per dairy cow utilized in surveyed organic farms the production results were lower because of the lower quality of that area compared with conventional farms. The amount of subsidies involved to dairy production improved significantly the income from activity (milk production). The details of results of milk production in surveyed conventional and organic farms was on Table 4. and Fig.4.

Table 4. Specification of milk production's results in surveyed farms (based on AGROKOSZTY in 2008)

Specification		Average in farms with dairy cows	
		conventional	**organic**
Number of analysed farms		52	25
Average annual number of dairy cows	[heads]	10	7
Milk yield	[litres/cow]	4793	3361
Sale price of milk	[EUR/litre]	0.28	0.27
Total labour input	[hours]	207.3	229.2

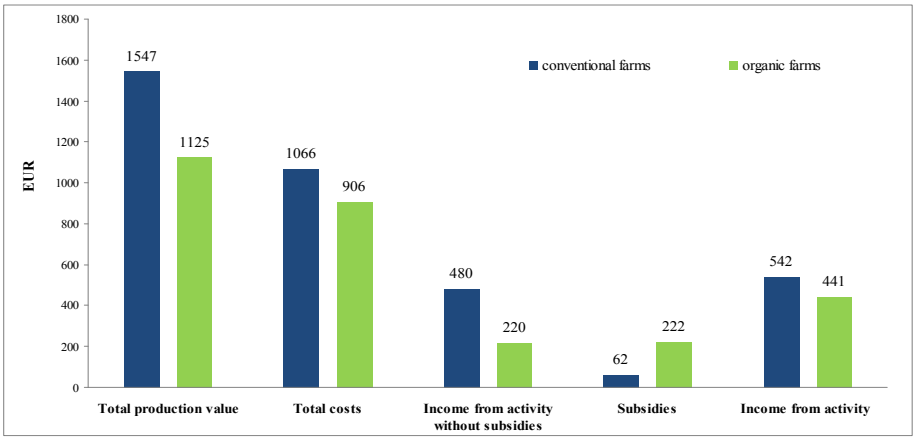

Fig. 4. Economic results of milk production per dairy cow in 2008

Conclusions

On the basis of conducted analyses the main directions of agricultural production in surveyed farms were identified. Both in organic and conventional production cereals could be mainly specified for leading directions of plant production and dairy cows for animal production. Organic production of cereals led to higher income from activity both in winter rye and winter wheat in surveyed farms. Lower economic results of organic milk production were mainly due to lower production results – lower milk yield and lower number of dairy cows.

The share of subsidies in income from organic production was higher than in conventional farms and strongly influencing the level of income from activities of described plant and animal production. Total labour input was higher in organic farms for all surveyed agricultural activities.

In general total costs of analyzed agricultural activities were lower in organic farms so the problem of reducing productions costs is not so important but the low scale of production on organic farms. The possibility of increasing the scale of organic production to ensure sufficient levels of income based only on agricultural production is limited and not economically justified e.g. the organic fertilizers are very expensive, there's a little chance to buy additional forage area for the dairy cows, etc. Indirectly in this meaning we can find a justification for organic production's support from public funds.

On the other hand in response to the increasingly higher requirements of the consumer high quality organic products are made in organic farms. Competitiveness of production results should fight for product quality - not just a cost-price competitiveness. Leadership should therefore be sought in differences in the production of putting on organic and regional products of high quality. Consumers expect high quality food, safe and produced with respect for the environment, low level of environmental degradation and the conservation of biodiversity. In this regard the organic production could be a good alternative for family farms in remote rural area also taking into account well economic results of organic production in comparison with conventional production.

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Problems of food market development of Ukraine

Abstract: *In any country food market trends and the level of foodstuffs provision is a question of urgent importance. The main function of food market is providing victuals in necessary volumes.*
The aim of this paper is to analyze modern state of food market in Ukraine and to research factors of its development. For this purpose we used following methods: analysis and synthesis, statistical, conceptual and logical.

Keywords: *food market, agricultural sector, individual households, agricultural enterprises, Ukraine*

Introduction

Forming of balanced food market is one of topical problems of social-economic development of Ukraine. Overcoming the crisis in agrarian sector of economy is expected on the base of development of market relations in Ukraine.

Domestic food market of Ukraine has expressed regional differences. Each region has its own conditions for its functioning, which are stipulated by resource potential of enterprises, level of development of market infrastructure, natural conditions, regional specialization etc.

Problems of formation and development of agriculture on market principles are explored by many Ukrainian and foreign researches. The studies of Balabanova H., Berezin P., Sabluk P., Shebanin V. and others were directed to solve these problems. However, we can notice that in scientific publication

there are many approaches even concerning meaning of conception "market". Problems of optimal combination of market regulators are still debatable.

The aim of the paper is to identify factors that affect the food market, reasons of too slow development of market relations in agriculture of Ukraine.

Methodology

We used following methods: analysis and synthesis, statistical, conceptual and logical.

Results

The development of agricultural market affects many factors. One of the main among them is the natural conditions of functioning entities. Sectoral structure of agriculture in some regions of Ukraine is forming just under the influence of natural conditions.

Natural resources and conditions of Ukraine in general are favourable for agricultural development. Mostly flat terrain, sufficient heat and moisture during the active growing season, large areas of fertile soils allow growing different crops in the temperate zone and developing all major areas of biotechnology and livestock raising. However, the level of crop yields so far remains low and significantly inferior indexes than in economic-developed countries.

As a result of realized reforms the increase of agricultural lands owned by private farms is observed. Thus, in 2008 the area of agricultural land in individual households amounted to 15.6 million hectares, which is 42% more than in 2002. During this period the area of land in agricultural enterprises decreased by 22% (fig. 1).

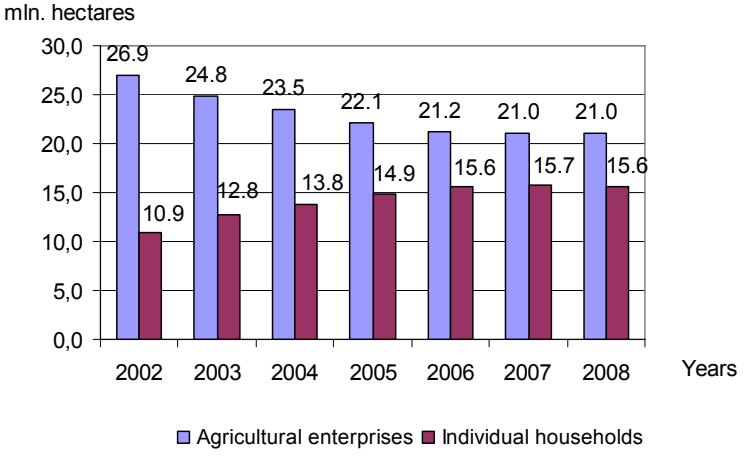

Figure 1. Agricultural land used by different types of producers in Ukraine

We can notice the tendency of increasing production in agricultural enterprises. However, the largest share of agricultural production was still in individual households, where in 2008 it produced 56112.5 million UAH[1] of gross agricultural output, which was 54% of all production (fig. 2).

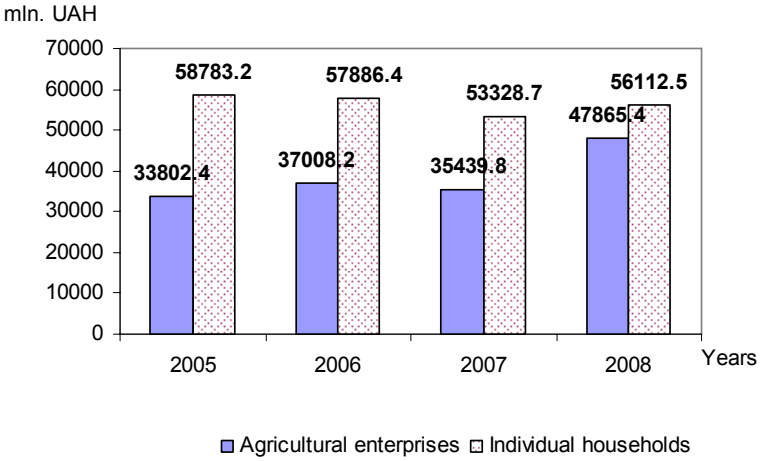

Figure 2. Gross agricultural output of Ukraine

Individual farms have no commercial orientation. The average size of land holdings of these type of agricultural producer mostly do not exceed 0.5 hectares, but occasionally have reached two hectares.

Individual households can be characterized as follows:
- land is an essential means of their livelihood;
- as a rule, members of these households live in rural areas;
- household's members usually have another jobs (including in schools, factories, trading network, etc.).

The comparative major contribution of private farms to total volume of agricultural output is caused by a number of factors. First of them is high level of unemployment and significant excess of labouring rural areas. It forces rural inhabitants to do subsistence farming for the purpose of their survival. Law level of labour compensation leads rural people to produce and sell small volume of agricultural products: potatoes, meat, milk, etc.

The second factor is the higher level of animal productivity and crop yields in individual households than in large-scale farms. This is the result of long-term period reformation of agricultural enterprises and, as usual, inefficient use of their resources. It should be noted that individual households every year increase the area of agricultural land, transforming into farms. Thus they become commodity orientated.

1 UAH – Ukrainian currency "hryvnia" (100 USD = 505 UAH in 2008).

All enterprises have insufficient of means of production and financial resources. The value of capital assets, which are used in agricultural production, have reduced more rapidly than in other activities, which are carried out by agricultural enterprises. This is a result of difficult financial situations of entities, unfavourable investment environment in agriculture, attempts of diversification of activities of agricultural enterprises by looking for profitable types of economic activities [7].

Low profitability of agricultural enterprises and limited credits doesn't allow to renew the capital assets, to do major repairs of existing means of production. That is why quality of used fixed assets becomes worse. Therefore, the level of provision of tractors, combines and other machinery is 45-50 percent needed. It all affects the volume of agricultural production.

During 2000-2009 gross grain production in Ukraine increased by 88%, vegetables – by 43%. However, volume sugar beet yields decreased by 24% and potatoes – by 1% (fig. 3).

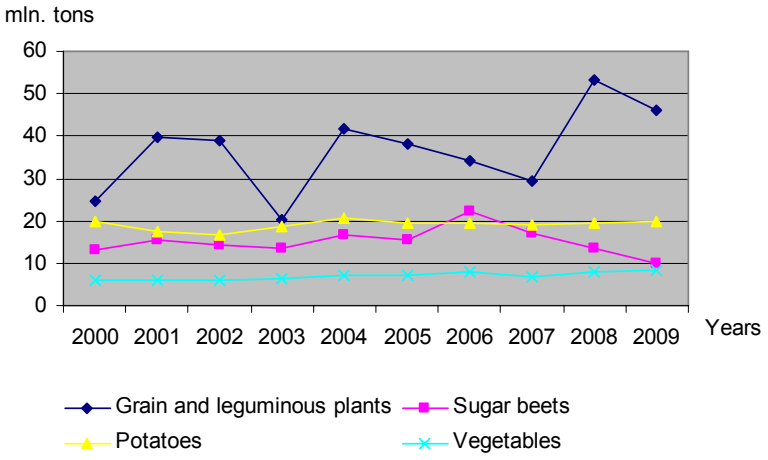

Figure 3. Gross agricultural products yields of Ukraine

Agricultural enterprises are the main producers of grain and sugar beets, because of growing technological features, advantages and technical factors of large-scale production. Thus, 79% of grain and leguminous plants, also 88% sugar beets were grown in agricultural enterprises. Individual households grew 98% potatoes and 86% vegetables (fig. 4).

There is a tendency to increase productivity of all types of crop production (fig. 5)

However, in comparison with the similar indicators of other European countries, yield crop production in Ukraine is in 2-3 times lower (table 1).

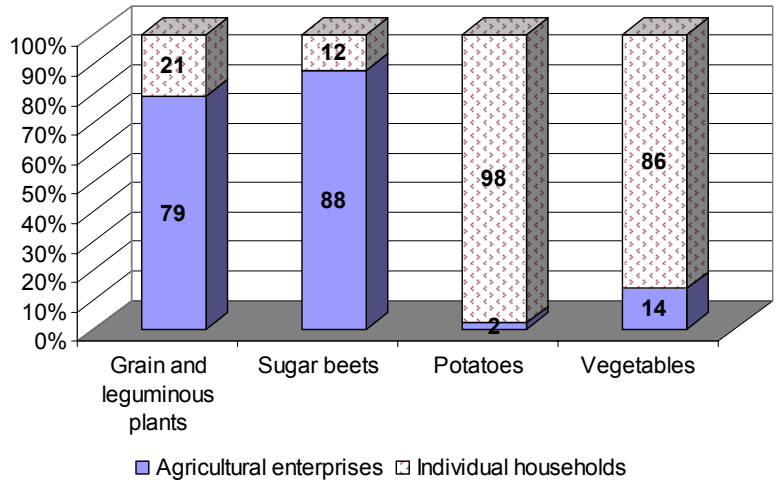

Figure 4. Structure of crop production by the type of producers in Ukraine in 2008

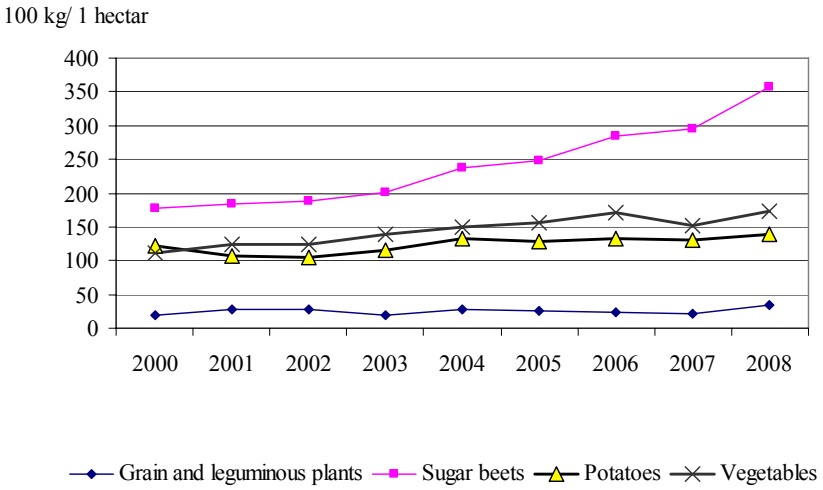

Figure 5. Crop capacity of agricultural products in Ukraine

Table 1. Crop capacity of some agricultural products in Ukraine and European countries (100 kg per 1 hectare)

Name of products	Ukraine	Poland	Slovakia	Austria	Germany	France
Grain and leguminous plants	34.6	41.7	40.6	49.3	78.1	74.5
Sugar beets	356.2	543	565	702.3	666	937
Potatoes	138.7	198.5	184.7	325.3	443	437.9

Certainly low yield is a result of lack of fertilizers and plant protection, delayed implementation of technical operations, lack of means of production, etc.

In conditions of high inflation in the worst condition are sectors of economy with long production period. Therefore, the volume of milk production decreased by 8%, and meat (in the slaughtered weight) - 24% (fig. 6).

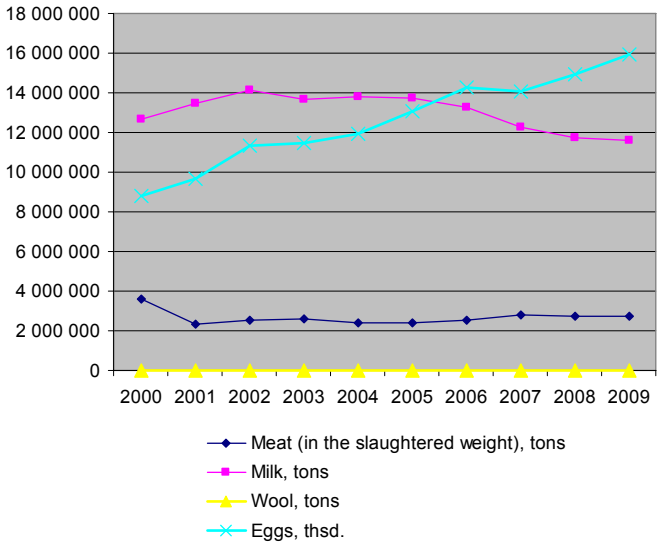

Figure 6. Volume of livestock production in Ukraine

Most of animal products produced in households: 51% of meat, 82% of milk and 78% of wool. Only egg production is concentrated in agricultural enterprises, which share in total volume of production is 57% (fig. 7).

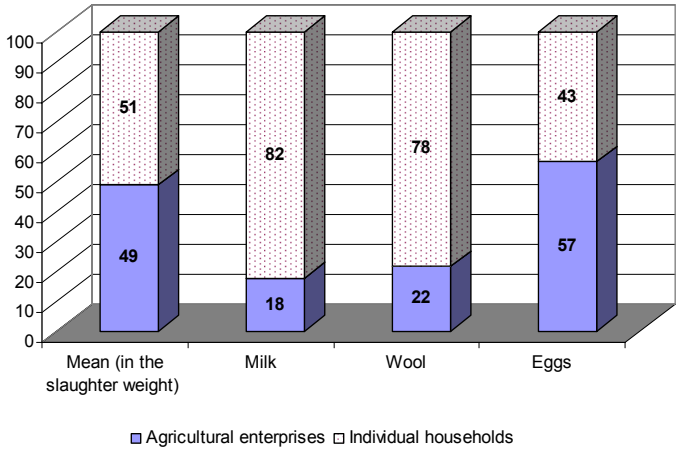

Figure 7. Shares of separate producer in total output of livestock products in Ukraine, %

The main problem in breeding is that in order to survive in difficult economic conditions of 1990's agricultural enterprises sold the most marketable product – cattle. The tendency of decreasing of livestock is not surmounted in Ukraine by this time. Thus, the number of cattle reduced by half and in 2009 was 4.83 million head of cattle.

Recently Ukraine's agriculture remains unprofitable. The livestock production was the most unprofitable, namely meat of all kinds (fig. 8).

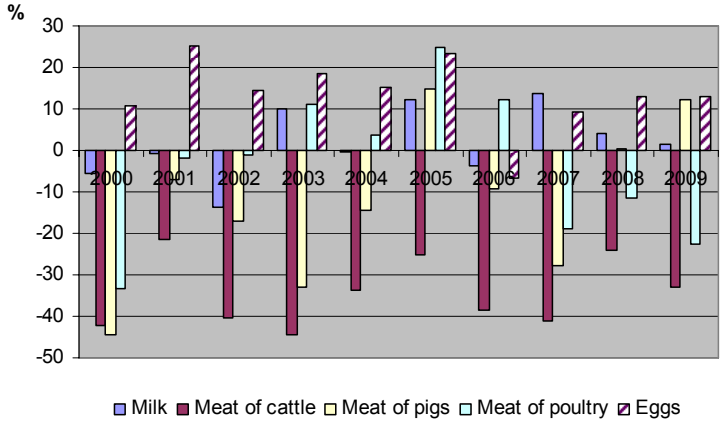

Figure 8. The profitability of livestock production in Ukraine, %

Crop production of such products, as grain, vegetables, and potatoes was profitable (fig. 9).

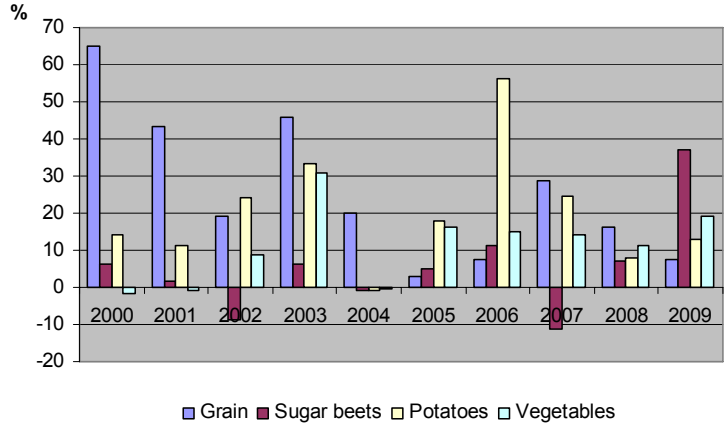

Figure 9. The profitability of crop production in Ukraine

The inadequate formation of agricultural market infrastructure is the one of the main problems of agriculture in Ukraine. Agricultural producers have limited possibilities for the choice of channels on alternative basis. Besides purveyor, having the monopoly, purchase agricultural raw materials at low

prices. Having limited volume of similar products offered on the market, local food supermarkets prefer to purchase large volumes of products from foreign producers [8]. Physical infrastructure of food markets is weak. There is lack of refrigerators, warehouses, information and communication systems.

Low-income consumer and their limiting purchasing power are the limiting factor of food market development; this reduces the demand for food. In 2008 average monthly household expenditures for the purchase of food products were 1316 UAH, which was by 400 UAH more than in 2007. Meeting the needs of food staples, within its purchasing power, was carried out mainly by domestic production.

In 2008 indicator of food affordability was 50.8 %, while 60% is the maximum criteria. It should be noted that in Europe the share of food expenditure in total household expenditures is within 20 to 25 percent.

Thus, we can classify the factors influencing the formation and development of the food market of Ukraine.

