MULTIFUNCTIONAL DEVELOPMENT OF RURAL AREAS

INTERNATIONAL EXPERIENCE

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Wydawnictwo Wyższej Szkoły Ekonomiczno-Społecznej
w Ostrołęce

OSTROŁĘKA 2012

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Projekt okładki – Cover Design
Arkadiusz Bloch

Na okładce wykorzystano zdjęcia autorstwa Barbary Dawcewicz
The photograph on the cover by Barbara Dawcewicz

ISBN 978-83-929620-7-6

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Punkty Informacji Europejskiej w Ostrołęce
Europe Direct

Publikacja wydana ze wsparciem finansowym
Komisji Europejskiej w ramach projektu
Europe Direct

Ark. wyd. 8,84
Druk: Drukarnia LIBRA-PRINT Daniel Puławski
www.libra-print.pl

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MAIN ABBREVIATIONS

AWU	-	Annual Work Unit
ARiMR	-	Agencja Restrukturyzacji i Modernizacji Rolnictwa (Agency for Restructuring and Modernisation of Agriculture)
CAP	-	Wspólna Polityka Rolna (Common Agricultural Policy)
CIS	-	Wspólnota Niepodległych Państw (Common of Independent States)
EU	-	Unia Europejska (European Union)
ESU	-	Economic Size Unit
EAFRD	-	European Agricultural Fund for Rural Development
FADN	-	Farm Accountancy Data Network
GAC	-	Good Agricultural Condition
GUS	-	Główny Urząd Statystyczny (Central Statistical Office)
IMF	-	International Monetary Fund
KBE	-	Gospodarka Oparta na Wiedzy (Knowledge Based Economy)
MRiRW	-	Ministerstwo Rolnictwa i Rozwoju Wsi (Ministry of Agriculture and Rural Development)
ODR	-	Ośrodek Doradztwa Rolniczego (Agricultural Advisory Center)
OECD	-	Organizacja Współpracy Gospodarczej i Rozwoju (Orgainization for Economic Cooperation and Development)
PTTK	-	Polskie Towarzystwo Turystyczno-Krajoznawcze (Polish Tourist and Sightseeing Society)
PROW	-	Program Rozwoju Obszarów Wiejskich (Rural Development Programme)
PGR	-	Państwowe Gospodarstwo Rolne (State Agricultural Farm)
RAAC	-	Regional Agricultural Advisory Center
RDP	-	Rural Development Programme
SERA	-	Study on Employment in Rural Areas
SOP	-	Sectoral Operational Programme - Agriculture
SAPARD	-	Special Accession Programme for Agriculture and Rural Development
UNDP	-	United Nations Development Programme

INTRODUCTION

The aim of the European Union's rural development policy is to promote multifunctional development of rural areas. The policy addresses not only farms, but also the entire rural environment. The concept of multifunctional development has been fostered in response to the numerous problems experienced by rural areas. The key challenges to rural growth include low incomes generated by farm owners, high unemployment, in particular in areas that were once dominated by State Agricultural Farms, and social exclusion of rural inhabitants. In an attempt to limit migration from rural to urban areas, multifunctional development promotes non-agricultural activities in the countryside, including business, tourism, agritourism, forestry and residential construction.

Multifunctional development is not a new concept in Poland. The need for restructuring measures in the countryside was particularly dire when the market transformation processed commenced in 1989. The majority of State Agricultural Farms were closed down, but most employees were unable to embrace the change. Many of them still inhabit rural areas and struggle with unemployment. The concept of multifunctional development creates various opportunities for improving the livelihoods of rural families. This idea inspires researchers to identify factors that affect entrepreneurial behaviors of rural inhabitants.

The concept of multifunctional development surfaced in response to the depopulation of the Polish countryside. Young and educated people are increasingly likely to search for employment opportunities in the cities. The discussed approach was also designed to decrease high unemployment rates among rural residents who are reluctant to search for new jobs in urban areas.

The papers were compiled into a monograph to promote the concept of multifunctional development of rural areas and the ensuing opportunities for non-farm activities in the field of tourism, services and small-scale production.