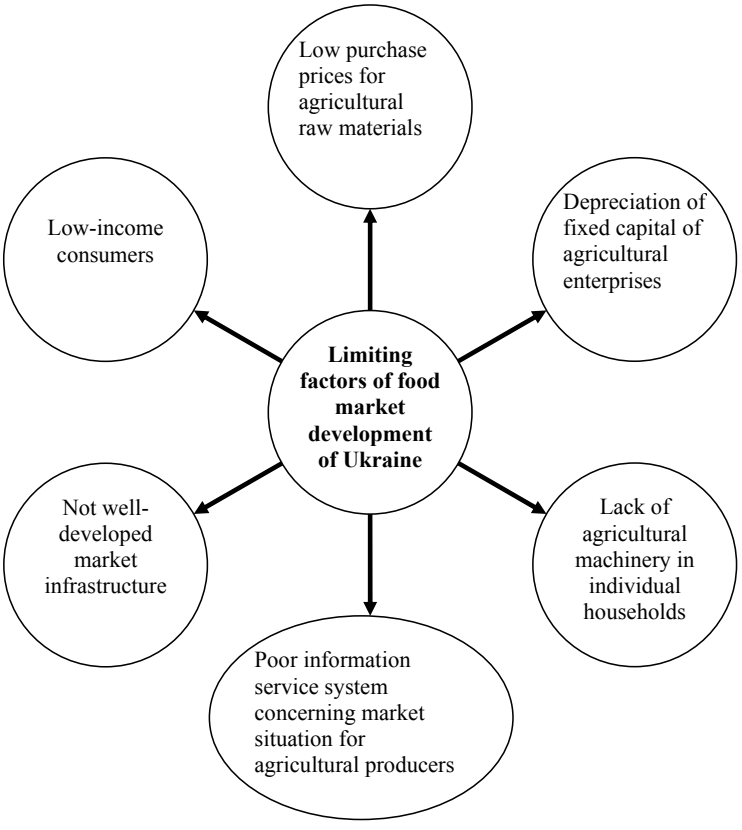

Figure 9. Limiting factors of forming and development of food market in Ukraine

Conclusion

With favourable natural and climatic conditions, Ukraine's inefficient use of agricultural potential is evidenced by low rates of productivity of agricultural crops.

A significant decline in profitability of main products of agriculture can be considered threatening in terms of food security. Therefore, there is no investment for the development of this sector.

Lack of procurement centres of agricultural products produced in individual households leads to excessive reduction of purchase prices. But prices of distribution are in 2-4 times higher.

The disadvantages of the food market can be attributed primarily:
- low level market infrastructure development, namely lack of wholesale trade;
- lack of marketing activities of enterprises and the relevant specialized agencies;
- low-income consumers.

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The agriculture as a real assumption of regional and rual development in Serbia[1]

Abstract: *Serbia is a country in transition, the one which, after '90ies of the last century, has passed through number of difficulties, which had manifested in change of social and economic system, change of economic and social structure, and all other consequences followed by those changes. The path toward its membership in the EU is long. Like other socialist countries, after the World War II, it has also used an acceptable concept for that period of economic development's planned direction with focus on the country industrialization, where had been left aside agriculture development, the activity which had before significantly more important role in the country economy. The industrialization processes were followed also by accelerated urbanization. Increasing number of inhabitants is concentrated in the cities, suburbs to which they were spread and in industrial centers. In the rural areas, the number of inhabitants was relatively, later even absolutely, decreasing; population on individual agricultural husbandries became older and older, while existing resources became less used. The consequences are increasingly poorer rural settlements. Along with official policy for equable development of all regions, obvious regional differences in development were present also in that period.*

This was until the beginning of '90ies of the last century, when had appeared radical fall in real sector of the economy, especially in industry where major workers had been employed and had the most significant participation in creation of the country's domestic product. The similar happens with the construction activity, but also with agricultural enterprises and agricultural cooperatives. Many regions in the country were left without enterprises where workers had gained a live hood and the state its incomes. During these events, the regional differences have significantly increased.

1 Paper is a part of research project III 46006 - Sustainable agriculture and rural development in the function of strategic goals achievement within Danube region, financed by the Ministry of Education and Science of Republic of Serbia, project period 2011-2014.

As it is not impossible quick or almost none renewal of industrial production, especially in those branches which require great investments, and could employ more workers, we consider that the development focus should direct, as much as possible, to improvement of agricultural activity, as in primary production, as well as in processing of those products in food products. Therefore modest, but possible investments, would accelerate development of this sector, which could employ more workers, with significantly higher production for internal and foreign market. It would simultaneously lead to the improvement of rural development and more moderate regional development of Serbia.

In this paper is given a brief review on developmental processes in Serbia after the World War II, on structural changes in economy and population, on the problems of regional and rural development and on real possible role of agriculture sector in improvement of regional, rural and total development of the country in next years.

Keywords: *Industrialization, urbanization, agricultural production, rural development, regional development.*

Basic characteristics of developmental processes

The politicization and ideology are important characteristics of socialist development concept and all social relations. There were mixed economic and social factors to a great extent, while together with the policy of economic development were respected also social goals, especially concerning collective consumption policy. The industrialization processes were ensured an important increase of income, accumulation and employment. It has simultaneously ensured faster growth of life standard, personal and public consumption. Regarding that urban population has lived better, the village - town migrations have no discontinuance. Naturally, it had its negative effect – pressure on the cities. However, for accumulation limit and tendency for its direction in production purposes – industrialization, the urbanization processes have lag behind the industrialization. That is how was created a special population category, so called, second-raters, who were employed in industry or some other activity, i.e. they had a worker status, and at the same time, they have lived at the village and have deal with agricultural production. In that way, they were denying their full contribution, both to industry and agriculture. Nevertheless, their position was more favourable because they increased family income by salary, and they assured food articles by agriculture. This type of production had predominantly natural character. The rural population in Serbia, for example, in 1948 amounted 72.3% and in 2002 – 11% of total population.

"Declining of absolute number of agricultural population meant also an intersection of secular tendency of its accumulation in agriculture. Owing to low starting base, high growth rate had often a limited effect to a mass per

capita income and total number of employees, but their significance had been in decreasing absolute number of agricultural population and thereby overcoming the degenerative tendencies in agriculture, to upset deeply the traditional economy and to bring off undeveloped regions onto the industrialization path. For this perspective is not irrelevant that developed and semi-developed regions develop quickly, allowing the problem of undeveloped to be solved by manpower migration."[2]. It is clear that, together with the economy development, if it is necessarily territorially adjusted, it ensures also the development of insufficiently developed regions and decrease of regional differences.

It is not our intention to criticize previous approach to development, while it was influenced by economic system and real possibilities. There should consider that, with very meager accumulation and possibilities for investments, the focus was given to industry development, along with full conscious about strong mutual link between industry and agriculture development. In agriculture create food products and raw material for industry, and in industry the means of production and the consumer goods. Especially in initial period, the agriculture is also a tank of manpower for industry, because major of population live in rural areas and deal with agriculture. Both industry and agriculture broaden the market for each of them products. The accumulation which make in these activities, depending on developmental and economic policy, overflows from one to another. At the same time, development of one activity contributes to development of some other.

The concepts and development policies, observed in longer period, differ, whether they are the result of spontaneous courses, imposed by market principle of economy functioning, or as the result of directing, peculiar for plan or mix model of market-plan economy. Near after the World War II, in Serbia (ex Yugoslavia), the most important branch in the real sector of economy was agriculture, and in population structure, its major part was rural population. Previous development concept was based on detailed planning of development, starting from direction of modest investments, electrification and industrialization.

The agriculture in that period was neglected, and new production structure after conducted agrarian reform with new subjects in this field, was establishing slowly, with main characteristic – low productivity. The development of industry, which was mostly located in urban areas, or industrial centers, has absorbed number of manpower from rural areas in the cities and industrial centers. In that way, villages had stayed without young manpower, and farmers had become older and older. Industrialization and urbanization processes have changed relatively fast the economic and social structure of the country, so the cities had become bigger, and rural population had decreased, at first relatively and later absolutely, industry had become basic

2 Kosta Mihailović: Regional development of socialist countries, Serbian Academy of Sciences and Arts, Belgrade, 1972, p.45-46.

economy factor and manpower absorbent. The social sector of agriculture has risen gradually and had become more important creator and supplier of market with agricultural and food products, as well as significant factor in surpluses meant for export[3].

The private sector in agriculture stayed undeveloped, with problems in production: insufficiently educated young manpower, poor investment possibilities, uncertainty in products placement, prices and all significant elements for its economy. Cooperative relations with social sector, counting also cooperative associations, have mostly been at the expense of an individual farmer. In that way, rural husbandries left behind with small agricultural areas, in average under 3 ha, with increasingly older and insufficiently educated manpower, with small market surpluses and the most often, the production directed to satisfaction of household's own needs.

Without a critic of developmental concept and processes which had realized in period 1945-1990, we consider that, after certain progress in industrial development, should pay more attention to development of agriculture in individual agricultural husbandries, and improvement of rural areas development, especially regarding infrastructural equipment, in order to make life conditions more favourable, and population to stay in these areas. Thereby would decrease a pressure on the cities, decrease assets for (social) tenements construction (up to 10% of NI annually), which have realized mainly in urban areas, decrease social costs[4]. If we had such approach, today we would not have so powerful processes of rural areas (settlements) devastation. Some of them have been already totally abandoned.

Such processes, with some changes in shorter developmental stages, have realized to the beginning of '90ies of the last century. **Then emerge radical changes in economic system and economic structure**. Industrial enterprises have become economically unsustainable, due to market loss, retrogression in development, change of owners, and dismissal of numerous workers. Some of them vanished physically. None of big industrial combines did survive. Some of smaller parts left, neither market successful, nor competitive. New owners the most often did not succeed in empowering them for the market game. Agricultural property in public (social) sector, including big agricultural combines, has experienced the same faith, with even worse consequences, while the land, as their main production factor, should return to previous owners.

3 In that process the agriculture, as underdeveloped, has become gradually more and more modern economic area, as in productive, as well as in organizational sense, with increasing productivity. Decisive contribution was given by industrialization, while technical-technological equipment of agriculture was increasing. Especially during '70ies and '80ies of the last century has been powerful a social sector in Serbian agriculture, with strong agricultural combines.

4 Although in the same social-economic system, the Republic of Slovenia has different approach from other republics of former common state, so more significant attention it has given to development of rural areas, therefore the cities in this republic was slowly widen, and rural areas were not abandoned, or this trend was much under, than in other parts of the country. The regional differences in developmental grade on its territory were less than in other republics.

They have also left without market, the products have become increasingly less competitive, there have been lack of working capital and investments. Practically, the real sector of economy in Serbia lost its significance, with difficult economic, social and all other consequences.

The regional dissimilarities in Serbia are extreme, as regarding developmental level, as well as regarding population, production and developmental possibilities. They have increased in transitional period, opposite to actual policy to decrease gradually. Major parts of the country are in extremely tough situation, followed by unemployment and poverty. Huge rural spaces, with great natural wealth in agricultural land, water potential, forest wealth, mineral and other raw material, stay insufficiently used, many villages stay without their inhabitants, current population become older and thin. The poverty in these regions is pretty expressed. On the other hand, in several cities (Belgrade, Novi Sad, Nis, Kragujevac) the population concentrates, which employ difficult and meet numerous problems.

In existing terms, when the investments represent meagre resource, when the economy is increasingly disposed to outside competition (Intermit Agreement on Stabilization and Accession to the EU is in effect, negotiations with the WTO are in final phase, there is also the CEFTA 2006 Agreement – the exchange between the signatory countries was liberalized, as several more agreements on free trade – Russia, Byelorussia, Turkey), when export possibilities are limited, and the competition on the world market very strong, fast renewal of industrial capacities which could employ again numerous manpower and become the carriers of economic and total social development, is not possible. That process will be slow and on big combines in former form cannot be counted on. **Therefore, in the real sector, taking into consideration all natural and other conditions for improvement and more intensive development of primary agricultural structure and, on its base, development of highly-productive processing-food industry, for Serbia is realistic the development possibility, which can contribute, in the fastest way, to total development of the country, and simultaneously to its faster and more even regional and rural development**[5]. Serbian agriculture, the way it is now, is the only activity in the real economy sector in which Serbia realizes surplus in foreign trade exchange and balance of payments of the country, which enormous deficit becomes more and more powerful limitation factor of Serbian development[6].

5 There is no clear distinction between these two terms, but it is quite certain that they mutually overlap, while accelerated and evenly distributed rural development contributes to more balanced regional development and opposite. Therefore is inevitable that, all measures and developmental programs which undertake, must be mutually adjusted and well coordinated.

6 In 2009 was realized deficit in foreign trade exchange of agricultural-food products in amount of 950 million USD, and opposite to the deficit in total exchange of goods abroad in amount of 7.7 billion USD (SORS: report No. 204 on 14.07.2010.).

Rural problems and regional dissimilarities

The rural areas have development indicators under average, although they occupy major territory and more than half of total population still lives in them. The rural areas of the Republic of Serbia (without KM) range over around 66 thousand km^2 or 85% of total territory. In these areas are 3,904 settlements or 83% of their total number in the republic. In 2002, in this area had lived 4 million and 162 thousand inhabitants or 55.4% of their total number. In these areas, number of inhabitants decreases significantly faster than the average one (in last census period 1991/2002, decrease of 3.7% according to average of 1%). Population density is significantly under average: 63 inhabitants per km^2 in regard to 97 for the whole republic. The level of education is lower than the average, so the population without formal education and with elementary education, make about 55% of these areas population in regard to average 46%, while secondary and college educated population make 43% in relation to 52.3%. In primary economy sector in rural areas realizes 32.5% of DP, in relation to average 19,3%, while in tertiary sector realizes around 26% in relation to 41% in the republic. In the primary sector in rural area work around 33% of total employees and the republic average is 23.4%. In these areas, in sector A (agriculture, hunting, forestry and water management) realizes around 30% of DP, in relation to the average one, i.e. 16.3%[7]. In these areas, the poverty is more expressed. There considers that the poverty in Serbia is predominantly rural phenomenon, as in many countries in transition. There is significantly more poor in rural than in urban areas. In 2007 were poor 9.8% rural and 4.3% urban households. In that time, almost two third of poor was living in rural areas http://www.prsp.sr.gov.yu/kolikoje.jsp. Undoubtedly, due to the economic crisis which is still ongoing, the number of poor has been increased both in rural and urban areas.

At the same time, the regional dissimilarities in development grade are unacceptably expressed, so the focus of regional development policy is that they gradually decrease. It is constitutional, legal, but also social and human obligation. Along with underdevelopment of Serbia, which has been a consequence of numerous problems and causes from past two decades, the differences in developmental grade between some regions have been legal and had appeared as a consequence of numerous factors, such as historical, natural, economic, social and similar. However, extremely great dissimilarities must overcome, because they carry tough consequences for the whole country. According to available data[8], the areas with special developmental problems classify in three categories: the municipalities which, for almost four decades, have not come out from the underdevelopment cycle; the area of „transitional poverty" – industrial centers with sudden decline of production and employment and Serbian communities in AP Kosovo and Metohija.

7 MAFWM – Draft Strategy of Rural Development, 2010-2013, August 2009.
8 Republic Office for Development: Regional development of Serbia, December, 2009 (http://www.razvoj.gov.rs).

According to available data[9], the regional disharmony reflects in migration of population, employment, i.e. unemployment and income per capita. Serbia has been faced with strong depopulation and uneven positioning of population. There is expressed abandonment of rural and underdeveloped part of the republic. East, west and southwest parts are jeopardized in demographic sense (areas with poor economic activity and low developmental grade), while in areas of the city of Belgrade and South-Bačka district concentrates the population (at the higher developmental grade). Intolerably great dissimilarities are expressed also at the district level and the municipalities level (local authorities):

- In period from 1971 to 2008, in Pirot district, the number of inhabitants was decreased for 28.5%, while in the city of Belgrade was increased for 32%. At the municipality level, the dissimilarities are: decrease of 81.6% in Crna Trava municipality and increase of 31% in Preševo municipality,
- Unemployment level was in relation 4:1 at the district level (Jablanica district versus Belgrade) and at the municipality level (Lebane versus Petrovac),
- Salaries per capita at the district level were also in relation 4:1 (the city of Belgrade versus Jablanica district) and, at the municipality level, the relation is much more unfavourable and amounts 12:1 (Novi Sad versus Opovo).

All these indicators refer to deepness of the dissimilarities, their causes, interdependence of many factors, to necessity of comprehensive activities in order to identify all peculiarities in some specific regions and undertaking the best measures for their gradual alleviation.

Institutional solutions and concrete measures directions

The constitution of the RS ("Official Gazette RS" No.98/2006) determines an obligation of taking care of even and sustainable regional development, in accordance with the law. Together with the Strategy of Regional Development of Serbia (brought in 2007) was brought the **Law on Regional Development** ("Official Gazette RS", No. 51/2009 and 30/2010), which was arranged complex problem of regional development and was regulated the support system at the national, regional and local level. The law arranges adoption of some developmental documents, as a method of regionalization according to NUTS classification, as well as the stimulating measures system. The significant role has the National Agency for Regional Development and regional agencies, which create and manage the developmental programs, at the regional and local level.

The support to the regional development realizes through the Fund for Development of the Republic of Serbia[10], the National Investment Plan, various

9 Republic Office for Development: Report on Serbian Development in 2009, Belgrade, April 2010 (http//www.razvoj.gov.rs).

10 Approved assets of the fund in 2009 was amounted 296 million EUR, which would contribute to employment of around 21000 unemployed persons.

types of government power, among which is also directing assets in faster rural development[11], as well as from the funds (programs) of foreign support. The classification was made on 5 regions by the law, at the level 2 (NUTS 2): Region of Vojvodina, Region of Belgrade, Region of Sumadija and West Serbia, Region of South and East Serbia and Region of Kosovo and Metohija. According to the law, the regions classify, according to development level, in two groups:

- The first group do **developed regions**, which development grade is above the republic average of GDP per capita,
- The second group – **insufficiently developed regions**, which developmental grade is under the republic average of GDP per capita.

According to this criteria, in developed regions belong Vojvodina region and Belgrade region, and in insufficiently developed, the rest three regions[12].

The units of local authority (municipalities, towns and the city of Belgrade), in accordance to development level, classify in four groups:

- First group – the units of local authority which development level is above the republic average,
- Second group – the units of local authority which development level is in range from 80% to 100% of the republic average,
- Third group – the units of local authority which development level is in range from 60% to 80% of the republic average,
- Fourth group – the units of local authority which development level is under 60% of the republic average.

The law also differs:
Insufficiently developed units of local authority, in which consider the units from previously mentioned fourth group (development level under 60% of the republic average), than those in which the decrease of inhabitants, since the census in 1971, is above 50%, and the units of local authority on the territory of AP Kosovo and Metohija; and

Devastated areas in which consider the units of local authority from the fourth group, if their level of development is under 50% of the republic average.

According to the Decree about determination of unique development list of the local authority units:

- In the first group (development grade above the republic average) belong 40 local authorities[13];

11 In 2010, within the authorized ministry for agriculture, the assets meant for rural development are 2.1 billion RSD, or around 21 million EUR.
12 According to Decree on determining unique development list and the units of local authority for 2010 (Official Gazette RS No. 51/2010)
13 Apatin, Arilje, Bačka Palanka, Bačka Topola, Beograd, Beočin, Bečej, Valjevo, Vrbas, Vrnjačka Banja, Vršac, Gornji Milanovac, Zrenjanin, Inđija, Jagodina, Kanjiža, Kikinda, Kosjerić, Kragujevac, Kruševac, Kula, Lajkovac, Niš, Novi Sad, Pančevo, Pećinci, Pirot, Požarevac, Senta, Smederovo, Sombor, Sremska Mitrovica, Sremski Karlovci, Stara Pazova, Subotica, Temerin, Užice, Čajetina, Čačak i Šabac.

- In the second group (development grade of 80% to 100% of the republic average) belong 23 local authorities[14];
- In the third group (development grade from 60% to 80% of the republic average) belong 36[15], and
- In the fourth group (development grade under 60% of the republic average) belong 46 local authorities.19 Those are extremely insufficiently developed units of local authority. Out of these 46 local authorities, 40 of them belong to devastated areas[16]. (See the map at the end of this paper work).

Based on this classification, for year 2010 were brought concrete acts (three decrees), by which regulate stimulus of faster development of the local authorities from the second, third and fourth group, i.e. devastated units of local authority.

Certain assets from the republic budget (and other sources) for 2010 direct, through the Fund for Development of RS, under much more favourable terms than existing on monetary market, **by Decree on conditions for incentive and enterprise and entrepreneurship development in undeveloped municipalities in 2010** („Official Gazette of RS" No. 11/2010), in order to stimulate more even regional development, through stimulating the business of legal entities and entrepreneurs, stimulating competitiveness and economy liquidity and stimulating employment in 2010. These assets direct in building new objects; capacity enlargement of existing objects (reconstruction and modernization); purchasing equipment and credits for financing the activity extension. At the same time, there emphasize municipalities, from which some subjects can count on this kind of support, and those are the units of local authority, which level of development is under the average level in the Republic of Serbia, classified in the third and fourth group according to development grade (totally 82 local authorities). **The assets**, along with regulated requests, **use as long-term credits**, with use of currency clause, with term which depends on purpose: credits for construction, reconstruction, modernization and purchase of equipment with payment term to 5 years and credit period to 1 year; credits for permanent working capital with payment term to 2 years and credit to 9 months; credits for entrepreneurs with payment term to four years and credit to 1 year. **The interest rate is 2.5% annually, for investments on the area of third group of undeveloped, i.e. 2% annually for investments on the area of the local communities from the fourth group.**

In **Decree on conditions for stimulating production and employment in devastated areas in 2010** („Official Gazette of RS" No. 11/2010 and 38/2010) are stated the local communities which line up in devastated areas (40 mu-

14 Ada, Aleksandrovac, Bač, Bački Petrovac, Bor, Vranje, Zaječar, Kladovo, Kraljevo, Lapovo, Loznica, Lučani, Novi Bečej, Novi Kneževac, Odžaci, Paraćin, Požega, Ruma, Sokobanja, Titel, Topola, Ćuprija i Šid.
15 Aleksinac, Aranđelovac, Bajina Bašta, Batočina, Bogatić, Boljevljac, Velika Plana, Veliko Gradište, Vladimirci, Despotovac, dimitrovgrad, Žabalj, Ivanjica, Irig, Kovačica, Kovin, Koceljeva, Leskovac, Ljig, Majdanpek, Mali Iđoš, Negotin, Nova Varoš, Novi Pazar, Opovo, Priboj, Prokuplje, Raška, Svilajnac, Sečanj, Smederevska Palanka, Srbobran, Trstenik, Ćićevac, Ub i Čoka.
16 Local authorities from previous footnote, with exception of: Alibunar, Bela Crkva, Brus, Knjazevac, Petrovac and Surdulica.

nicipalities from mentioned fourth group – see footnotes 19 and 20), which development grade is under 50% of the republic average, in which invest incentives for stimulating and attracting new investments, etc. The incentives direct by approving the credits through the Fund for Development, in form of long term investment credits for building new objects, extension of existing objects capacity (reconstruction and modernization), purchase of equipment and credits for permanent working capital for programs of investments in devastated areas. The advantages have: enterprises which employ more workers, projects-programs which provide more employees or work places to persons registered in The National Office for Employment in municipality where realizes the program-project; the carrier of investment who has own participation in the investment, etc. **This type of credit approves in term of 8 years, with grace period from 2-3 years, along with application of currency clause, but big enterprise can get credit up to 8 million euros, with interest rate of 2% annually.**

The Decree on conditions for investments in work-intensive branches of processing industry in insufficiently developed municipalities in 2010 (Official Gazette of RS No. 11/2010) sets the assets for stimulating the purchase of equipment and credits permanent working assets for projects in work-intensive branches of processing industry in local authority units, which level of development is under the average one in the republic – ahead mentioned second, third and fourth group. Those credits approve with currency clause, on term of 5 years with grace period to 1 year if they invest in building, reconstruction, modernization and purchase of equipment, but if they invest in providing permanent working capital, on term of 2 years and grace period to 9 months. The credits for entrepreneurs approve on term of 4 years and credit of 1 year. The interest rate depends on what group the user belongs to, so at annual level it amounts 3.5% for the local authorities from the second group, 2.5% for the third group investments and 2% for undeveloped area – fourth group.

The Law on agriculture and rural development (Official Gazette of RS, No. 41/2009) is a basic law which regulates directions of agriculture and rural development in the republic, and it determines that agricultural policy and rural development policy conduct by realization of special developmental documents – Strategy of Agriculture and Rural Development, National Program for Agriculture and National Program for Rural Development[17]. At the same time, the law regulates also the incentive system classified in three categories: **direct** (premiums, incentives for production, regressions and support to non-commercial agricultural husbandries); **market** (export, funding storage costs and credit support) and **structural** (rural development measures, improvement of protection and quality of land and measures of institutional support). The incentives concretize by annual decrees brought by the government, ai-

17 According to the available information, these developmental documents are in final preparatory phase, which should be adopted by the government.

ming to gradually adjust to orientation of the Common Agricultural Policy of the EU (CAP)[18]. These assets determine in the budget for the current year[19].

The Regulation on determination of area with heavy working conditions in agriculture (Official Gazette of RS, No. 3/2010, 6/2010 and 13/2010) determines those local authorities which, according to specific criteria (if they are on altitude over 500m; if they are on area of national parks with over 15% of its territory; etc.) belong to the areas with heavy working conditions and, as such, have more favourable conditions for using incentives meant for agriculture development and improvement of rural development. Here belong 46 local authorities (municipalities – towns)[20]. We can see that certain number of local authorities repeat, i.e. overlap with those classified after criteria for regional development improvement, which means they fulfil the conditions for using incentives in several grounds.

Conclusion

Serbia is a country with pronounced regional differences in development. The differences in development meet both in rural and urban areas. There are pronounced differences also regarding development possibilities of some regions, and each of them have its own characteristics that can be used in developmental processes. Each region dispose with more or less possibilities for improvement of agricultural production and therefore, for starting adequate processing capacities. The preparation and realization of concrete developmental goals adjusted to each area could provide their faster economic and social development. In limited possibilities for investments (insuf.cient in.ow of foreign investments, decreasing sources from privatization, low accumulative capability of home economy), it seems very rational that, in future years, direct signi.cantly bigger assets to development of agriculture and processing

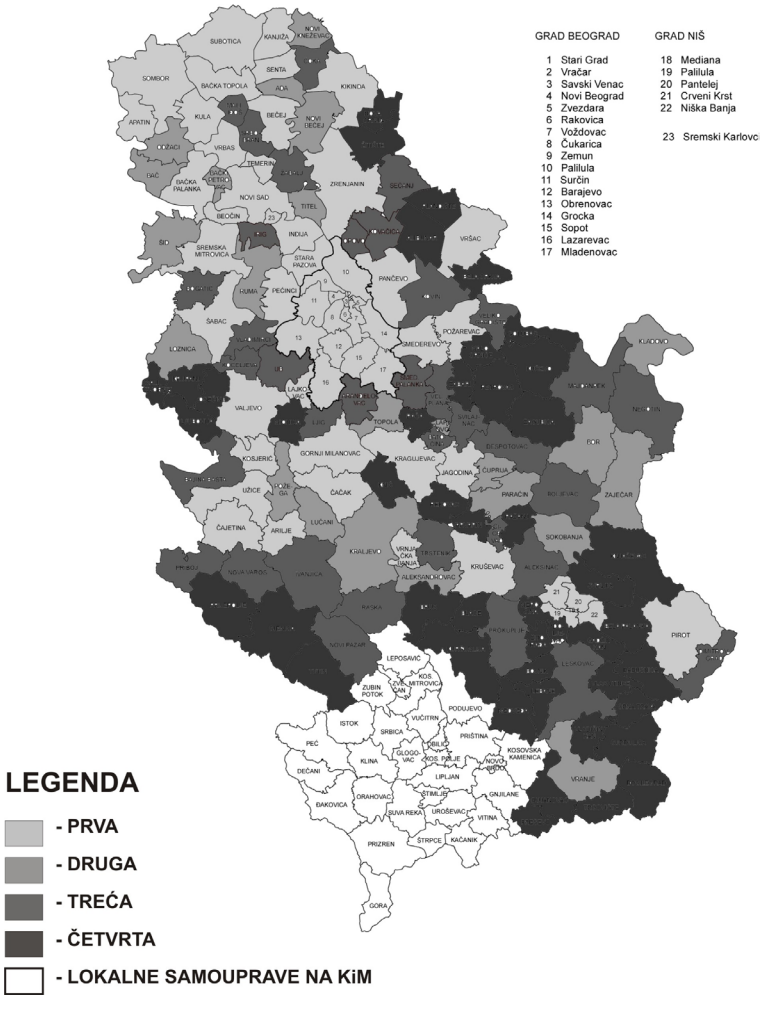
18 Serbia is in harmonization process of incentive scheme to agriculture and rural development with requirements of the EU and the WTO (decrease of payments according to production size, like premiums for milk, decrease of export subsidies), but also uses pre-accession period for keeping some measures, by which it directly influences on productivity growth and decrease of untilled land (e.g. regression of inputs).

19 For example, in 2010 was set aside for incentives 16.3 billion RSD (around 163 million EUR): within direct incentives do input regression in agricultural production (fertilizer, seed, fuel), provides support to genetic improvement in the field of livestock breeding, support to insurance in agriculture, support to milk producers by premiums pay off, support to bee keeping; within the market incentives – still gives support to exporters of agricultural-food products and support to storage of agricultural products in public warehouses; within structural incentive gives support to strengthening of competitiveness through investments in agriculture (production of milk, meat, fruit, vegetables, grains, industrial plants etc.), investments in processing capacities for processing milk and meat; than in support to organic production, preservation of genetic resources of domestic animals and support to investments for activities diversification at the village. Disposition of these assets was made by 28 decrees, brought in the first half of 2010. A part of budget assets direct to improvement of animal health, plant protection, forests improvement and improvement of water supply. Total assets for all mentioned purposes in 2010 are 230 million euros. It is about 0.75% of predicted GDP, or 3% of total budget expenses in 2010. These assets have decreasing tendency (in 2006 – 1.2% of GDP, or 4.70% of total budget expenses).

20 Arilje, Babušnica, Bajina Bašta, Bela Palanka, Beočin, Bosilegrad, Brus, Bujanovac, Čajetina, Crna Trava, Dimitrovgrad, Doljevac, Gadžin Han, Golubac, Irig, Ivanjica, Kladovo, Kosjerić, grad Kraljevo, Kuršumlija, Ljubovija, Majdanpek, Malo Crniće, Medveđa, Nova Varoš, grad Novi Pazar, Opovo, Pirot, Preševo, Priboj, Prijepolje, Raška, Ražanj, Sjenica, Sokobanja, Sremski Karlovci, Surdulica, Svrljig, Trgovište, Tutin, grad Užice, Vladičin Han, Vlasotince, grad Vranje, Žitarađa i Žabari.

industry based on primary agricultural production, in order to improve this area by making competitive production structure, which would directly and indirectly contribute to development of other activities in total development of the country.

It seems that this approach with limited resources, in current natural conditions and available human capital, could achieve the most favourable developmental results. At the same time, it would improve also more rural areas, and decrease their much expressed regional dissimilarities in development. There would be necessary to make closer connection and appropriate coordination level in conducting agrarian policy, the policy of rural and regional development. In that way would more rationally use possible incentives, and increase the effects. If Serbia become a candidate for membership in the EU, for these purposes it could count also on certain assets from the EU pre-access funds, as in existing (to 2013), as well as in future budget period.



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Governance of market in the case of local food systems as crucial dimension of the „rural web" – case study of an Austrian and a Hungarian National Park region

Abstract: *Rural development processes can be interpreted as the result of an increasingly complex interplay of different driving forces. The 'rural web' concept, developed recently as a theoretical framework, emerges as the intersection of six inter-related dimensions (endogenity, novelty production, governance of market, institutional arrangements, social capital, sustainability), each of which highlights particular features of rural development. Keeping in mind that these dimensions cannot be separated from each other, the paper examines the domain of governance of market in two National Parks, the Hortobágy National Park region in Hungary and the Hohe Tauern National Park region in Austria. In both cases the existence of a dynamic innovation approach is visible, which means that these large protected areas are referred to beyond their boundaries as tools of sustainable regional development. While the two regions are exemplary for different development paths (one characterizing more a case study of the "accumulation" group and the other one of the „depletion" group), the interrelations of actors turn out to be crucial for development activities. With regard to the specific situation of national parks the question arises, if producers of the two examined regions distinguish themselves from the conventional agri-food market through initiatives that aim to create alternative food networks. The hypothesis behind the work is that governance of market can be one of the reasons for the differences in development of the two regions. The paper compares the food networks in the two regions, and also examines the local contexts in which they take shape. Finally it tries to assess how the other sectors (especially tourism) are linked to agriculture, within the specific context of environmentally sensitive regions of National parks.*

Introduction

The work in the paper is part of an ongoing research in the territory of the first National Park of Hungary, where sustainability of the area is examined. This work is supported by the János Bolyai Research Fellowship of the Hungarian Academy of Sciences. Earlier study of the authors (Katona-Kovács – Dax, 2008) following the work of Copus et al (2007) indicated that the selected case study areas are examples of two different paths. The Hohe Tauern National Park region characterizing more a case study of an "accumulation" group while Hortobágy National Park region of a „depletion" group. Taking the rural web concept, the aim of this paper was to exam the similarities and differences of the two regions, special regard to the governance of market dimension. Machlis – Field (2000) underline "*if one wishes to stimulate local economy the place to begin with is the export sector ...* those *economic activities within the boundaries that bring in money"*. As the two examined regions are protected areas, there are barriers to economic activities, *"export sectors"*. On the other hand the work of Mose (2007a:xv) states, that there is a new understanding of protected areas and sharp contrast to traditional concepts, focusing mainly on the conservation, new approaches are aiming at a consistent integration of conservation and development functions making protected areas 'living landscapes'. The economic activities he lists are: "*Agriculture as well as forestry, handicrafts, tourism, or education…* these activities… *offer potential arenas to test which way and to what extent this process of integration could be developed in practice."* The paper tries to get an answer if there are differences in the governance of the market along these activities in the selected areas. The hypothesis behind the work is that this can be one of the reasons for the differences in development of the two regions. Ladegård and Romstad state that against supply side, demand side is a much neglected issue in rural development. Examination of market governance dimension of rural web could be an answer to this problem as well. The first part of the paper outline the concept of rural web, what gives a frame to the work. That is followed by the case studies of the two National Parks, comparing the food networks in the two regions, and also examining the local contexts in which they take shape. The final chapter gives the comparison of the case studies and the conclusions through the link to rural web.

The concept of "rural web"

With increasing global integration of our economies the discussion on innovation and regional growth has taken account of emerging aspects of interrelations. This perspective has turned out to be also relevant for rural development analysis. As a consequence, rural action was more and more seen as a wide scope of activities influenced by the inter-play of quite different drivers and policies. This wider theoretical framework has been brought together recently by the definition of the "rural web", a more or less coher-

ent and hybrid network based on the specificity of each region (Brunori et al. 2007). It draws particularly on the concepts of networks, coherence and territorial capital. The ETUDE project in which this concept was designed highlighted in a series of case studies and reports the particular relevance for rural regions.

In all its elements the local is confronted with the perception from and interrelation to the outside. The role of networks is unquestioned in recent studies on rural change. It is important to realize that they are not limited to internal strengthening of regional identity, but transgress borders and include a plurality of networks. This understanding of networks is summarized by Murdoch, "T*he network approach is useful because it allows us to link together the development issues that are internal to rural areas with problems and opportunities that are external. In this sense the term `network' allows us to hold `inside' and `outside' together within one frame of reference*" (Murdoch 2000, p.417).

The second aspect, the coherence of activities, is seen as the spatial expression of particular modes of regulation and strategies of social groups. According to different viewpoints there is different reflection on rural change by 'internal' and 'external' observers. This leads to quite different coherences and spatial processes might be perceived simultaneously, by one group as idyllic and by others as threatening outlook necessitating active intervention.

Territorial capital can be understood as embedded in the notions of 'space of places' and 'space of flows' (Castells 2010). The current tendency to give priority to the space of flows opens the territory increasingly to the influences of global change. As Castells argues this threatens our experiences in urban and rural societies. "*The dominant tendency is toward a horizon of networked, ahistorical space of flows, aiming at imposing its logic over scattered, segmented places, increasingly unrelated to each other, less and less able to share cultural codes*" (Castells 2010, p.459). This dimension of changes affects particularly rural regions.

These considerations are summarized in the view that nowadays regional rural societies and economies are driven by multilayered networks. This rural web is hence composed of a set of interrelations and interactions between actors, resources, activities, sectors and places that are specific to each of region observed (van der Ploeg et al. 2008). Moreover, we encounter webs of different density, more or less coherence and have to take account of the dynamic evolution of webs. Considerations on the theory of rural development and empirical studies led to the definition of six dimensions of the rural web (Figure 1). Though these dimensions might be readily distinguished from each other, they cannot be separated, as the web exerts its strengths simultaneously across all dimensions.

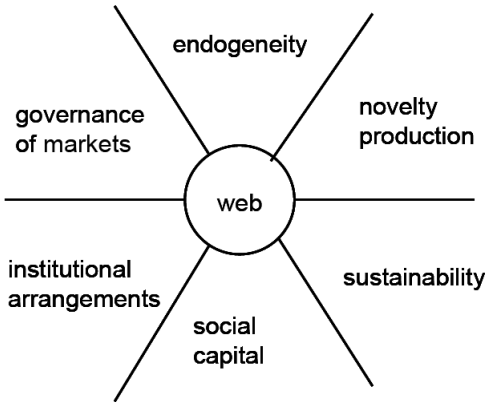

Figure 1. The theoretical dimensions of the web
Source: van der Ploeg et al. 2008, p.8

The following characterization of the dimensions intends to underscore the core relevance of the web for rural development processes:

- *Endogeneity* refers to the degree to which a regional economy is grounded on regionally available (and regionally controlled) resources.
- *Novelty production* is defined as the capacity to continuously improve processes of production, products, patterns of cooperation etc.
- *Sustainability* is defined in a variety of ways; a generally accepted notion is the existence of the social and ecological conditions necessary to support human life at a certain level of well being through future generations. Three dimensions (environmental, social and economical) of systems are emphasized.
- *Social capital* is embodied in the ability of individuals, groups, and institutions to engage in networks to cooperate and use social relations for a common purpose and benefit. Importance of trust, keeping norms and making partnership.
- *Institutional arrangements* are structures and mechanisms of social configuration and cooperation.
- *Market governance* refers to the institutional capacity to control and strengthen markets and to construct new ones (including the organization of supply chains).

The elements of the rural web are taken as a conceptual framework against which the specific organization of agricultural products in the two national park regions is analyzed.

Case study Hohe Tauern National Park region in Austria

Short description of the National Park Hohe Tauern

The National Park Hohe Tauern (Figure 2.) is the largest National Park in Austria and of the whole alpine region. It is located in the Central Alps (with altitudes between 1000m and 3798m) with an extension of more than 1,800 km2.

Its establishment looks back at a long history of protection with an agreement being signed by the three governors of the concerned provinces Salzburg, Carinthia and Tyrol to develop a common protection area already in the 1970s. Though these three provinces have some share in the National Park, the province of Salzburg has by far the largest share and will be the focus of analysis in this paper. In 1981 Carinthia declared their part as National Park, Salzburg followed in 1984 and finally Tyrol completed the protected area in 1991. In 2006 the National Park Hohe Tauern was acknowledged by the International Union for Conservation of Nature (IUCN) as protection area of the category II (National Park).

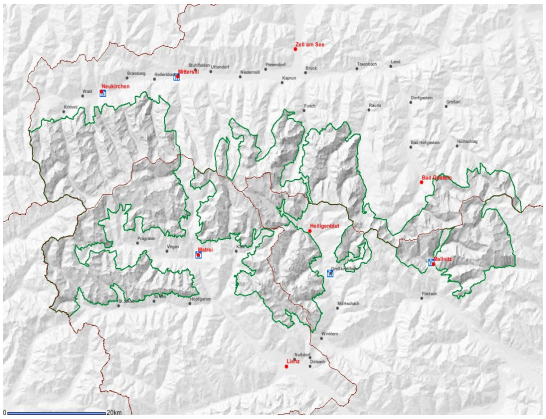

Figure 2. Hohe Tauern National Park region

This conservation area has been selected as case study because there is a long tradition of alpine farming despite the high share of wilderness areas. In the public perception this led to the shaping of the specific cultural landscape which is of outstanding ecological as well as social and economic relevance. While at the outset of the creation of the national park the conservation task was the main policy priority, meanwhile a shift in the perspective have led to a stronger valuation of the asset base in the region (Mose, 2007b). This contributed to a vision of raising the regional identity through the specific cultural heritage (Ploner, 2006). While in the core zone (65% of the area) the protection of the nature in its originality is of major importance (Huttegger 2005), in the external zone a specific cultural landscape developed which is particularly rich in species with traditional construction types and breeds of domestic animals adapted to the region. As a result an exceptional biodiversity of fauna and flora emerged overall in this area.

Population and economic activities

Table 1. shows the change of population between 2002 and 2009. The total number of inhabitants in the region decreased but not in each settlements. The average number of economic activities related to the inhabitants of the region is 0.4.

Table 1. Population and economic activities in the examined settlements

Examined settlements/ LAU2s	Population	Population	Change of the population	Economic activities
	2002	2009	2009/2002	2010
Badgastein	5 351	4 499	84.1 %	2 145
Bramberg	3 880	3 935	101.4 %	868
Fusch	758	691	91.2 %	160
Hollersbach	1 167	1 124	96.3 %	423
Hüttschlag	972	916	94.2 %	95
Kaprun	2 916	2 966	101.7 %	2 180
Krimml	878	850	96.8 %	373
Mittersill	5 567	5 417	97.3 %	2 586
Muhr	627	659	105.1 %	29
Neukirchen	2 614	2 603	99.6 %	845
Rauris	3 109	3 040	97.8 %	676
Uttendorf	2 820	2 823	100.1 %	733
Wald	1 169	1 167	99.8 %	376
TOTAL	**31 828**	**30 690**	**96.4 %**	**11 489**

In Table 2. following the Statistical Classification of Economic Activities the respective figures for the municipalities of the National Park area are calculated (only the most relevant activities are included). A higher share can be seen for the sector of accommodation, which underlines the character of the tourist region, and also the effect of the National Park on the economic structure in the area.

Table 2. Share of economic activities linked to NACE classification in the examined National Park settlements, 2008

NACECODES	NP settlements
A.. - Agriculture, forestry and fishing	0.82
B.. - Mining and quarrying	3.85
C.. - Manufacturing	11.52
F.. - Construction	12.37
G.. - Wholesale and retail trade; repair of motor vehicles and motorcycles	10.54
H.. - Transporting and storage	7.29
I.. - Accommodation and food service activities	25.29
.. Enterprise support service	5.94
.. Public services etc.	18.76

Following the concept of the National Park both the maintenance of the natural area and the protection of the cultural landscape close to a natural state are the core aims (Nationalpark Hohe Tauern 1995). While in the core zone the protection of the nature presides over all other aspects, in the external zone also the interests of mountain farmers, the regional economy, tourism, local population and science are to be considered. The combination of both aspects, an integration of protection and utilization activities leads to the favourable situation that the National Park region is able to make a considerable contribution to the regional value added and act as incentive for new ideas for a sustainable regional development (Mose 2007b).

The council of the National Park as the highest decision making body ensures cooperation between the three provinces and coordination of relevant measures and projects. As the administration of the National Park is carried out in the three National Park administrations of Carinthia, the Tyrol and Salzburg, these activities also provide a wide range of tourism offers, like guided tours, special excursions, trekking tours, presentations, visitor centres and exhibitions and link to further use of the particular assets.

In addition to that initial focus the foundation of the network of farmers, marketing initiatives, processing sector, tourism actors and handicraft enterprises („Arbeitsgemeinschaft - ARGE Nationalparkregion Hohe Tauern“) and regional key actors, like local section of the Agricultural Chamber, and land owners in the national park in 1994 contributed to develop a sensitive and sustainable way for improving economic activities and quality of life in the area. The working group set up participated in EU programmes like Leader II and Leader+ and supported regional projects. It facilitated sponsors and partners, initiated new networks, engaged in public relations and product marketing activities intensifying the interconnections between agriculture and regional tourism. In relation to the rural web it is important that further networks were built, like a network of restaurants and another one clustering guest houses for young people in the area as well as a network of women who promote traditional handicraft (Tauernblicke 2004). Recently (in 2006) the ergion wide “umbrella” network (ARGE Nationalparkregion Hohe Tauern) was modified into an association of the Local Action Group of the Leader progamme. This new institutional base retained the previous aims linked to the national park and went on with the promotion of linkages in regional development. As the association is now directly responsible for the Leader 2007-2013 programme this new organizational position allows to even further stress the use of local assets and increase reference to the national park in programme activities.

Food chain network example: organic milk of the „Ja!Natürlich“ product line

One of the most explicit examples of addressing the symbolic character and image of the region for economic purposes is the evolvement of organic farming in the region. In 1994 a close cooperation between the Nationalpark Hohe Tauern and the organic product line Ja!Natürlich of the international concern

REWE started. It had and still has the aim to provide new and stable market opportunities for the main regional products milk, beef and tourist facilities of mountain farmers. Today every second farmer in the region manages the farm according to the conditions of organic farming, and the regional dairy „Pinzgau Milch" has become the largest processor of organic milk in Austria. Organic farmers have long-term contracts with the dairy and can rely on a guaranteed takeover of their milk production, as well as considerable surcharges for organic milk. Because of the fruitful cooperation between the national park and the brand ja!Natürlich the region gained the label of an European „organic model region".

Besides the processing and marketing of organic milk, which has the longest history of cooperation between the National Park region and ja!Natürlich, the production and marketing of organic beef by the same brand as well as the tourism project of holidays on a Ja!Natürlich farm have been accomplished. Participants from both sides realize considerable advantages such as income increases/maintenance for farmers and processors, valorisation of the regional resources, continuos public relations for the national park on every package of milk, a strong customer loyality through high quality products with a distinct indication of source and high acceptance of the national park by the local population (Loferer 2006).

As presented in Table 3. about 520 organic farmers deliver 33 Mio kg milk per year to the regional dairy „Pinzgau Milch" in Maishofen, Salzburg located within the National Park region. The organic milk is collected in separated tanks with subsequent separated processing. Organic milk has meanwhile achieved the majority of the processing quantitiy of the dairy (33 Mio out of 55 Mio kg total milk processing). It is important that the organic milk is delivered to Ja!Natürlich and subsequently merchandised by REWE within the Ja!Natürlich product line. 45% of the raw milk is processed to so called „white milk products", including drinking milk, butter, joghurt, etc., another 45% to mixed milk drinks and about 10% to „yellow milk products" (cheese) (Wilhelm 2007). The products of Ja!Natürlich are placed on the market under the commission of the supermarket chains of the REWE concern Merkur, Billa, Adeg throughout Austria. About 10% of the sold milk products remain in the province of Salzburg, about 65% in Austria (without Salzburg) and about 25% are exported abroad.

Table 3. Supply Chain of organic milk in the National Park Hoher Tauern

Production	*Processing*	*Marketing*	*Sale/Consumers*
Organic milk production: about 520[1] out of 1000[2] farmers	Dairy „Pinzgau Milch" 33 mio kg organic milk (60%) (out of 55 mio kg [3])	Organic product line "Ja Natürlich" of REWE	In the supermarket chains of the REWE concern: Billa, Merkur, Adeg in Austria Consumers[2]: ca. 10% Salzburg ca. 65% Austria ca. 25% abroad

1 Ja!Natürlich (o.J.)
2 Tremesberger 2010
3 Loferer 2006

As already mentioned the cooperation between the National Park Hohe Tauern and Ja!Natürlich comprise also the production and marketing of organic beef of high quality and as third pillar Ja!Natürlich-holidays. Since 2001 there is a broad cooperation of the agency for the "holiday-region" of the national park which coordinates the whole tourism marketing activities of the region with the Ja!Natürlich farmers, showing considerable success (3.000 overnight stays per season in 2009). Tourists are able to retrace the organic products to their origins, produce themselves local products and stay in organic farms or National Park inns (REWE 2009).

Besides these activities some other local food systems developed within the region or are in the process of development. One of the more advanced projects is the „Bramberger fruit juice", which is already a product of the Austrian label „Genussregion" of the Ministry of Agriculture, Forestry, Environemnt and Water Resources since 2007. Within the Leader+ programme a consortium of national park actors, the orchard and horticulture association and some municipalities purchased a flexible modern apple press that would allow all partners to be used and could also handle smaller quantities of fruits (which is particularly important for small-structured farmers in the area). Since then the private cultivation and maintenance of the traditional regional apple and pear trees within meadow orchards could experience a certain revival. The orchard and horticulture association as the operator of the fruit press, thus could enhance use of traditional meadows with scattered fruit trees. It also provided a „Pomarium", which is an educative orchard to teach people about growing and cultivation of fruit trees in the former typical cultivated landscape.

Another project of the Leader+ programme is the „Pinzgauer Wollstadel". There women of the region manufacture and work with the wool of sheep in a traditional way and provide an illustrative example of diversification use. The produced garments (like traditional jackets, clothes, caps, gloves, etc.) are sold in the „Wollstadel", a traditional building highlighting local culture and contributing to building a symbolic value from the production. Training courses on the traditional ways of wool processing (like spinning, frisking or knitting) add to the respective activities.

The production and marketing of venison is an example of a recent activity of the current Leader programme, indicating the extension to further activities and realizing a comprehensive perception of the rural assets. This includes also food health aspects as the marketing campaign stresses the image of venison as healthy food (poor of fat, cholesterine and calories).

The list of relevant activities reveals the linkage of processing invention in the national park image and builds on the specific regional identity. Much of this development could only be achieved by the continuous involvement

of large group of networks that enhances innovatory approaches which are based on the local resources. The activities hence address a great deal of the rural web dimensions and illustrate the relevance of the concept.

Case study Hortobágy National Park in Hungary

Short description of the Hortobágy National Park

The Hortobágy National Park was established originally on 520 km^2 in 1973. The rating system for protected areas of International Union for Conservation of Nature classified it to the II. Category.

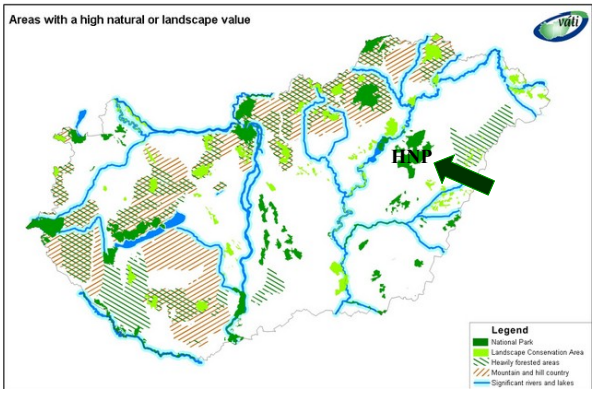

Figure 3. Areas with a high natural or landscape value in Hungary, including the HNP
Source: National Office for Regional Development (2005:20)

The area of the National Park has grown since its foundation due to the gradual preservations and taking under conservation. Its basic area is over 800 km^2 in 2010. Most part of the environmental protected area is state owned. Two NUTS2 regions, four NUTS3 regions (borders of these counties with red line in Figure 4.), 10 LAU1 regions and 22 LAU2s share area with the HNP.

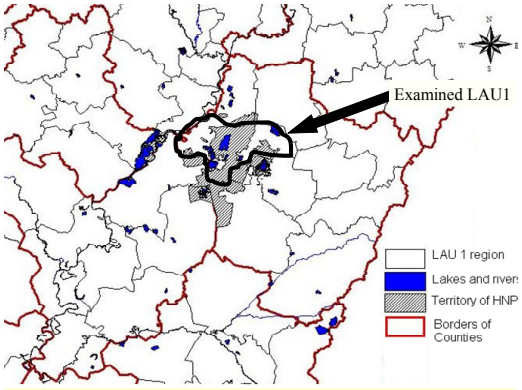

Figure 4. LAU1 regions with share in the HNP area
Source: Katona-Kovács et al. 2009

The reason for the selection this area as case study is, that HNP is the first and so far the largest national park in Hungary. The UNESCO World Heritage Commission entered the area of HNP on the list of World Heritage on 1st of December 1999. Justification for inscription were: Criterion (iv): The Hungarian Puszta is an outstanding example of cultural landscape shaped by a pastoral human society. (Nearly 60% of the area is grassland) Criterion (v): The landscape of Hortobágy National Park preserves intact and visible the evidence its traditional use over more than two millennia and represents the harmonious interaction between human beings and nature. (UNESCO, 2009) The examined LAU1 region (Balmazújvárosi, Figure 4) is the only, where all LAU2s share territory with the National Park area, so this LAU1 from the ten sharing area with the national Park has the largest share.

Population and economic activities in the examined LAU1

Table 4. shows that in twenty years the number of inhabitants decreased in each settlement[1]. The only LAU2 where this decrease was less than 2% is the centre city of the examined LAU1, which is the biggest in the examined small region, giving 57% of the total population of the LAU1 region in 1988 and 60% in 2008.

According to the database of the Central Statistical Office (HCSO), 4558 economic activities are registered in the LAU1, from which 2961 actors have only tax reference number. In the case of the other 1597 we can find different forms of economic activities (e.g. limited companies, cooperatives, associations). The average number of economic activities related to the inhabitants of the region is 0.15.

Table 4. Population and economic activities in the examined settlements

Examined settlements/ LAU2s	Population	Population	Population	Change of the population	Economic activities	Actors only with tax reference number
	1988	2002	2008	2008/1988	2010	2010
Balmazújváros/S1	18 503	18668	18 269	98.7 %	**1083**	**1934**
Egyek / S2	6 638	5919	5619	84.6 %	**206**	**497**
Tiszacsege / S3	5 624	5169	5013	89.1 %	**193**	**366**
Hortobágy / S4	1 717	1708	1601	93.2 %	**115**	**164**
TOTAL	**32 482**	**31 464**	**30 502**	**93.9 %**	**1597**	**2961**

Source: HCSO

1 In the paper the examined LAU1 is the Balmazújvárosi, which is also mentioned as small region in the text. The four LAU2s consisting the examined LAU1 are called as settlements, abbreviations refer to these LAU2s S1, S2, S3 and S4, the higher the number the smaller the settlement examined (see Table 4)

Examining those economic activities with only tax reference number the results show (Table 5.), that they are mainly activities from agriculture. Most of them are small farmers, with own land. In this category accommodation and food services activities give the highest share in Hortobágy, which is the smallest settlement of the region, but the most visited place by tourist with the concentration of tourists' attractions.

Table 5. Share of economic activities linked to NACE classification only with tax reference number in the examined settlements, 2010

NACECODES	S1 (%)	S2 (%)	S3 (%)	S4 (%)
A.. - Agriculture, forestry and fishing	**87.1**	**96.0**	**85.8**	**64.0**
I.. - Accommodation and food service activities	0	0.4	2.7	**19.5**
L.. - Real estate activities	9.1	2.0	8.2	7.9
Other activities	3.8	1.6	3.3	8.6

Source: own calculation based on the database of HCSO

Table 6.shows that even in the case of determinate economic activities primary sector also has high share, especially in smaller LAU2s (S2, S3, S4). Wholesale and retail trade gives the highest share. Results along activities are in line with other studies, which stated that there are no significant industrial establishments in the region. (Süli-Zakar, 2009) Baranyi (2008) also underlined that the region forms the periphery of the NUTS3 regions it covers.

Table 6. Share of economic activities linked to NACE classification in the examined settlements, 2010

NACECODES	S1 (%)	S2 (%)	S3 (%)	S4 (%)
A.. - Agriculture, forestry and fishing	7.2	**19.4**	**17.1**	**17.4**
B.. - Mining and quarrying	0	0.5	0	0
C.. - Manufacturing	7.9	4.4	4.7	5.2
D.. - Electricity, gas, steam and air conditioning supply	0.2	0.5	0	0
F.. - Construction	17.0	10.2	8.8	3.5
G.. - Wholesale and retail trade; repair of motor vehicles and motorcycles	**18.0**	**25.7**	**23.3**	**22.6**
H.. - Transporting and storage	5.7	1.5	8.8	3.5
I.. - Accommodation and food service activities	5.2	5.3	**9.3**	7.8
J.. - Information and communication	0.7	2.9	0	0
K.. - Financial and insurance activities	2.4	3.9	2.6	3.5
L.. - Real estate activities	4.2	1.0	0	1.7
M.. - Professional, scientific and technical activities	7.1	3.9	2.1	11.3
N.. - Administrative and support service activities	5.4	4.4	3.1	1.7
O.. - Public administration and defence; compulsatory social security	0.3	0.5	0.5	1.7
P.. - Education	2.6	1.5	2.1	0.0
Q.. - Human health and social work activities	1.8	1.5	1.6	2.6
R.. - Arts, entertainment and recreation	3.0	2.9	3.1	3.5
S.. - Other services activities	11.4	10.2	13.0	13.9
T.. - Activities of house holds as employers	0	0	0	0
U.. - Activities of extraterritorial organisations and bodies	0	0	0	0

Source: own calculation based on the database of HCSO

Here (Table 6.) accommodation and food service activities have the highest share in Tiszacsege, which LAU2 is situated next to the river Tisza, but even in this case 50% of these economic activities are low quality beverage serving activities for local inhabitants.

Aims, initiatives and networks

As in the case of Hohe Tauern NP in the core zone the protection of the nature presides over all other aspects, while in the external zone farmers, tourism, handicraft, science, the regional economy and local population are to be considered.

The three key organisations of the HNP are state owned. The HNP Directorate (Internet 1.) located in Debrecen LAU2, the Hortobágy Non-profit Limited Company for Nature Conservation and Gene Preservation (Internet 2.) and the Fish-farm of Hortobágy are located in Hortobágy LAU2 but different places. In the future there is an aim to place the three main and state owned organisations in the same building in Hortobágy and increase the cooperation between them.

The role of the HNP Directorate changed, as earlier they had environment management and authority tasks and later the authority tasks was given to the Lower-Tisza Inspectorate for Environment, Nature and Water. A lot of good initiatives of the Directorate has been started (railway on the fishpond for bird watching as well, Safari in HNP, Bicycle rout, "Csárda" rout), some of them are already achieved (e.g. visitor centre in Hortobágy LAU2, Internet 1). The organisations are also applying for different EU funded sources (e.g. along LIFE program, AEMs, regional and rural development). The problem is the lack of collaboration, communication, distribution of these funds between actors. For example the above mentioned initiatives were presented to the inhabitants on an organised Forum as the Directorate's future steps/or ongoing projects. Because the high cost of these projects the constructors of these tasks come from outside of the region. Also along an interview in the Directorate, the interviewee to the question, do you employ local actors to the environment management task, gave the answer that the reason why not is, that they are not enough qualified for the job.

Main functions of the Hortobágy Non-profit Limited Company for Nature Conservation and Gene Preservation (Ltd) are breeding animals from gene bank stocks, grassland management with the aim of animal care, ecological farming on arable land and tourism. The rate of ecological farming has been increasing since the establishment of the Ltd.. About 2,300 hectares of arable and 22,000 hectares grassland are managed by the HNP directorate, but utilised by the Ltd within the scope of an agreement on nature-protective maintenance. The Ltd became the greatest organic-primary food producer in Hungary. In 1999 Ltd was registered as integrator of organic production on 20 neighbouring farms. Regarding the webpage of the Ltd. they integrate about 26 farmers. It has to be added, as a result of the elections in 2010, the government selected new leaders for the three main organisations of the HNP. A

problem along the change is that in these cases the knowledge of the earlier actors they gained along their work is never needed. Even a farmer who was integrated through the Ltd said, that he does not know the future of their link with the integrator.

Hortobágy Local Action Group is becoming also an important actor since 2007, they have their office in the main building of the Non-profit Company. Related to the Austrian LAG this is a much younger organisation as the region has not gained funds from LEADER+, although they applied for it. Burocracy around funding and the operation of the organisation does not allow the LAG to fulfil its task along the LEADER principles and instead of putting energy to develop the region and communicate with inhabitants active members of the LAG spend their time mainly with administration. This is also underlined by the fact, that the social debate on the future of the programme, was mainly linked to administration and burocracy questions. An other problem is that the LAG is loosing the trust of the local actors, as payments are very slow, why on the other hand the deadline of applications are very strict. Even the budget of the LAG is changed as a result of the 2010 elections.

Food chain network

One of the main organic products of the region is grain (wheat, sunflower). From over the 400 organic producers in the region one third share area with the National Park. They sale their products through the coordination and integration of the Hortobágy Non-profit Limited Company for Nature Conservation and Gene Preservation and the association of organic producer in the region (East Hungarian Organic Producers Association). The grain is exported (to Germany, Switzerland, Italy) to foreign mills and processors, so the added value is not the profit of the region. There are two smaller oil processors in Karcag and Hajdúszoboszló.

An other important organic product of the region is the Hungarian Grey Cattle. This product gives the most important income of the Ltd. The Ltd. found a niche market for the meat of the Cattle. Their main buyer is the HIPP Ltd., but the Ltd. also have an own shop in Hortobágy, where the fresh meat, sausages and other processed products are soled directly to the consumers, including tourist.

Table 7. Supply Chain of the organic meat of the Hungarian Grey Cattle

Production	*Processing*	*Marketing*	*Sale/Consumers*
Organic meat production by the Non-profit Ltd and about 20 integrated farmers	Mainly by HIPP, but the Non-profit Ltd also has contract with two Hungarian processors	Through HIPP and the Non-profit Ltd.	Most of the product is sold abroad through the HIPP, but the own shop of the Non-profit Ltd. and restaurants also create link to consumers

Source: based on the interview carried out at the Ltd.

Also important organic product of the region is fish. The Fish-farm of Hortobágy has about 60 km^2 fish pound and employ about 165 people. The Fish-farm (working in the form of a join-stock company) is one of the biggest employer of the region. The whole supply chain of the fish (Table 8), is in the hand of the Fish-farm.

Table 8. Supply Chain of the organic fish

Production	*Processing*	*Marketing*	*Sale/Consumers*
Fish-farm of Hortobágy organic production on the whole area from 2004	Fish-farm of Hortobágy has an own processing factory	Fish-farm of Hortobágy	Own shop in Debrecen (NUTS2 regional centre) Cora Budapest bio market

Source: Home page of the farm http://www.hhgrt.hu/kereskedelem/elohutott.html

Beside the state owned organisations, there is a bigger private farm, called Virágoskút (http://www.viragoskut.hu/). This farm with its organic products (vegetables, tinned food, meat, milk) is well known in the region. Its activity covers the whole supply chain, from production to marketing and also selling. The family running the farm, sell their products directly to consumers on bio-markets, but also through retailers. 25 families from the region work on this farm. The label of their products has the information, that it is bio, but they do not advertise the region, there are no signs that the product was produced in the HNP region.

Additional regional products

Tourism as an additional product is presented through the work of Bodnár (2004). She states, that the World Heritage status has not resulted in making the HNP more popular among either the national or the foreign tourist. The national park region can be characterized by a transit tourist traffic at present, again loosing added value. The results of her questionnaire survey demonstrate well that the affected settlements which can take part in receiving tourists towards– except for Hortobágy village – have not prepared for this task yet. Not only the development stage of the basic infrastructure and the number of the programme offers, and its quality are uneven but in many cases the lack of the presence and cooperation of the human resources with environmental consciousness. Cooperation is insufficient at present between the HNP's organisation and the surrounding settlements and between the settlements. The HNP's organisations should undertake the initiative role in making contacts with the settlement. It should inform the local councils of its development ideas and the possibilities in them, i.e. they should implement tourist attraction together in the Zone D of the HNP.

Comparison of the case studies and conclusions through the link to rural web

Pekka et al. (2010) call attention that *current rural development has encouraged local stakeholders to look for new alternatives of rural production and local livelihood. In a way, rural communities are at present subjected to a resilience test where both the individual performance and the community support to novel entrepreneurship do matter.*" Their results show, that "*the farmers' networks are driven more by survival strategies focusing on production methods and less by competitive strategies focusing on markets.*" The market governance domain of the rural web has high importance in national park regions, because the economic structure of the regions and as a result "export sectors" has limitations coming from environmental protection. In the examined two regions farmers of the Hungarian case study are more focusing on production methods, while strategies focusing on markets are more present in the Austrian region. In HNP region farmers fight for survival, while in Hohe Tauern they attempt to distance themselves from conventional agri-food market.

We found depopulation in both regions, but the negative trend is more visible in the Hungarian case. The two examined region has around the same number of population but the number of economic activities per inhabitant is two and a half time higher in Hohe Tauern.

Endogeneity is an extremely relevant dimension within the rural web of the National Park Hohe Tauern. There is a strong awareness within local actors concerning the embeddedness of the regional food production in the regional economy. The example of organic milk shows that particularly the production is grounded in regional resources, knowledge and traditions (small scale farming), local identity and sense of place. The examples of various other networks and projects based on regional resources like the Bramberger fruit juice, the production and marketing of venison, underpin the relevance of the "local" in the production design. One conclusion might be that food production and marketing here embodies the distinctive landscape and culture into the product (milk, beef) and turns it into a sensible market value (Brunori et al. 2007, S. 13). Endogeneity domain need further improvement in the case of the HNP. Value chains in the HNP although based on regional resources are involving less actors from the region and partnerships along the chains are weaker. Although the region is part of the World Heritage actors of the HNP in the shadow of their problems do not see the possibilities linked to this resource. As endogeneity has a strong and two way interactions with novelty, endogeneity and regional identity has to be improved in the HNP. Interaction between novelty and governance over the markets has positive impact in terms of endogenous development, which is visible in the Austrian case.

The aspect of *sustainability* is even more of significant importance according to the aims of the national park (maintenance of the natural area, protection of the cultural landscape), the strong strategic orientation towards organic

production, especially of milk and beef production, and the relationship built between a small-scale tourism sector and goals of sustainability for use of the national park. Ecological sustainability is visible in the Hungarian case but sustainability linked to the other two dimensions (social and economical) is questioned.

Strong territorial identity as largest National Park in Austria and as a region with a specific cultural heritage adds to *the social capital* development in the region. This reflects the already long and still ongoing cooperation between different stakeholders within the ARGE National Park and now the LAG National Park Hohe Tauern and the National Park Verwaltung, though there could be a better on-going cooperation between the municipalities and national park council (Ploner 2006). Already in 1994 the regional institutional association (ARGE Nationalpark Hohe Tauern) engaged in organizing the local actors and aimed at enabling and improving economic activities and quality of life. More recently the ARGE turned out to become very important in backing up the Leader process and initiating a host of regional projects linked to the national park. Through the transformation of the ARGE into an association of the Local Action Group of the Leader programme the link of the Leader network to the aims and projects of the National Park even was enhanced. Particularly the intensified cooperation between "ja!Natürlich" and the national park administration and the LAG reveal the support for social capital development.

These activities led to new networks (network of women promoting traditional handicraft, network of restaurants and network of guest houses for young people) that underline the relevance of *institutional arrangements*.

REWE, the market organization involved in making use of organic products places the region National Park Hohe Tauern on the market via their organic product line "ja!Natürlich". Particularly through the extension of the organic milk supply chain and its extension to other products, like organic beef, farm holidays organic farms, the market value for the involved farmers could be sustained and increased substantially. In consequence this summed up to the label of an "organic model region" that is leading in the market in Austria and a widely recognized best-practice example. To a high degree the economic process is linked to the distinctiveness of the national park area and its products. This is a quite clear example of constructing and developing a new and powerful market with influence far beyond the regional boundaries. In the case of the Hortobágy National Park supply chains and market governance of local products are much more separated. Possibility to be another "organic model region" is there but it needs more and better links, cooperation between actors and products.

In both case study regions the institutional situation and linkages of activities is of core relevance for the effectiveness of rural development action. Particularly in the national park region Hohe Tauern a long-term commitment and dense structure of actors have contributed to strengthen this "rural web" which

can be revealed through highlighting some of the major components in its regional appearance. Our study underlined that the denser the web of domain interrelations, the greater the sustainable outcome.

Kanemasu et al. (2008:181) in their work along testing the web in one case study call for attention, „*that although the traditional process utilised ensures benefits in terms of local resource management, however, the fact that 80% of the market of that given product is controlled by an individual actor raises questions about the extent to which this rural development initiative is delivering benefits in terms of local economic development and social justice*".

In the case studies examined by Kanemasu et al. (2008), where governance of market was the most important domain, they had the result that the creation of new institutional frameworks is the weakest and less interactive domain. The results of the examined case studies in this paper find stronger relations (role of REWE, the HNP organisations and LAGs), so the aspect of a New Institutional Framework is added to the interrelations of the dimension of rural web around market governance (Figure 5). A well operating, new institutional framework can have a positive, while a weak one would imply negative effects on market governance and vice versa.

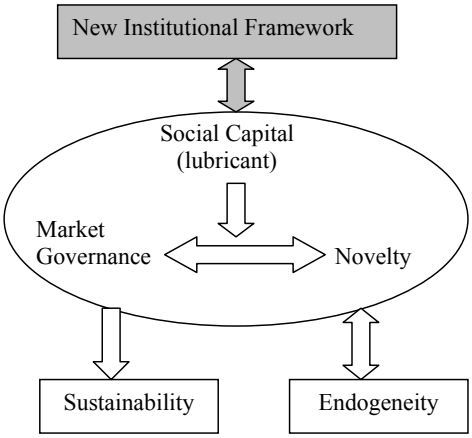

Figure 5. A pathway of rural development: domain interrelations unfolding around market governance. Source: Kanemasu et al. (p181) and addition of aspect of New Institutional Framework

Our results underlined the importance of all domains in successful rural development even in the case when governance of market was the most important domain. Stronger domains result a more sustainable region. As it was mentioned in the introduction Hohe Tauern National Park region characterizing more a case study of an "accumulation" group while HNP region of a „depletion" group, which above the differences in resources (especially financial, human and social capital) also comes from the variance in the rural web domains in the two regions.

Our work also resulted new questions, which could be examined in the future, such as: Further actor oriented analysis could be carried out (SWOT) linked to the structure of the examined food supply chains, how the different level actors think about the sustainability of the system they are involved in. Does the number of food supply chains matter? Is it important if it is a bottom-up or top-down developed chain? The share of different type of food chains in NP areas from the total output could be examined as well. Is the share of value chains in NP areas' economy the same as the share of chains in conventional areas' economy? Finally it could be examined what type of food value chain insure the resilience of the region better.

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Assessment of regional development in light of rural and agricultural indicators within the Královéhradecký region (NUTS4, the Czech Republic)

Abstract: *Regions in the Czech Republic, the same as in most European countries, show in their rural areas a considerable difference rate from points of view demographic, social and economic as well as from point of view of infrastructure. The paper deals with an assessment of NUTS 4 in Královéhradecký region in light of rural development and agriculture indicators. The methodological approach is based on multivariate statistical analysis using composite indicators. Identification and a subsequent analysis of these differences and a determination of a certain sequence of regions and their categorization can be beneficial for definition of trouble shooting regions and better support aiming. In the paper is also evaluated current regional policy applied in observed NUTS 4 in relation with disparity analysis results and categorization.*

Keywords: *Composite indicator, rural region, disparity, ranking, categorization*

Introduction

Disparities among regions are a very frequent term in the Czech Republic in last 20 years. Major and still deepening disparities among rural areas started to appear at the beginning of 90´s in connection with an economic reform. Kahoun (2007) presents that this economic transformation led in past to increase of economic differences among of individuals and also among particular areas. The same as market economy leads to a concentration of wealth in more successful society groups. It also leads to concentration of economic activity and wealth in advanced regions where presumptions for more successful economic development are created. Economy restructuring, including agrarian sector, led generally to a decrease in development of agriculture as an employer for rural population, however im-

pacts of this change were not same in all regions. This logically implied a rise of disparities among a town and the country and rural municipalities mutually. Currently, regions fight with various problems in their rural areas. There is observed a decrease and aging of the population, a lowers growth of incomes and jobs and decrease in bio-diversity and abandonment the land.

These problems have to be solved. A balanced development of rural areas is an aim of both the cohesion policy as well as the rural development policy which presently represents the II pillar of the Common Agricultural Policy.

As it was mentioned above, the countryside is not homogeneous. The evaluation of these disparities should be than as background for an application of policies which aim to development of rural areas. Here, an importance of the methodical scheme construction, enabling a comparison of regions and possibly a determination of sequence of these regions, grows. Composite indicators are valued for their ability to integrate large amounts of input indicators into easily understood formats for a general audience and therefore are used for benchmarking the mutual and relative progress of countries or regions. Munda, G. and Nardo, M. (2005) mentioned the options of usage:
"Composite indicators are very common in fields such as economic and business statistics and are used in a variety of policy domains such as, sustainable development, quality of life assessment, industrial competitiveness, globalization, innovation or academic performance."

Typology of composite indicators, methods of construction, requirements for input data and other issues are reviewed by Manly (2005), Saisana and Tarantola (2002), Mundo and Nardo (2005) and OECD (2008). OECD very often uses the composite indicators for the benchmarking or the monitoring performance of countries. As it was remarked above, composite indicators are used for comparison of regions from a view-point of the situation in rural areas and agriculture in this paper. The definition of input indicators has cardinal importance. Bryden, J. (2002) features some key rural development indicators; OECD (1996) provides set of basic indicators relevant to rural areas as well. These indicators with respect to Czech conditions could be used for the purpose of this analysis.

Aims and methodology

The valuation with the help of particular instruments of descriptive statistics is the starting point, but it is not fully sufficient. One-dimensional methods which expertise every single indicator separately provide information about the state and the development of every single indicator separately. That is very valuable information in terms of the development of regions, but fractional and not sufficient.

It is important to use such indicators for the regional development. It would be possible to accomplish complex characteristics. Composite indicators provide that. These indicators are able to describe complex conceptions such as prosperity, efficiency and sustainability. They can be easier interpreted than the whole com-

plex of fragmentary indicators and enables the fast comparison of regions from given point of view. Their construction is more complicated and that is why it is very important to pay attention to following analysis to prevent wrong interpretation.

The main aim of this article is to assess rural development in selected regions in light of rural and agriculture indicators. Assessment is based on composite indicator analysis which enable the comparison of the level of the development of regions and on its basis the categorization of regions. For its achievement there has been set a few partial aims:
A) The selection of suitable method of construction of composite indicator, these requirements are thought by author:
- the method of calculation is easy and understandable even for non-statistician,
- the value of composite indicator is easy to interpret,
- the composite indicator shows largely the regional differences,
- Composite indicator is applicable to all thematic topics (to be able to create one complex summary indicator for all topics together).

B) The valuation of region's position for the year 2008 and for the change in the years 2004 – 2008 with the regard for results of composite indicator of chosen method. The work is focused on the modeling of multidimensional statistic methods whose analytical apparatus enables complex analyses mutual incidence relevant indicators. The example is illustrated on selected indicators on the level of the districts (five NUTS 4 regions in frame of region Královéhradecký kraj (NUTS 3) of the Czech Republic).

Data entering the analysis were obtained from regional year-books of the Czech Statistic Office in 2004 – 2008, Ministry of Agriculture and Land Parcel Identification System. The choice of input data was realized on base of literature (see Bryden J. 2002, OECD 1996) and foregoing researches as well as with respect to accessibility of data.

Table 1: Table of input indicators

Demographic indicators	**Social situation indicators**
Average age of inhabitants Age index Share of people with university degree Natural growth Migration balance Average age of employees in agriculture Growth by immigration Population density	Rate of reg. unemployment Average monthly wage Average registered number of employees Share of employment in agriculture, forestry and fishery Average monthly wage in agriculture Number of applicants for 1 job Share of employment in industry and building industries
Economic-production indicators	**Infrastructural indicators**
Share of agr. land in region acreage AWU/ha Share of farms in size category 100 ha and more in total number of businesses Ratio of arable land Intensity of farm animal breeding Average size of farm Ratio of less favoured areas Number of farms	Number of beds in mass accommodation facilities per 1000 inhabitants Number of inhabitants per 1 doctors Number of municipalities per primary school in district without district town Opened flats per 1000 inhabitants Number of inhabitants per 1 kindergarten Number of health-service facilities in district without district town per municipality Finished flats per 1000 inhabitants Number of inhabitants per primary school

Source: Czech Statistical Office 2004 – 2008, Land Parcel Identification System, Ministry of Agriculture

The Královéhradecký region (NUTS 3) is situated in northeastern part of the Czech Republic and covers the territory of the following five districts (NUTS 4): Hradec Králové, Jičín, Náchod, Rychnov nad Kněžnou and Trutnov. With an area 4 758 square kilometers and a population of 548 368 inhabitants it belongs among the smaller NUTS 3 regions of the Czech Republic. The part of its northern and eastern border is as well the state frontier with Poland.

There are many approaches to determination of the countryside. Some definitions contain limit values (e.g. border for a rural municipality up to 2000 inhabitants), others are all-descriptive. The European Commission uses the OECD methodology. This definition of rural areas is the most widespread and it is dealt with the only definition internationally recognized and it serves for international comparisons.

The OECD methodology is based on a population density and on a share of inhabitants living in rural communities in a given region. A statistic limit, commonly used in the Czech Republic for limitation of rural municipalities is 2000 inhabitants. In ex ante evaluation of the Program of Rural Development of the Czech Republic it is reminded that from a view-point of methodology it is useful for determination of rural area to present an influence into two categories – a number of inhabitants and a population density per km^2. Each of the above mentioned ways of the country determination has its advantages and disadvantages and it is not possible to determine unambiguously which typology is the best and reflect best the reality.

Královéhradecký region includes 448 municipalities, from that 58 are towns (more than 2000 inhabitants). About 69% of Královéhradecký region acreage occupies rural territory; this area includes 29% inhabitants of this region (according to OECD). Least urbanized is district Jičín, where more than 20% population live in municipalities with up to 500 inhabitants. In the Královéhradecký region is this share about 12%. Average acreage of the municipality in this region is 10,6 square km and average number of inhabitants in one municipality is 1238.

The table 3 shows the above mentioned variant of the rural municipality definition. The first variant stems from the OECD methodology where as a rural municipality is considered a village with population density up to 150 inhabitants per km^2. According to the OECD typology, the region Jičín belongs in the category „a rural region“– so a region where more than 50% of population live in rural municipalities. Other regions belong among so called transitional regions, i.e. regions with a share of inhabitants in rural municipalities in an interval 15 – 50%. A town region (less than 15% of population live in rural municipalities) is not in the Královéhradecký region (NUTS 3).

Table 2: Extent of rural area in the districts (NUTS 4) of the Královéhradecký region (NUTS 3)

	Hradec Králové	Jičín	Náchod	Rychnov nad Kněžnou	Trutnov
Number of inhabitants	160 412	78 098	112 302	78 753	120 078
Number of municipalities including towns	104	111	78	80	75
Average number of inhabitants per municipality	1 542	704	1 440	984	1 601
Share of people living in municipalities with density up to 150 inhab. per square km in total number of inhabitants	24.23	53.64	28.89	45.34	31.24
Share of people living in municipalities up to 2000 inhabitants per total number of inhabitants	25.11	42.23	27.39	42.00	29.90
Share of people living in municipalities up to 2000 inhabitants and with density 150 inhabitants per square km in total number of inhabitants	21.38	40.06	26.42	34.40	27.54

Source: Czech Statistic Office 2008, own calculations

As Majerová (2009) presents, owing to specific conditions and historical development, are the most represented in the Czech Republic mixed regions. They constitute a wide range of transition between an expressively rural and expressively town regions. For the reason the middle category is further divided into three other types:

- Preliminarily rural (37.5 - 50 % rural population) – Rychnov n. Kněžnou;
- Mixed regions (25 - 37.5 % rural population) – Náchod and Trutnov;
- Preliminarily town regions (15 - 25 % rural population) – Hradec Králové.

Selected methods of composite indicators

The models of the aggregate indicators have been applied on chosen indicators of the theme of situation in rural area and agricultural development.
The literature of composite indicators (see Hrach, K. 2005, Saisana, M., Tarantola, S. 2002, Svatošová L. 2005) offers several examples of aggregation techniques. In the paper were used methods as follows (table 3).

The order or five observed regions for each indicator was created in case of ranking method. The first rank has been allocated to the best value of an indicator; the fifth rank has been allocated to the worst value. The identical values have been assessed by the average order. The region, whose sum of orders of indicators was the lowest, was found in the best position. The region whose total sum of order was the lowest had the best position. In case, where lower value of the indicator indicates better state, is yij in ratio method expressed as reverse value of observed proportion. Standardized scores yij are in standardized method computed according to (3), if higher value of variable presents positive state. If higher value presents negative state (for example unemployment rate), are modified yij values included to composite indicator with negative sign.

Table 3: Synopsis of compared composite indicators methods

Name	Method of calculation	Formula number
Ranking	$CI_i = \sum_{j=1}^{m} q_{ij}$	(1)
Ratio	$CI_i = \frac{\sum_{j=1}^{m} y_{ij}}{m}$, where $y_{ij} = \frac{x_{ij}}{\bar{x}_{\cdot j}}$	(2)
Standardization	$CI_i = \frac{\sum_{j=1}^{m} y_{ij}}{m}$, where $y_{ij} = \frac{x_{ij} - \bar{x}_{\cdot j}}{s_j}$	(3)
Range	$CI_i = \frac{\sum_{j=1}^{m} y_{ij}}{m}$, where $y_{ij} = \frac{x_{ij} - extr(x_{\cdot j})}{R(x_{\cdot j})}$	(4)

Note: q is the sequence of regions, index i represents region; i = 1, …., 5 and index j variable; j = 1, …, m; where m is number of variables; xij is original variable; is arithmetical average; refer to minimal value of selected variable (in case that high value of the variable indicates positive state) or maxima value (if high value indicates negative state); is range.

Results and discussion

A) The selection of the calculation of the aggregate indicator for the evaluation of districts in the Czech Republic

The goal in this section is to choose such method which is in the intentions of signalized requirements under partial aim A. There were given points to each method depended on the fulfillment of given requirements. The scale had three levels: the method which does not comply with the result in terms of requirements obtained 0 points. The method which complies but there are some reservations were got 1 point. Two points were given to the method which obtains given requirement without reserve. The classification of points has been accomplished by the author of the work.

Simplicity

The criterion of simplicity reflects the evaluation of severity of the composite indicator's calculation. To meet the requirements without reserve, the user without knowledge of statistics should be able to calculate the result. That means only with the knowledge of calculation of mean. The ranking and the ratio method fulfill that. The range method can be accepted with the reservation. This method works with variation range, which is not a well known concept for a common user. Standardization method contains the variance in its result. It is possible to calculate the variance in MS excel, but its interpretation and understanding can cause difficulties for the common user. That is why the standardization method is not in this evaluation considered as easy and understandable.

Interpretation

Sufficient interpretation of resulted value of composite indicator is an important aspect.

This aspect is different in particular method. The ratio method is considered to be the most appropriate. We can easily comment which results are higher than average (which is higher than 1) and which results are below the average. We can even say by how many percent or how many times is the result of a certain region higher or lower than the average. Standardization and range methods are acceptable with the reservations. Utilization of standardization method is limited when the mean value is zero. When using range method, we do not calculate with the mean. Further, it is not possible to deduce which regions are higher than average and which are below the average. It is hard to relate results of other regions to the zero mean when using standardization method, especially when calculating the proportion. The interpretation of ranking method is not complicated; however there is information about primary values lost.

Differences reflection

When calculation the regional differences it is important to intercept and qualify these differences as well as it is possible. The results of ranking method depict the differences in results out of the focus. That is why we consider this method not suitable. All other methods are suitable with reservations. Each of them in a certain way lowers the degree of disparity and the influence of the distant values. The result of the ratio method depends on the distant indicator's values. They distort the height of the mean and also the value of the composite indicator. The standardization method is a bit more resistant against extreme values than the ratio method. The range method is even less sensitive to those values than the standardization method.

Applicability

All compared approaches were found to be applicable to the data in the regional development. All methods enable to summarize the data in different units and to create the final aggregate indicator. When calculating the ratio method there can not be zero in the denominator which may be limitative.

According to adjusted requirements for the aggregate indicator was chosen **the ratio method**, which has obtained the highest number of points in the selection phase (table 4).

Table 4: Composite indicator method selection according to proposed conditions

Criterion\Method of composite indicator	Ranking	Ratio	Standardization	Range
Simplicity	2	2	0	1
Interpretation	1	2	1	1
Differences reflection	0	1	1	1
Applicability	2	1	2	2
Total	5	6	4	5

Note: point scale is as follows: 2 = comply with requirement without reserve, 1 = comply under reservations,
0 = not acceptable.
Source: own calculations

B) The evaluation of region's position using chosen methods of composite indicator and subsequent categorization of regions from the point of view of ranked indicators into the composite indicator

Position evaluation

The ratio method has been chosen as a method of composite indicator. The ratio method has still got the reserve in one of the criterions of selection – in the reflection of the differentiation. For this particular reason the author suggests the modification of ratio method. It consists of the substitution of the mean by the value of median. Median is a robust characteristic of central location. Its usage in the calculation enables more expressive differentiation of the resulting value of composite indicator. Median of each indicator is not influenced in the calculation by distant observations as much as it is in the case of mean. It enables more outstanding differentiation of composite indicator.

The ratio method can be characterized by the formula (2). In terms of the modification changes the formula for yij (2) into (5).

$$y_{ij} = \frac{x_{ij}}{\tilde{x}_{.j}} \qquad (5)$$

Note: y is modified value, index i refer to region, index j to variable; i = 1, …., 5; j = 1, …, m; where m is number of variables; xij is original values of the variable; is median of the variable.

In the situation where the lower value of indicator means better condition, there is recounted quantity yij expressed as a reversed value of ration in the formula (5).

Partial evaluation of regions in frame of selected topical indicator groups

From a view-point of evaluation of importance of every variable of the total indicator value, as the most suitable was chosen the ratio median method. This method is further used for more detailed evaluation of indicator groups for regions (NUTS 4) in frame of the Královéhradecký region (NUTS 3). The calculation was created for year 2008.

Table 5: Composite indicators according to topic groups of indicators and regions NUTS 4

Region (NUTS 4)	Demographic		Social situation		Economic- production		Infrastructural	
	CI	rank	CI	rank	CI	rank	CI	rank
Hradec Králové	2.60	2.	1.26	1.	1.03	1.-2.	1.09	2.
Jičín	2.80	1.	0.94	4.	0.96	4.	0.88	5.
Náchod	0.58	5	0.99	3.	1.03	1.-2.	0.97	4.
Rychnov nad Kněž.	0.89	4.	1.03	2.	0.90	5.	1.00	3.
Trutnov	1.03	3.	0.92	5.	0.98	3.	1.41	1.

Source: own calculations
Note: CI = composite indicator

Demographical indicators showed in complex the best values in districts Hradec Králové and Jičín where e.g. higher increase in number of population can be observed. The worst region Náchod was characterized by the negative migration balance and a higher age index value. A social situation resulting from the selected input indicators were evaluated the best in the region Hradec Králové. Here it is important to emphasize that the social situation was evaluated with an emphasis on the agricultural sector. The region Hradec is characterized by the lowest unemployment, a low share of job applicants, and an above-average wage height.

In evaluation of economic-production composite indicator, two first places fill districts Hradec and Náchod, the worst the region Rychnov. It is given by geographical and climatic conditions which reflect themselves in the extent of agriculture in the given region. The region Hradec Králové has a highest share in agricultural land and the highest ratio of arable land; agricultural production is more intensive in this region than in others.

In evaluation of infrastructural indicators, the region Trutnov gets on the first place. It is given by attractiveness of this region from a view-point of travel movement and thereby also higher numbers of accommodation capacities than in other regions. From a point of view of our indicators, the region Jičín takes the last place.

Complex evaluation of regions in frame of all selected indicator groups
Complex evaluation is made for all groups of input variables together for year 2008 and for change over years 2004 – 2008.

Table 6: Composite indicators for year 2008 and change in 2004 – 2008

Region (NUTS 4)	2004		2008		Change in 2004 - 2008*	
	CI	rank	CI	rank	CI	rank
Hradec Králové	1.062	2.	1.501	1.	1.004	2.
Jičín	1.016	4.	1.411	2	1.041	1.
Náchod	0.915	5.	0.892	5.	0.986	5.
Rychnov nad Kněž.	1.031	3.	0.954	4.	0.990	4.
Trutnov	1.075	1.	1.089	3.	1.002	3.

Source: own calculations
***CI for change between 2004 – 2008 based on average change indicator**

As it is obvious from the table 5, the best results were achieved in year 2004 in Trutnov and in year 2008 in Hradec Králové. These regions embodied better results in variables such migration balance, share of people with university degree, average registered number of employees or number of health-service facilities in district. Their composite indicator was markedly above the value 1 which indicated the mean value. Ranking is closed by Náchod district, which showed worse results in mentioned variables. Hradec in 2004 and Jičín in 2008 embodied above-average results in the average wage. Náchod district is focused on the engineering and textile industry, both with lower value added.

Biggest progress is perceptible between the years 2004 and 2008 in Jičín district (table 5, columns Change in 2004 – 2008). In terms of the tracked indicators, the smallest progress was accomplished in Náchod district.

Categorization of valuated regions based and selected indicators

The position of the regions depicting the combination of the stage in certain year and change in the certain period (table 5) can be digestedly characterized by so call Diagram of the regional development (figure 1). The regions in the quadrants leaders, stagnant and catching up can be considered as those with good developing potential. Dashed line for composite indicator in the year 2008 and also for composite indicator of change between the years 2004 and 2008 represents the mean value from the composite indicators of observed regions. The best results embody those leaders where there has been the positive development provided in the years 2004 – 2008 as well as above-average height of composite indicator for the year 2008. It is Jičín district. The above-average height of composite indicator for the year 2008 and below-average improvement in the period 2004 – 2008 were characteristic for district Hradec Králové, the stagnant quadrant. Trutnov can be considered as the Catching up with encouraging development even though in the light of the state of the regions we usually locate them to the worse group of regions. In the light of the change it made huge improvement in the period 2004 – 2008. The quadrant Losing contains regions which usually reach below-average values in terms of single years, but even in terms of a change of tracked time series, the regions remain to be under-average. There are situated districts Náchod and Rychnov. Distribution of regions into particular quadrants is mostly influenced by indicators contained in all topic groups, i. e. negative migration balance, unemployment rate and registered job applicants or lower average wage in agriculture.

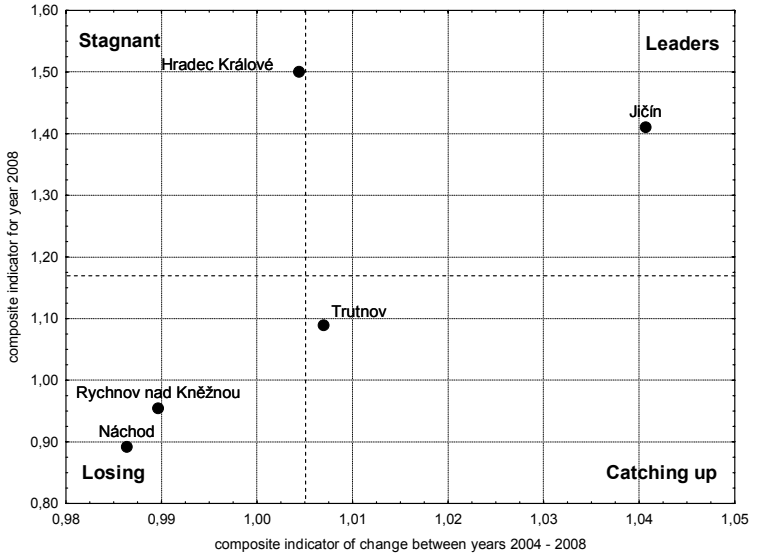

Figure 1: Regional development diagram
Source: own elaboration
Note: dashed lines mean average value of composite indicators (for year 2008 is it 1,169; for change between 2004 and 2008 is it 1,005).

Conclusion

There has been a methodical instrument for the evaluation of regional development suggested in this work. It has been verified on selected indicators of the rural and agricultural sphere. The suitable method for the evaluation of position of the regions has been chosen, the method has been modified by author to suit even better the primary requirements. The important base for the determination of the composite indicator is the quantity of data, which is important to gather for all primary indicators. The missing indicators lower the quality of analysis. For the values of composite indicators for the year 2008 and the change in the years 2004 – 2008 was diagram of regional development created, which has enabled the categorization of the regions.

The utilization of the methodological instrument for the complex evaluation of the regional development is universal and is not limited by the type of a region. The suggested methodology enabled to carry out a comparison of region collectively, on base of all selected indicators and separately according to topical indicator groups. Differences among particular regions were quantified with the help of the composite indicators and on base of found out results a ranking of regions in frame of a district was compiled.

The composite indicators are significantly influenced by a selection of used indicators, according to a type of method then by a way of calculation. Further it is essential to point out that their construction can not be created without knowledge of all input variables. The analysis was carried out at the level NUTS 4 for the reason of the necessary database absence at a lower territorial unit.

If we deal directly with the disparity analysis in the rural area, of course, it is necessary to choose the least territorial-administrative unit so that town area could be excluded. Observing of disparities among rural municipalities mutually can be a contribution for more exact definition of troubleshooting areas and more accurate revealing of these disparities causes. However, there is an absence of database connected with an economic efficiency, a significance of agriculture, indicators describing the infrastructure etc. Other troubleshooting problem of these analyses would be a question of delimitation of a rural municipality. A use of different variants of the country delimitation will lead to different results. For these reasons the author chooses an evaluation procedure of the situation in rural area at a regional level.

A situation analysis in rural areas with the help of the composite indicator can be used in creation of development programs aiming to a stabilization and further development of rural areas. The identification of regional differences and the determination of the certain rank of regions can be beneficial for the definition of trouble shooting regions and better support aiming.

According to strategic regional documents for years 2008 – 2010 and 2010 – 2013, Náchod district is supposed to focus on the rural development activity, the exploitation of brown fields and on the increase of living standard in rural

territory. The program is focused on cross-border cooperation with Poland as well. In Královéhradecký region are supported mainly two mountain rural areas – Krkonoše Mountains (Trutnov district) and Orlické hory Mountains (Rychnov district). The first named area has for the Královéhradecký region bigger importance. This importance is also connected with higher financial support. The support of the specific regional products and services from Orlické hory area is not included with high importance in strategic regional document of Královéhradecký region. Some decreasing of this disadvantage is solved partly by cooperation of Rychnov district in frame of Euroregion Glacensis as cross-border cooperation with polish partners. Development problems of Náchod district are solved in strategic documents quite good.

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Strategic goals and priorities of sustainable agriculture and rural development in region of Upper Danube Region[1]

Abstract: *According to the Draft Spatial Plan of Republic of Serbia (2010): spatial integration and functional connection of regional units, that are necessary for achieving of greater territorial cohesion within Republic, as well as for development capacities strengthening and greater competitiveness of its constituent parts, leads to the identification process of development zones. One of them is the Danube belt, wider area functionally directed to, or linked with Danube River, which also includes zone along the Sava River. Compact space, linked with west towards Hungary, Croatia, Slovakia, Austria and Germany, and east towards Bulgaria, Romania, Ukraine and Moldova, is a key development axis for spatial integration of Republic of Serbia with Europe. Economy, transport, tourism, cultural cooperation and other forms of population connection along this development axis, will be supported by projects related to Corridor 7, or common development strategy based on interstate cooperation of Danube countries and regions. Except underlined, important place will have also protection projects and cooperation within process of natural resources preservation between Serbia and Croatia in the area of Upper Danube region.*
Unequivocally orientation of Republic of Serbia for European integrations requires different definition of role and importance of agriculture, food-industry and rural development, comparing to previous documents and practice. Hence the need for creation of clearly conceived frame like a document – Strategy, as adequate answer on key questions for further development of agriculture and rural areas in the zone of Upper Danube region (Sombor city and municipalities of Apatin and Bač)[2]. In possi-

1 Paper is a part of research project III 46006 - *Sustainable agriculture and rural development in the function of strategic goals achievement within Danube region*, financed by the Ministry of Science and Technological Development of Republic of Serbia, project period 2011-2014.

2 a) Standing conference of towns and municipalities and the program of environmental protection in Serbian cities and municipalities (2004-2006) provided consulting support to realization of all activities during the establishment of the Strategy of local sustainable development of the Sombor Municipality (now city) 2007-2015.
b) Consulting, research and technical support in realization of all activities during the establishment of the Strategy of sustainable development of the Apatin Municipality, 2009-2019, provided Regional agency for small and medium enterprises, Alma Mons doo Novi Sad and Institute of agricultural economics Belgrade.

ble extent, policy of this development should be adjusted to the Common Agricultural Policy of EU, whose focus is more and more on development of rural areas.
By development strategy, as long-term development document, relating the contemporary scientific achievements, are determined strategic goals and priorities of sustainable agriculture and rural development in the zone of Upper Danube region. That was accomplished by fundamental perceiving of existing natural and created potentials, available human resources, previous development directions, present and predictable problems, detail analysis and estimation of environment impacts. According the above mentioned, the most favorable, realistically achievable options of future development are suggested, bringing down the focus on place and role of agriculture in sustainable development of rural areas.
Strategic goals and priorities of sustainable agricultural and rural development in the zone of Upper Danube region, presented in this paper work, are mostly global and they just represent view on vision. They are actually answer on question „what we want to achieve?" considering available resources.

Keywords: *strategic goals and priorities, sustainable agriculture, rural development, Upper Danube region, Republic of Serbia.*

Introduction

Development of *the Strategy for the area of the EU Danube region*, for whose creation the European Commission received mandate on June 2009, and that should be adopted in early 2011, will allow establishment of a third large transnational region in Europe (beside the Mediterranean and the Baltic region), for which in the period 2014-2020 special development fund will be defined. The priorities of cooperation in the Danube region are transport, environment and economic development.

Republic of Serbia Government Act "***The position of the Republic of Serbia for the participation in the development of a comprehensive EU strategy for the Danube region***" (March 2010), stipulates:

- within the *Environment protection section* - priority areas are: *Environment protection and sustainable use of natural resources in the basin of the Danube*, relating to strategic activities for development of the national parks and other protected areas potential and water quality improvement in the Danube River Basin;
- within the Socio-economic development section - priority areas are: *Economic development and strengthening of regional cooperation and partnerships in the region of Danube Basin*, relating to strategic activities for stimulation of the rural economy diversification and improvement of the local economy by strengthening the facilities of local communities and development of tourism (rural, agro, eco), development of local crafts and agricultural production promotion in the Danube Basin region.

c) Consulting, research and technical support in realization of all activities during the establishment of the Strategy of socio-economic development of the Bac Municipality, 2009-2014, provided Regional agency for small and medium enterprises, Alma Mons doo Novi Sad and Institute of agricultural economics Belgrade.

Model of sustainable agriculture and rural development that favors agricultural resources, biodiversity and climate is a priority of all acts passed in recent years concerning a new model of development based on the concept of the social, economic and environmental sustainability. In terms of the nature-geographic, resource and socio-economic developmental characteristics, *Strategic objectives and priorities for sustainable agriculture and rural development in the area of the Upper Danube region*, concern with the modalities of development of the sustainable agriculture and rural development, which will provide an optimal contribution to sustainable development of the Upper Danube, within following strategic acts:

- Local sustainable development strategy of the Sombor Municipality (nowadays City) 2007-2015;
- Sustainable development strategy of the Apatin Municipality, 2009-2019;
- Strategy for socio-economic development of the Bač Municipality, 2009-2014.

Successful management of the above-mentioned strategic documents development required from the very beginning high political sensitivity and skill of reaching commonly acceptable solutions especially when a number of interested parties had different and often opposing views on key aspects of the strategy development. Therefore, in the development of the strategies for sustainable development, principle of conformity of the strategic priorities with already adopted strategies at the national level was cherished. In the very process of strategic documents drafting a participatory approach which implied the participation of all relevant stakeholders from the territory of the municipalities Sombor (nowadays City), Apatin and Bač was applied.

Based on the principles of transparency and openness, operating procedures and working groups, whose main role is defined through the decrees and rules of procedure, were adopted. In accordance with the above, certain working bodies were defined:
During the establishment of Sustainable Development Strategies of the Sombor Municipality (nowadays City) and Apatin Municipality:

- Partner Forum;
- Strategy development team;
- Coordination team;
- Thematic working groups.

During the establishment of sustainable development strategies of the Bač Municipality:

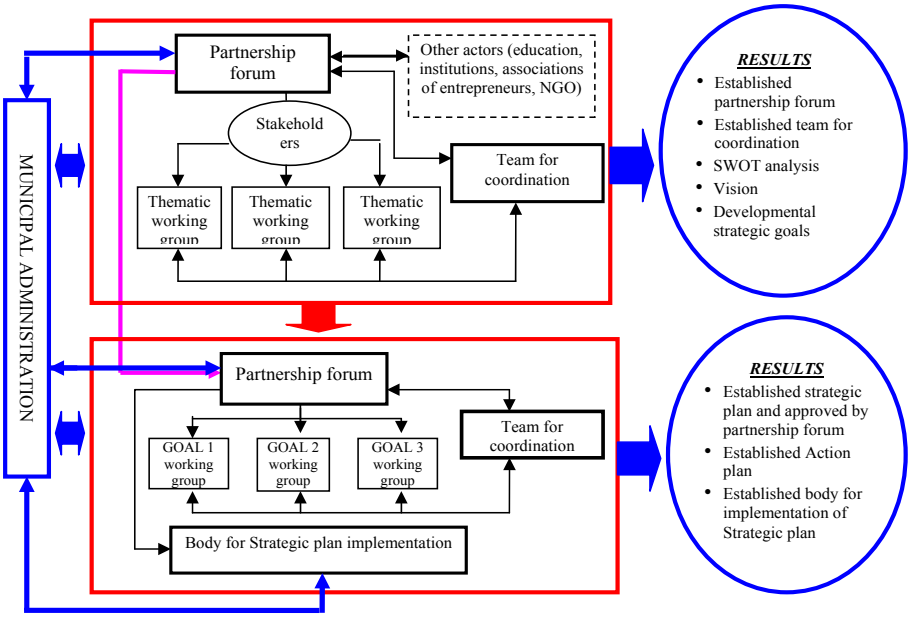
- Partnership;
- Local action group;
- Thematic working groups.

Complete coordination of the formed body required both vertical and horizontal approach, and effectiveness and efficiency of the set system was included in the communication plan.

By combining strategic approaches and practical solutions, Strategies represent an instrument that allows a conduct of systematic, integrated and sustainable development policies in the local community.

It is important to point that the abovementioned Strategies of local sustainable development are "living" documents, subject to change, critical consideration in accordance with the needs, circumstances and other factors (both positive and negative) that occur in the realization of the projected aims and objectives.

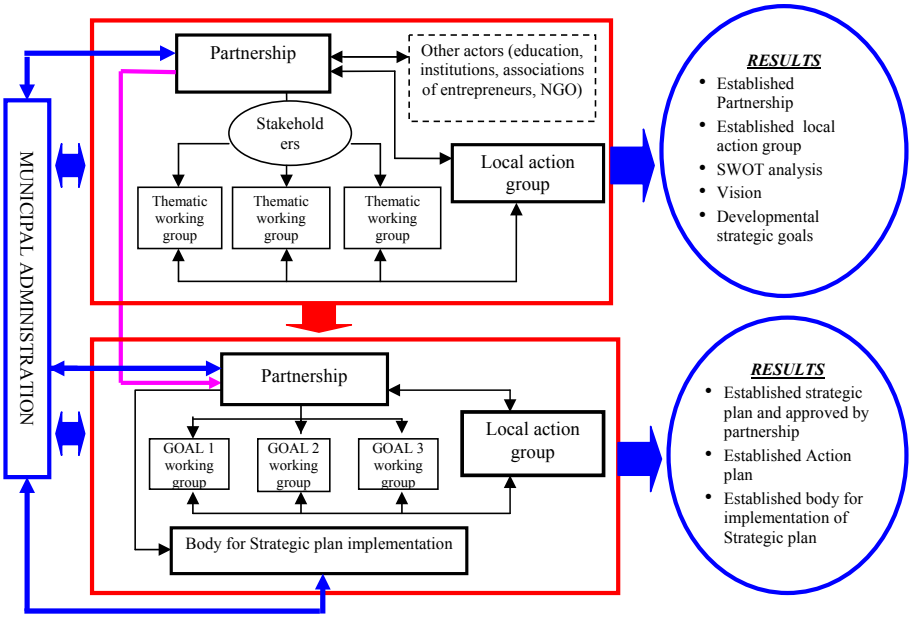
Picture 1 is schematic presentation of establishment process of the Strategy of sustainable development of Sombor municipality (now city) and Apatin municipality.[3] Picture 2 is schematic presentation of establishment process of the Strategy of sustainable development of Bač municipality[4].



Picture 1 – Process of strategic planning - organization

3 Strategy of sustainable development of Apatin municipality, 2009-2019. Regional agency for small and medium enterprises, Alma Mons doo Novi Sad and Institute of agricultural economics Belgrade, Belgrade, 2009.

4 Strategy of sustainable development of Bač municipality, 2009-2014. Regional agency for small and medium enterprises, Alma Mons doo Novi Sad and Institute of agricultural economics Belgrade, Belgrade, 2009.



Picture 2 – Process of strategic planning - organization

Within establishment of strategic plans for local administration development, forming of bodies of local action groups (LAG) represents part of methodological approach of local economic development (LER) that enables transparency of decision making process during the selection of development priorities.

Methodological approach (World Bank methodology or methodology for establishment of the *Strategy for local community sustainable development* within Exchange 2 programme of the EU) requires formation of development bodies, and accent is on common (coherent) work of local governments and organizations from public and private sectors. In accordance with methodological approach of strategic plans creation, local action group represents local partnership of representatives of city (municipal) government, NGO representatives and representatives of business associations.

Process of sustainable development strategy establishment

Process of *Strategy of local sustainable development of Municipality* Sombor (nowadays City) developing, as well as *Strategy of sustainable development of Municipality Apatin*, was based on plan of activities of program *Exchange 2,* which represents a platform for creation of general methodology of sustainable development of local communities. Main principles used in modeling of the Strategy of sustainable development of mentioned municipalities were:

- *Bottom-up principle* - strategies were managed and developed by local administration and stakeholders. Experts provided consulting role, training of municipal coordinators, as well as professional and technical support during the document establishment.

- *Principle of participation and transparency* – Strategy creation processes were open for public through participation of civil and business sector representatives and municipal administration in bodies established for strategy development. Furthermore, public was constantly informed via municipal website, radio, media and press.
- *Principles of equality* – during the work group meetings decisions were made and work handled in jointly manner, regardless to religious or political beliefs, no matter whether the participants were businessmen, agriculturists, clergy, scholars, NGO representatives, etc.
- *Principle of sustainability* – key principle applied during municipality vision, goals and priorities setting, was principle of sustainable development. Municipality Sombor, as well as Municipality Apatin, will strive to use all of their resources in a manner that will best suit the needs and interests of citizens, and taking care of environment improvement.
- *Principle of balance of potentials, needs, ideas, resources and capacities* – development strategy of municipalities Sombor and Apatin reflects actual needs of municipalities and their citizens, as well as realistic assessment of resources, comparative advantages, financial potentials and capacities.

Process of *Strategy of socio-economic development of Bač municipality* developing is in accordance with stances of World Bank. Focus is on participative local development planning, and defining of local development domain in comprehensive way, putting on same level spatial, economic, demographic, social and environmental dimension. Accordingly, main principles that have guided the establishment of Strategy for sustainable socio-economic development of Bač municipality are:

- *Principle of consensus and interdependence* - This indicates consensus reached by serious negotiations, not a general democratic system of majority voting. Consensus of participants, during the Strategy establishment, has been held by interactive participation on workshops as well through expression of own interests of all actors, with respect the needs for compromise in different circumstances. This also meant construction of common vision, and identification of strategic goals and measures.
- *Principle of equality* - Nobody is the owner of partnership, as no organization dominated within the partnership. Partnership members are equally involved in the everyday activities and process of decision-making. During the capacity building of each partnership segment, it is important to enable mutual interaction of all stakeholders based on this principle.
- *Principle of diversity* - often are emphasized difficulties connected with quality of partnership work, as it involves different interest groups, or stakeholders. When it is claimed that the problems incurred during the facing of various (often-opposed) interest groups reduce partnership action. However, within complexity of developmental problems that municipalities met, it was important to ensure platform that will take into account wide range of possible views and experiences, in order to define causes of certain problems and possible solutions (partners usually differ in level of knowledge, orientation, goals, experience, approach to specific problems, etc.).

- *Principle of responsibility* - proposals that were determined during the partnership meetings (as well as meetings of working groups) are strategically grounded, rational and financially justified. In other words, there were clear criteria and procedures that guided the process of strategic priorities and measures determination, and which will be again in focus in the process of programs/projects selection.
- *Principle of transparency and openness* – creation of Strategy of socio-economic development of Bač municipality was public, as well as adopted decisions that are by their nature public too. Through this principle, municipality continually and timely informed all citizens, but also wider public about all stages within the process of strategic document establishment (through Internet, media, etc.). In this way, all stakeholders were fully and truly informed.

Methodology

In accordance with the defined principles, the strategic document development methodology consisted of several phases:

- *Activities plan development* – it consisted of activities related to kick-off meetings with municipality president, heads of administration/departments and other high officials, to whom the main Strategy development plan was presented. Based on available resources for Strategy creation (human capital, facilities, etc.), municipalities proposed people that will constitute *Strategy development team (or LAG)*, whose responsibility was to precisely plan all activities, define duties, and adjust *communication plan* along with consultants on strategy development.[5]
- Based on available resources for Strategy establishment, municipalities formed *Strategy development team (or LAG)*. Team proposed and based on that work body *Partnership forum (Partnership)* was defined, whose main role was decision-making and managing on all strategic development priorities proposed by *Coordination team (LAG)* and members of *Thematic work groups*.
- *City/Municipality profiling* implied organization of the meetings administered by experts for Strategy development, as well as education/workshops for city/municipality representatives *(Strategy development team, or LAG)* whose main function was introduction to the model and approach to city/municipality profile development (situation analysis). Data layout for city/municipality profile creation was related to choice of indicators by which insight in current state of city/municipality by certain segments was possible, and later these indicators were used to measure performance results in the Strategy implementation phase. *Local community (city/Municipality) analysis phase* identified and grouped all necessary elements, problems and potentials of city/municipality, used to determine strategic priorities of the city/municipality future development. Analysis involved

5 In case of Sombor and Apatin, after defining kick-off activities Coordination team members were proposed and Agreement of cooperation was signed, as well as the plan of activities between program Exchange 2 and city/municipality.

both quantitative and qualitative data processing approach, and participation of stakeholders in identifying, analysis and ranking of problems was of utmost importance. Following data collection and condition analysis, SWOT analysis was performed (Strengths, Weaknesses, Opportunities, Threats), that defined strategic priorities of sustainable development.

- *Participatory process* – in development of strategic documents of utmost importance is that all stakeholders conjointly participate in defining of main priorities of city/municipality development. Logic and advantage of participatory planning is based on direct involvement in the very process, through all the phases of Strategy development, from common challenges in identification, to development of common solutions. Activities of participatory process included also establishment of *Partnership forum (Partnership)*, which represented key body for discussion and information exchange among all social, economic and institutional stakeholders from the territory of municipalities Sombor, Apatin i Bač, concerning the defining and implementation of policies and activities of sustainable development. The role of *Partnership forum (Partnership)*, considered organization and defining of *Thematic workgroups*, whose members are representatives of city/municipal agencies, business sector, government and non-government organizations, and other relevant institutions from the territory of municipality (nowadays City) Sombor and municipality Apatin. *Thematic workgroups* worked on constitution and identification of vision, common goals and possibilities for problem solving, and in accordance with goals and policies of sustainability they proposed activities that should be included in Strategy of sustainable development of city/municipality. Members of Thematic workgroups were administered by *Coordination team (LAG)* whose members were allocated (as coordinators) in established workgroups. By participatory process, in this phase of creation of Strategy of sustainable development, the vision, strategic goals and measures of municipality (nowadays City) Sombor, municipality Apatin and municipality Bač were established, i.e. programs/projects that would carry out harmonized goals of city/municipality development in following period were proposed.
- *Adopting Strategy of sustainable development* consisted of an array of planned activities that were meant to include and activate broader public, or in other words constantly informing public on activities related to process of strategic document development. In accordance with pre-set communication plan, the strategic document draft was presented to the public through planned promotional activities (panel discussion organization, presentation of strategic priorities in local communities of city/municipality, presentation of strategy draft on the city/municipality website, constant information through local media on Strategy development activities, etc.) whose main characteristic was more transparent approach to opinions and suggestion on possible amendments to the document. Time frame for this process *(public debates)* was one month. After that process, the city/municipal assembly adopted the Strategy of sustainable local development.

- Successful *Strategy implementation* implies strong political will and support. Also, implementation plan implies budget, human, institutional and procedural component required for Strategy implementation.
- *Action plan*, defined within strategic document, included hierarchy of tasks, responsible parties, realistic time frame, human resources and financial needs, sources of funding, expected impacts and results, measures and systems for evaluation of each project. During the implementation, each project will be constantly monitored to ensure achieving of established goals and desired results.
- Team of people is responsible for managing the process of strategy implementation. Practice is to establish an *office or agency for local economic development* (public-private partnership, or non-profit organization). Advantages of establishing an office are that it directly monitors Strategy implementation process, and it may affect other municipal activities and decisions as well, as it may develop direct cooperation with private sector and other organizations, etc.
- *Monitoring* represents a constant process of strategy monitoring and/or implementation of projects according to the schedule and used inputs, infrastructure and services of project user. It identifies in due course current or potential good results or issues, in order to ease up timely adjustment of project operations. Monitoring assumes planned project per se, measures progress, has focus on completion and is perpetually present.
- *Evaluation* is necessary in order to make periodic Strategy implementation assessment, and manner it was conducted in, therefore this phase includes answers to following questions:
- What has been achieved?
- How was it implemented?
- Lessons learned and how to benefit from them during creation of new projects?
- *Evaluation process* overlaps monitoring process which refers to project or implementation program. It implies systemic approach to periodic implementation quality assessment, and programs are by internal control being monitored through reports, that are gathered on various bases (e.g. data gathered on weekly, monthly or quarterly basis).

In designing of monitoring and evaluation system, it is necessary to incorporate a few indicator types, as there are:

- *Goal indicators* that measure Strategy or project progress according to the same goals;
- *Output indicators* that measure progress according to the given output;
- *Input indicators* that measure financial payment, human resources and staff time.

Indicators that measure Strategy establishment progress, have to be:

- *smart* - specificity, measurability, achievability, importance, time limited;
- *justified* - valid from the aspect of key participants in process of monitoring and evaluation, or stakeholders, and they have to measure what is set for measuring;

- *reliable* - conclusions formed according to indicators must be the same if they are measured by different persons;
- *type sensitive* - indicators must be disaggregated by type;
- *sensitive* - enough to measure important changes in situations that are monitored;
- *cost-effective* - Information should be valid according to time and money that was necessary for data collection;
- *well-timed* - should be able to collect and analyze all data relatively quickly;
- *in accordance with local ability/resources* - should not be too complex and difficult for the partners in the project;
- *built on the stability* - indicators should be determined according existing local data about activities or should come through experience from the indicators used in other projects (of course, where is possible).

Development priorities and objectives

Precondition for achievement of strategic goal of *Upper Danube region* is realization of general and specific goals, as well as realization of measures and projects, which are given for each of three specially marked *development priorities (directions of development)*. Defined development priorities essentially determine way of strategic objective realization, or they are instruments of strategic objective of the city/municipality:

1. **Development priority:** ***Improved and continuous social development;***
2. **Development priority:** ***Competitive and sustainable economic development;***
3. **Development priority:** ***Preservation, protection and promotion of environment quality.***

As the **three general goals** of the territory of Upper Danube region, which are related to the defined development priorities, considered as general development framework and instrument for realization of higher goal (Strategic objective), are selected:

1. **General objective** (general objective of I development of priority): *Polycentric development of social sector as generator of overall Region prosperity*;
2. **General objective** (general objective of II development priority): *The continuous and sustainable economic growth based on developed institutions and entrepreneurial infrastructure, simulative local environment for investment, particularly for new and foreign investments, implementation of new technologies, better employment and entrepreneurship development*;
3. **General objective** (general objective III development priority): *Sustainable management of natural resources and protection and improving of environment quality through rational usage of existing natural potentials, strengthening of the energetic competitiveness, application of new technologies and strengthening of institutional and infrastructure capacities.*

Realization of each general objective considers definition and accomplishment of sub-objectives (**specific objectives**). Specific objectives are priorities that lead to achievement of higher goal (general and strategic objective) and

vision realization. By specific objectives is determined how is implemented general, or strategic objective, and they are instruments of higher goals that solve certain problem, or part of problem. In addition, accent is on definition of specific objectives that can be implemented (in relation to needed resources, time) and give optimal effects in development process and achievement of higher goals, with predictable results (ratio: *input-output*).

For vision, strategic goal and three general objectives realization (for all development priorities of Upper Danube region), next **specific objectives** are identified:

- *Support to human capital development* (I development priority);
- *Improvement of infrastructural capacities in public sector* (I development priority);
- *Strengthening of institutional cooperation and institutional capacities in public sector* (I development priority);
- *Affirmation of social and cultural identity* (I development priority);
- *Continuous build, reconstruction and modernization of physical infrastructure* (II development priority);
- *Development of competitive and export-oriented industry, service sector and SME sector* (II development priority);
- *Development of intensive and competitive agricultural production within wider concept of complete rural development* (II development priority);
- *Development and constant improvement of tourism* (II development priority);
- *Protection and improvement of natural resources* (III development priority);
- *Development of infrastructure in field of environment protection* (III development priority);
- *Strengthening of institutional capacities in field of environment protection* (III development priority).

For defining of each specific objective, **real measures** are identified. They have to be taken in order to achieve development priorities in specified timeframe. They are instruments for resources usage, and in technical meaning represent connection between strategic and operational work in development achievement. Measures provide time and financial measurability of objectives.

Development of intensive and competitive agricultural production within wider concept of complete rural development (III Specific objective, II development priority)

Significant support (source) of economic development in the Upper Danube region is definitely agricultural sector, with strong institutional capacities and preserved and developed agricultural infrastructure. Accomplishment of second specific objective is in direct function of vision and general objective of development priority realization - *Competitive and sustainable economic development*.

According to EU rural development policy, Upper Danube region its rural development has to base on:

- Creating of greater competitiveness of primary agriculture (properties enlargement, intensive appliance of agro-technical investments, higher investments in mechanization, quality standards, sale and marketing);
- Establishing conditions for additional employment of rural population (especially women, young, members of husbandries with small properties, etc.);
- Permanent improvement of living conditions in village;
- Special emphasis on agricultural land protection, environment preservation, etc.

Measures of Specific objective

Measure 1 - Protection and preservation of agricultural land
According the *Law of agricultural land*, local communities have obligation to reinvest all means obtained from public agricultural land renting into agriculture through investment in protection, maintenance and agricultural land preservation and agricultural infrastructure development. Measures include projects of commasation, melioration, anti-erosion measures, etc.

Measure 2 - Educational and consulting support to agriculturalists
This measure is especially important for agrarian sector competitiveness building, and it's specially useful in cases when agriculturalist are not organized through association, cooperative, etc. It is crucial that local communities keep strong connections with agricultural extension service in Novi Sad, faculty of agriculture, Ministry of agriculture, forestry and water management of Republic of Serbia, Secretariat of agriculture, forestry and water management of Vojvodina province, as well as number of relevant institutions. Through good cooperation of local communities with these institutions and constant educational and experimental activities, needed knowledge and skills can be available to farmers, so basic directions in further agriculture development planning can be provided.

Measure 3 - Support to establishment and development of farmers association, as well as support to inter-regional and international networking of producers
Considering high farmers' disorganization and big problems, especially in phase of products realization, it is extremely important role of local communities in the processes of farmers' cooperation encouraging, through the forms of cooperatives, clusters, associations, etc. Local communities support in establishing of inter-regional cooperation of agricultural producers (cooperatives, agricultural enterprises, association farmers, etc.) is highly useful

Measure 4 - Direct support to agriculturalists for building of agricultural production competitiveness
Although this measure is not under jurisdiction of local communities, by attracting of donor funds or/and establishment of agrarian budget, local commu-

nity could provide support for building of higher competitiveness for investment and development-oriented farms, especially in fruit, vegetable, organic and livestock breeding production. Support of higher competitiveness creation considers financial incentives to enlargement, intensification and modernization of agricultural production, as well as improvement of marketing, product quality, products realization, processing of agricultural products, etc.

Measure 5 - Support to promotion and agricultural products marketing
Given that current problems in Serbian agriculture are product marketing, insufficient investment in packaging, distribution and promotion, special attention of Upper Danube region should be devoted to these problems. Beside promotion of local products on fairs and support in establishing of certain agricultural product brand (by which local communities in Upper Danube region are recognizable), also very important is greater demand of city/municipality authorities on more strict control and monitoring of republic inspection regarding agricultural products repurchase flows.

Measure 6 - Support organic production and processing establishment
At the beginning of 2008 Secretariat for economy of the Vojvodina province, Agency Alma Mons doo Novi Sad and company *Slovan Progres* doo signed a cooperation protocol for realization of project of "Centre for organic production development" establishment. Its' aim had to be spreading of awareness about the necessity of healthy food consumption, improvement of organic food production and establishment of sustainable agriculture system. Center should include experts from the field of science, representatives of institutions which are dealing with food testing, food producers and government representatives, that all together by systematic interconnection and education, could achieve benefit and provide to local products safe way to the EU market. Everything stopped just on plans and good ideas. In next period is needed better support of state and public institutions, as well as their stronger cooperation with private sector within the affirmation of all proposed activities of this Centre.

Measure 7 - Strengthening of rural population activities diversification process and improvement of life conditions in rural areas
Measure considers at first place respect of the concept of rural development by the model of EU countries. Rural development includes not only intensification of primary agricultural production, but number of projects directed to environment protection, better life conditions in village, generation of new opportunities for employment, especially young and women, or members of husbandries with small estate, etc. Within this measure is needed affirmation of LIDER approach, which is primarily related on methodology of rural development projects nomination for financing from EU funds. LEADER instrument in implementation of rural development policy basically means „forcing" independent determination of integral programs of local communities sustainable rural development, with common action of local community authorities and all local stakeholders (by the *bottom-up* principle).

Measure 8 - Strengthening of institutional infrastructure capacities and promotion of inter-institutional cooperation

Measure considers efficient work of city/municipal departments/agencies for rural development /agriculture and special emphasis have to be on intensification of inter-institutional cooperation. In domain of inter-institutional cooperation, one of the projects should be strengthening of the initiatives of local communities within relevant institutions (Republic geodetic institute) for registration of change of public land usage that is leased. Institutional support considers also promotion of LIDER approach to rural development, in other words organizing of professional trainings for local authorities and LAG (local action group), toward nomination for rural development projects financed from EU funds.

Starting from the basic assumptions and aspirations of the process of strategic planning, proposed goals and priorities of sustainable agriculture and rural development within the zone of the Upper Danube region are based on detailed examination of local, material and intangible resources, needs and potentials, by the basic elements that create system of territory, in complete complexity of its economic, social, environmental and institutional components. Based on that was performed evaluation of the existing social capital needed for initiation of desirable and elimination or mitigation of negative processes and trends, in order to establish a partnership between local stakeholders for the identification, reconciliation, optimization and implementation of all activities that will ensure in long-term period increase of overall life quality in the zone of the Upper Danube region.

Order of mentioned developmental goals and strategic priorities realization will depend, at first, from real measures which should ensure their temporal and financial measurability. Accordingly, significant influence will have:

- estimated value of investments;
- possibility to secure necessary amount of financial assets (from the sources that are currently, or in the coming years will be available to potential investors);
- well organization and order of certain phases execution within the investment projects duration.

How the territory as a system is in constant process of evolution, not only influenced by endogenous factors and the developmental process, but also due to variable and unpredictable factors of environment, in achieving of mentioned trends of future integral rural development of the Upper Danube region have to predict real need for interventions, in terms of a possible redirection of programs, projects and other activities determined by this strategic document. Because of that has to bear in mind that strategic planning is a continuous process.

Conclusions

Strategy of local communities' sustainable development represents one long lasting, comprehensive and synergetic process that affects all life aspects on all levels. Concept of sustainable development considers economic growth, but that one which will secure greater participation of clean technologies and innovation of whole society, poverty reduction, better resources usage, promotion of health conditions and life quality, reduction of pollution level and preservation of biodiversity. For long lasting, and also sustainable development, resources and possibilities have to be distributed in such way that all residents can enjoy basic safety standards, human rights and social privileges.

Strategy of sustainable development of local communities in the region of Upper Danube includes few priorities. One of them is *competitiveness and sustainable economy development*. In function of vision and general goal accomplishment of mentioned development priority, specific goals have been defined, with special reference to sustainable agriculture and rural development.

Agriculture and rural development on the territory of local communities of Upper Danube zone, as well as in whole Republic, is in process of intensive changes. It was started from changes in comprehension of essential role of agriculture for development of one country, to comprehension of necessity for institutional changes, as like in Sombor city and Apatin and Bač municipalities, as in whole Serbia too.

Strategy of sustainable development establishment of selected local communities should compensate the lack of suitable strategic development documents for the territory of Upper Danube. Thereby it was necessary to harmonize needs of agrarian policy of selected local communities with Republic agrarian policy, as it could make further long-lasting and sustainable development of agriculture and rural areas possible, and their harmonization with requirements of international integration processes, before all Serbian accession to WTO, realization of SAA and EU admission.

In practice and legislation, exist many of unsolved problems that affect sustainable agriculture and rural development, as on level of local communities in the zone of Upper Danube, as on level of entire Serbia. Local communities (city Sombor, municipality Bač and municipality Apatin) can and has to offer reliable models for development of sustainable agriculture within their rural areas.

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Labour market and employment sources in rural areas of Bulgaria

Abstract: *The theory of path dependency reveals that in the territories, where the population is characterized with worsened structure, the infrastructure is affected by underdeveloped problems and the amenities are not enough evinced, it is difficult to expect designation of activities, creating new employment. The appearance of innovative and knowledge based job in the rural areas is very hard challenge because the prepositions providing and creating them are missing. The lack of appropriate infrastructure, the demographic problems and the affected pattern of working force in the rural areas in terms of education, qualification and abilities deprive the reliance on the endogenous resources to create new employment directions. It is found that significant resources for successful development of the rural parts are available in the realm of natural and cultural capital. The main challenge is to make a mechanism, which will utilize the natural and cultural capital of the rural areas, hence will mobilize local people and will create a new and more jobs. This is the only way to shape regional identity, bring a change in the life of people from these areas, and form stabile balance between urban and rural poles.*

Keywords: *rural areas, labour market, employment, unemployment rate, rural-urban relations, drivers, socio-economic situation, sources of employment, strategies of orientation*

Introduction

The main objective of the paper is to investigate the labour market in rural areas and to identify which are the opportunities and drivers for new employment. The new sources of employment are reckoned as employment created in the sectors apart from traditional agricultural production. For the sake of implementing this objective, a case study in a reliable rural region is done and the labour market, demographic and economic trends are identified. The employment aspects as available human capital, skills and adaptability as well as demand for labour and existence of top-down and bottom-up constraints

are elaborated as well. The selected pilot area for case study implementation corresponds with particular criteria, complied either with the specifics of the country and importance of the rural area type.

The criteria for selection of the pilot area are:

- Rural area with a population density below 150 inhabitants/km2 (OECD Classification)
- Intermediate region, where between 15% and 50% live in rural local units
- Accessible - half of its residents can drive to the centre of a city of at least 50 000 inhabitants within 45 minutes
- Low GDP
- Specified labour market

Fig. 1 Map of South-central Planning Region
Source: Ministry of Regional Development and Public Work

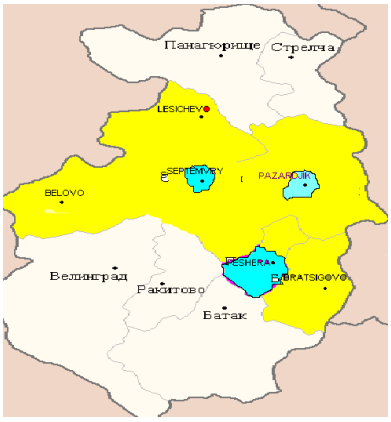

Fig. 2 Map of the urban and rural territories in the pilot area
Source: Pazardjik Region and own processing

Generally, this area is composed of 6 LAU1 municipalities - Belovo, Bratzigovo, Lesichevo, Pazardjik, Peshera, Septemvry, which are part of all 11 municipalities involved in Pazardjik region (Oblast), as the total number of all LAU 2 settlements is 73. As a result of the applied methodology, the rural settlements

are defined as ones that have a population less than 5 000 people and are part of the area, matching the above-mentioned criteria. As regards this criteria, as rural must be defined all 70 settlements, whereas other Septemvry and Peshera must be classified as small urban centres and Pazardjik as big urban place.

Methodology

The main method used to explore the problem is the case study. The case study approach is complex and includes a variety of other, quantitative and qualitative methods. As for the methodological approach, the secondary analysis of statistical data and relevant literature about the pilot area (reports, monographs), semi-structured / in-depth interviews with 20 key informants and structured interviews for recording information about successful initiatives for employment creation are done. Based on these results, a SWOT analysis is conducted, followed by Strategic Orientation Round analysis to evaluate the employment development potential of the pilot area.

The main model and hypothesis is depicted as DPSIR, i.e. driving force, pressure, state, impact and response (Fig. 3) to show the link between 'driving forces' which affect employment and economic prosperity, and policy responses. This model has been widely used with environmentally oriented researches but has not previously been applied to rural employment researches. The driving forces (or 'needs'), which influence the demand for workers and the supply of the workforce, and which catalyse different process can be 'endogenous' (human, social, financial, natural or physical capitals) or (neo-) 'exogenous' (investors, market, knowledge centres, governmental policy and cultural assets). They act on the labour market or employment ('state') through the 'pressures' of economy (economic activities) and people (well-being). In turn, the employment rate (jobs per person) and associated parameters influence the 'impact' (economic prosperity, change of the state and improvement of the socio-economic life). 'Responses' are responses of the local people and of the other agents evincing as commuting, migration and business relocation.

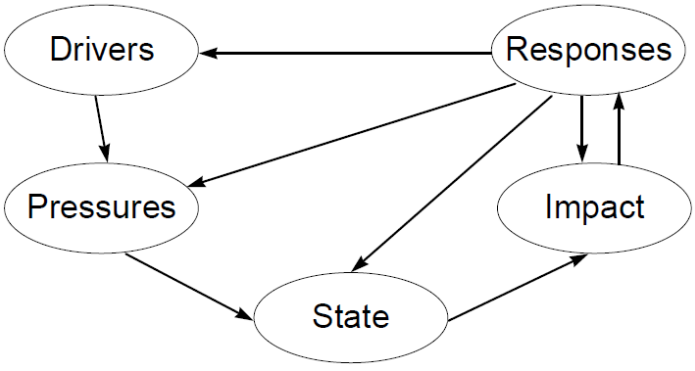

Fig. 3 The DPSIR framework for reporting on environmental issues
Source: Smeets and Weterings, 1999

The Logical Framework Approach is aftermaths implemented to operationalise the DPSIR model and to identify the opportunities for creation of employment in the selected pilot area, representing a widespread rural type in Bulgaria. The LFA is thought as an "aid to thinking". The LFA is facilitated by the local stakeholders pooled in groups. The LFA is staged is divided of several stages, as the key milestones are the identification of the problems (weaknesses in the state, drivers and undesirable responses) and achievement of propitious objective (propelling of the strengths to create opportunities and prosperous impact).

Demographic structure

The population of the pilot area enumerates 205 537 people, 101 380 of which men (42.32%) and 104 157 (50,68%) women in the beginning of this century. In 2007, the pilot area population ran to 198 055 inhabitants, 97 151 of which men – (49.05%) and 100 904 (50.95%) women.

The data by the Directorate General for Civil Registration and Administrative Services (DG CRAS) concerning the registered inhabitants shows that for the period 2000 – 2007 the population number has decreased with 3.4%. For the three towns in the region with population over 5 000 people – Pazardzhic, Peshtera and Septemvry this decrease is 2.5%, while for the villages territory it numbers nearly 5%. The number of municipalities' inhabitants, the administrative centre of which has less than 5 000 people decreases with a rather higher rate. The percentage of the population living the rural area in the region is about 45% out of whole population dispersed around 70 town and village units.

The differences between levels of the indicator pertaining to the natural growth of the population in the urban and rural parts of the pilot area are significant during the period 2000-2007 and continue to exacerbate. At the beginning of this period, the respective figures are -0.87‰ and - 0.42‰, while at the end of the period - 0.13‰ and - 4.57‰. This development is determined from the population aging, especially notable occurred in the rural territories and the persistent migration of young people to the urban zones. On the other hand, the reasons for such cases are the economic crisis beleaguered the rural areas in relation to the main sector agriculture and to the public service sector (education, health cares). The loss of jobs in agriculture is not compensated by the substantial spread of the other economic activities, as secondary industrial sectors and services.

Economic characteristics

As far as the 1990s might be described as years with immense economic, social and political changes that redounded to the interception of the connections between the former economic structures and a huge destroy of the former industries and services with the beginning of the new millennium were found some signals spelling for a normalization and socio-economic adjustment. Economic recovery and thriving emerged with the inception of the new millennium pertained to

the pilot area as well. The evidence this is noted in the growth of the GDP and GVA, which for the period 2002-2007 increased almost twice and in 2007, GDP amounts up to 2771 EUR. However, this level of GDP ranks the pilot area at just 73% of the country average and merely 11% out of the EU middle.

The dominant sector in the pilot area is industry, which is major activity for the municipalities: Belovo, Bratsigovo, Peshera and Septemvry. Especially for Peshera, GDP and GVA of these municipalities are predominated by the light industry and food manufacturing. Regarding the light industry, the main sub-sectors are sewing and shoe and paper production, which are found mainly in the towns and bigger villages of the pilot area. Food manufacturing is led by baking, wine production, milk and meat processing. As for Pazardjik and Lesichevo, GDP are dominated by services, as the district centre Pazardjik is one of the cities in Bulgaria with the greatest investments in trade chains, which is a paradox, taking into account the slight economic activity and low living standards of the people. The relative macro stability, investment costs and income livelihood in the pilot area are significantly contributed by the remittances of emigrants.

By the stakeholders' opinion, about 8-10% of the population in the active age has left the country and work abroad mainly in Spain, Greece and Italy. This circumstance subserves for the slackening of the unemployment pressure during the last 7-8 years and conduces for the improvement of the living standard and consumers' demand. However, the pilot area, which represents the approximately 2/3 of the economic and human potential of the Pazardjik (NUTS 2) region does not manage to entice key and structural investments, which inhibits the favourable development of the labour market and stability of the regional economy. The major part of the investments have been concentrated on Sofia and Plovdiv, which has transformed them as poles of growth and has engendered other investments to embark there, forming investment clusters. Such scenarios are reinforced by the path dependency theory, as far as Adam Smith (A. Smith, 1776 [edition 1977]) has noted that businesses of a certain type tend to congregate geographically, attracting workers with skills in that business, which draw in more businesses looking for employees with experience.

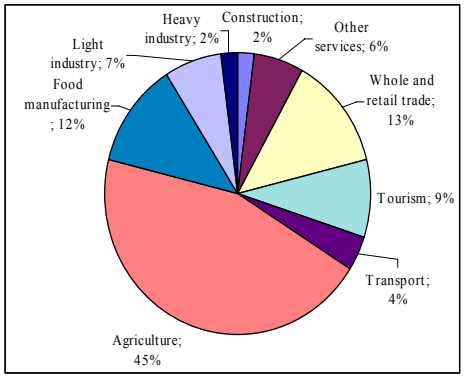

Fig. 4 Sector pattern in rural areas, 2007
Source: Field survey data

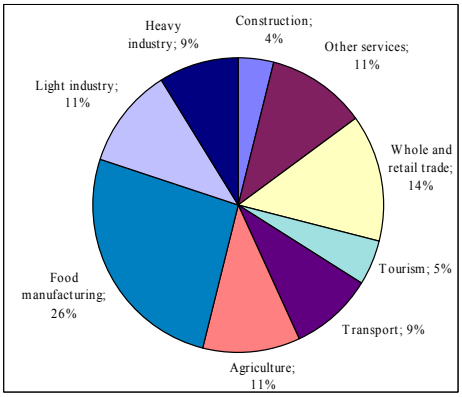

Fig. 5 Whole area pattern of sectors, 2007
Source: NSI and Municipal Development Plans

The economic situation in rural areas is strongly dominated by agriculture (Fig. 4) and the diversification process is heavily hindered. The most significant decline collated with the whole area data is scored in food manufacturing. It testifies that the rural areas are mainly suppliers of raw outputs, whereas the processing is concentrated in urban places. A rise is noted regarding tourism, manifesting the perspectives for its development. The main sub-sector in the pilot area is food and beverage manufacturing (Fig. 5). It is explicable that even though this production is appropriate to exist in the rural areas, in case of pilot area, a major part is located in the urban centres.

Employment and unemployment

The average unemployment level significantly decreases from 22.4% (2000) to 8,1% (2007), which is a national feature, as this indicator is a bit higher than the country average, which in 2007 is less than 7.5%. The high unemployment percentages are observed in all rural areas characterized as remote from the urban centres, aging and depopulating processes are strong. These factors are very pressing and the poly-centricity is transformed in concentricity, where both biggest cities (Pazardjik and Peshera) siphon up the human and labour resources from outside. The lowest unemployment rate is noted for Peshera and Pazardjik (about 4.5%) and it encourages many unemployed people to move into these centres.

In the rural parts, the unemployment by the survey data is estimated up to 16% (2007), which is significantly higher than the average unemployment in the urban areas. Besides, the participation rate in the rural parts is also over than the counterpart participation in urban centers, as between 24-25% of the working active population there does not partake in the labour market. Thus, it is estimated that the actual unemployment in rural areas might reach up to 40% out of the economic active population.

Another feature is that both urban centres perform as engines of some growth and they manage to bear out positive externalities on other neighbouring rural places. It means that the labour force from the villages located adjacent to both centres indicate higher employment rates than the remote and less accessible places. The data from the pilot study clearly demonstrate that there is a high correlation between the size of the population and unemployment state, as places with bigger labour potential and better demographic indicators fulfil a better performance. Thus, in a zero sum game, the centres with better performance swallow up the labour, human and social resources from other centres and determine their affected path dependency.

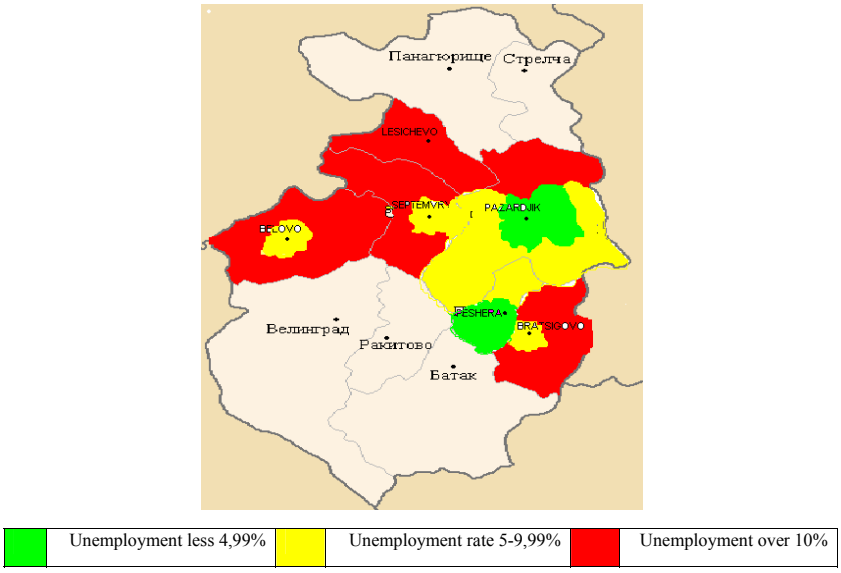

Fig. 6 Map of unemployment intensity
Source: Pazardjik Region and Pazardjik Region and own processing

There is a special category of labour force, without education, with lack of vocational skills and with defective working habits, which is inflexible and falls to permanent unemployment. It is ascertained that the significant part of the permanent unemployed are people with decadent personality, observed as specific of human capital in the rural areas. There is a strong correlation between long-term unemployment and feasibility to find some job, as persistent unemployment almost determines the jobless and decreased chances these people to get employment. The labour demand, it significantly retards behind the supply, as 23 unemployed are available per each vacant place.

The average salaries of the employment in pilot area are some of the lowest throughout the country. They account for scarcely 74% of the average salaries earned by labour contracting nationwide. The urban-rural differences are found far in the historical development of the whole country, when with the beginning of industrialization and urbanization, the labour force from the vil-

lages had been pulled out and designated into the urban industrial enterprises. The political and economic changes of the 1990 affected to a greater extent the economies and welfare of the rural areas due to the structure of agricultural and food chain predominantly deployed there. With the decomposition of the former agricultural cooperatives, where were engaged over 50% of the working force in the rural areas, all of these people lost their jobs and their salaries and reoriented either to private household production or moved to the urban centres. Altogether, the economy of the pilot area with few exceptions proves not to be resistant to the new conditions and a major fraction of the industrial sector was destroyed, the unemployment soared up, and respectively the salaries and incomes went down.

The economic performance in rural areas in terms of lower incomes and remuneration and impediments to get employment forced a significant part of working population to resort to permanent emigration. For instance, during socialism, the urban-rural relationships in terms of commuting and living were encouraged by subsidised transport fares, which encouraged a lot of people to live in rural areas and to work in the urban ones. However, with the end of the previous system, such policies ceased and people were provoked to migrate to places with bigger feasibility to get employment and higher incomes.

Strengths and weaknesses

Weak sides of the area have been examined as challenges: entrepreneurs put on first place the conditions for economic initiatives' financing. The problem is attributed not so much in the credit institutions' development and their products' rather than in the lack of active entrepreneurship and people distrust in the bank behaviour. The procedures are estimated as heavy. Especially burdensome problem create the compensations' requirements. There is a lack of venture capital and consulting services in this sphere. The credit access and the banks' attitude are determined by the general economic situation and the institutional environment. Anther disadvantage is the administrative barriers and the administrative service as a whole. They are exaggerated and insufficiently effective. The administration is not accepted and apprehended as necessary and useful factor for the economic development.

The demographic collapse in the area is placed also among the weak sides. The population's aging and the labour force lost, as a result of migration and immigration, deprive the area from new modern economic activities development. The lake of occupation is also a weak side of the region. The truth is that in some villages in the periphery, economic activity is reduced to farms producing for their own consumption and some trade services. The lack of income sources puts these regions in the marginal area.

The factor "uncompetitive agriculture" deserves special attention. The structural and institutional problems in the sector and the low support level define the weak production competitiveness and profitableness. In these conditions the agriculture could not retain and attract labour force and investment. Although the young inhabitants of the area are related to agriculture, they prefer secure and high-salary positions in the town centres or abroad. The crisis of the leading economic sector is accepted also as a consequence from the weakness of the local economy and society.

How to estimate the opportunities for the new employment sources' development? In the first place, they have relation to the assimilation of the EU development funds, which has been influenced by SAPARD application. In second place is the food-processing sector development. The business and the other interested persons understand that the profitable and stable production could be realized only by products having higher added value. The local human capital use is estimated to have the same positive force. A conception has been supported about the availability of persons with the necessary qualification, willing to work responsibly and effectively, making efforts for their own development, at the same time. The fourth factor, revealing opportunities, is the business support. The local entrepreneurs need partners, the banks, but also they need state and municipal support. The business requires politic answer to the defiance in front of it, by the strictly formulated policy and with the aid of the state institutions (administration, tribunal etc.). In last place, because of the local economy state, the RES were not examined as important source of new labour positions. As a whole, the development opportunities were estimated in traditional branches and activities' restitution, conforming to the changed conditions. The menaces for the development are related to the market access, i.e. the low competitiveness and the weak marketing; the incapacity to assimilate EU funds, which is real and confirmed by the facts, and the social services access – education and health, which diminishes the chances for progress.

The mineral water's availability has been evaluated as a strong side and development's precondition. There are some necessary conditions – available financial resource, entrepreneurs' experience and behaviour and qualified labour force. In combination with the changing life model and the proximity to big town centres, the complete utilization of this natural resource could give a relatively fast result and realize a spa-resort model, based on unique natural availabilities. To these arguments we can add the archaeological heritage, which would expose the Bulgarian historical past value.

Among the area's strong sides, human resources are the most important. The general estimation is that the necessary labour force for economic development is available. In the conditions of fast structural and technological changes, new forms for education and qualification acquisition are necessary.

Opportunities and threats

Organic and eco agriculture

The structure of agricultural production in the region as well as countrywide is propitious for expansion of the organic and eco-based production schemes. Nowadays, about 35% of producers use organic-like practices. However, due to different reasons and mostly to the cost certification procedures and unclear effects from the certification brand, only a minor part of the producers have a right to brand by label their production as organic. Another obstacle for the enlargement of the producers applying organic-bound production schemes is the dual production structures in the majority of farms, wherein only half is designated to the market, whereas the rest of the output is for internal consumption.

Agriculture is still a very important sector in the rural area of Bulgaria and for the short and medium time terms will be very difficult to neglect and to seek for employment outside this production. About 21% of the working active population in the pilot area is occupied in agriculture and their possibility is to

bend into production of qualitative fresh vegetables and fruits that have bigger additional value. The imminent changes in the CAP alleged to phase out direct payments under I pillar and to adopt payments for public goods also may encourage producers to shift into such supported agriculture.

Added value in food processing

The food processing industry has a rich history in the area, as the collapse of this production occurred with the political and economic transformation and the dissolution of the Committee of Mutual Economic Assistance. Nowadays, the pilot area lacks serious and working food enterprises from the can and manufacturing industry and producers are cumbered to realize their production. The appearance of processing enterprises will not only redound to employment growth but will increase the added value from the agricultural activities and will incite agricultural producers eventually to dilate their farming.

The pilot area is dominated by vegetable and fruit-growing, as these activities are much more labour-intensive than the cereal and meat productions thus the employment as now as in future will be more or less based on farming and food processing. Particularly, food processing will not significantly increase employment rather it will promote the incomes of rural people that is a factor for fulfilling this activity and to stay in rural areas. For the sake to achieve the merits from the food industry in terms of more employment and higher incomes, the measures for overcoming the great barriers connected with the not loyal import of agricultural input. Another crucial need is providing public funding for projects integrating local producers, as the built up food processing enterprises should be linked with the local producers to provide the input.

Logistic and storage sector

The pilot area has propitious geographic location and comparatively well-developed transport infrastructure, which should be used for employment growth. It is the most convenient and appropriate portal for the resource provisioning in relation to the agricultural input and forest materials coming from the mountainous areas. The pilot area provides inherent possibilities for establishment of warehouses, distributive centres, packaging enterprises and logistic centres trading with agricultural output that will stimulate employment and will promote the overall importance of the region.

Employment might be increased by building, maintaining and working in such centres, which will lead to creation of more jobs outside agriculture. The profile of jobs will be also diversified and enriched, as in these centres may work not only serving personnel but qualified staff. The development of such centres and sectors is principally suitable for rural areas, where the price of the land is cheaper, they are closer to the resource sources and the logistic is more appropriate. To valorise such development and to prop up the appearance of such businesses is very important to provide attractive conditions to companies and to concentrate the resource supply to the suitable points in the rural area.

Renewable Energy Sources (RES)

Renewable energy sources are another prospective field where rural areas may look for development. The area enclosed in Pazardjik-Plovdiv valley is noted as having the most sunshine and favourable for solar parks and the investment interest is significant, as these projects might be implemented by the financial support of Operative Programmes and Rural Development Programme. Nowadays problems accompanying the expansion of RES are identified in the relatively long investment return span and the price of generated electricity, which requires the State warranty for prices and electricity procurement. The RES in the broad view are assumed to be one part from the so-called 'green economy', which will create the possibility for setting up new economic cycles in rural areas. Due to the features of rural areas (landscape, open space, natural resources), they possess notable advantages in the development of RES and to achieve structural change of their labour market. The RES engage quite a number of people in the establishment period and vice versa few jobs during the exploitation period but attract people with special skills to stay in rural areas.

Cultural and natural-based tourism

The pilot area disposes with different and attractive cultural and natural favourites that are not yet well developed and do not contribute to the employment and diversification of jobs. Utilization of mineral water sources is a considerable possibility for the rural places as Bratsigovo, Belovo, Varnava (Septemvry municipality), etc to take advantage by development of recreation tourism and commercial enterprises.

Abreast with thermo resources, the rural parts of the pilot area are available with sites with ancient historical value (ruins from Roman and Thracian age, old-architectural neighborhoods, etc), which also might generate new employment and income sources for local people. It is assumed that animation of cultural-based tourism might be attained by significant exogenous support to aid for revelation, amelioration and promotion. The public-private partnership together with alleviation of the procedure for concession and public investment is the verified formula for the operation and utilization of these tourism activities.

Consultancy and service sectors

The consultancy sector is one of the most dynamic businesses developing after the accession of Bulgaria to the EU. It is noted that usually the projects fulfilled in the rural areas of the pilot region are consulted by experts living in urban centres. However, with the start of RDP 2007-2013 and especially the LEADER approach, the number of the consultants and experts originating from the rural area increases. Abreast with that, the number of the initiations implemented in the rural areas for establishment of the tourism centres, centres for serving the local people and guest visitors, Internet and information bureaus, etc is going up too. It ensures the possibility for educated and more qualified working people either to get employment or to set up their own busi-

nesses. The development of such services in rural areas and creation of more jobs might be achieved ultimately by the external financial support, which to exhort people that is better to stay "first in the rural area rather than to be last in the urban places".

Conclusions

The solution of the governance problems of the development of the pilot area should be sought in the following directions:

1. The integral analysis shows that for overcoming the backwardness are necessary investments, which in their prevailing part could be exogenous for the region. It pertains not only to public investments for the improvement of the main social services, but to private investments in business projects as well. Because of this, a key significance is the increase of the administrative efficiency at municipal level in order to manage social projects and business initiatives, as well as to create and maintain the functioning of social centres of development, supporting especially new founded business and innovations.
2. It is necessary to reinforce the possibilities for financing of local projects by own financial sources, which implies financial decentralization. This would allow to take decisions at the nearest to the concerned level of management and will contribute for more complete absorption of the EU funds for development (creating opportunities for co financing).
3. Creating at municipal level capacity for business and innovation support. The experience demonstrates that in the majority of cases the local entrepreneurs initiatives are the drivers of economic development. The support for the business by the local authority, through a rational utilization of municipal resources (land, buildings, etc.), the improvement of the administrative services and the processing of the regulatory frame are from a considerable importance for the achievement of a sustainable economic growth.
4. The full-bodied participation of the concerned parties - business associations, non government organizations and the local authority in the process of taking management decisions is essential for the formulation and implementation of vital policies and strategies of development. Related to this is particularly important to carry out LEADER type projects using a "bottom-top" approach.
5. The improvement of institutional efficiency at regional level. According to the actually acting regulation the planning and coordinating functions of governors are weak and inefficient. They achieve control functions upon the local authorities but at the same time are not an elected body and may interfere the activities of the municipalities (LAU 1).
6. The governments and other political decision makers should launch more cardinal measures for facing the challenges in the rural areas, not only by providing public funds to these areas but also by providing additional benefits and privileges for innovative and high-tech investors, whenever they start initiatives in rural areas with serious problems and doldrums.
7. Improving the access of rural inhabitants to social services and working positions in the municipal and urban centres developing transport links and communications.

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