The publication has been structured to address the key functions of rural areas. The first part discusses determinants of multifunctional development of rural areas. The second part contains papers dedicated to agriculture, animal production and farm effectiveness. It also concerns economic functions. It describes investments and their role in the multifunctional development of rural areas, enterprise growth in the countryside, knowledge management and the diffusion of innovations in farming and food processing businesses in rural areas. Moreover, it is devoted to environmental functions with special emphasis on the development of agritourism and rural tourism. The last part addresses the EU and its significance for the multifunctional development of rural areas.

Piotr Bórawski

PART I
DETERMINANTS OF MULTIFUNCTIONAL DEVELOPMENT OF RURAL AREAS

1

FACTORS CONTRIBUTING TO THE MULTIFUNCTIONAL DEVELOPMENT OF RURAL AREAS IN THE OPINION OF FARMERS WITH ALTERNATIVE SOURCES OF INCOME[1]

Piotr Bórawski, Wojciech Gotkiewicz

1.1. Problems of Agriculture Development

Agriculture has always played an important role in European Union policy. The agricultural sector received preferential treatment due to a shortage of farming products. In the late 1950s, more than 15 million people were employed in the agricultural sector of six Member States of the European Community (accounting for around 20% of the total work force), and they generated around 10% of the national income[2]. Member States undertook various measures to guarantee uninterrupted food supplies, and they increased farm incomes by introducing intensified production systems.

In industrialized countries, agriculture ceased to be a major sector of production although agricultural productivity and performance indicators continued to increase. Agriculture supplies food, and its marginalization has a negative impact on the industry itself as well as the consumers. According to estimates, the European farming sector would be deprived of competitive edge on the global market since many countries have better climatic and environmental conditions for growing food. The farming industry is also faced with domestic competition, mainly as regards land which is in high demand for non-agricultural projects (business development, road construction). Rural residents are significantly less educated than city dwellers, and the added value generated in agriculture flows to other sectors of the economy[3].

Small-scale individual farms prevail in the Polish agricultural sector. They account for 99.7% of all farm types, and they occupy 84.5% of the total agricultural acreage. Small-scale farms generate 90.1% of total agricultural production, 94.3% of net agricultural production and 92.9% of net market output in agriculture[4]. Polish farms are undergoing dynamic change. The number of farms is decreasing, while their average acreage continues to grow. Polish farms are vastly differentiated with regard to resource availability.

[1] The survey was carried out as part of a habilitation degree project with the support of grant No. NN112 386240 from the Ministry of Science and Higher Education.

[2] M. Adamowicz [1997]: Wspólna polityka rolna Unii Europejskiej. Doświadczenia – problemy – perspektywy. Biuletyn Informacyjny ARR, Warszawa: 6.

[3] M. Adamowicz [2009]: Współczesna rola rolnictwa a modele interwencjonizmu rolnego. Wieś i Rolnictwo 2/143: 33.

[4] F. Kapusta [2003]: Teoria agrobiznesu. Wyd. AE, Wrocław: 147.

The Polish countryside is characterized by significant variations in the level of social and economic development. According to Michna (2009), many people leave the agricultural sector due to unsatisfactory incomes[5]. The rate of urbanization and development is also high in rural areas across Europe. In France, only 27% of the rural population works in agriculture, and most countryside inhabitants are employed in processing plants and other industries. The situation is similar in Austria, where only 25% of rural residents work in agriculture. For the Polish countryside to develop, new jobs have to be created outside the farming sector. The success of this scheme depends on the presence of non-farming activities in rural areas. The majority of Polish farms are small or medium-sized estates. Small-scale farms have a low market output, but they play an important role as sources of modest income and places of residence[6]. The smallest farms also contribute to the preservation of the natural environment and cultural heritage[7]. The Polish agricultural sector is gradually divided between two types of farms. The first are low output community farms that give employment to farmers. The second groups comprises competitive and business-oriented farms with larger acreage[8]. The main disadvantage of low output farms is that they make modest use of resources[9].

Dzun and Jóźwiak (2009) quote EU statistics which indicate than in 2007, 70.2% of Polish farms had the area of 0-5 ha, 15.5% farms – 5-10 ha, 12% farms – 10-30 ha, and 2.3% farms – 30 ha and more[10]. Owing to the low use of other resources, farms are classified based on their economic size which is expressed in terms of Economic Size Units (ESU). This classification provides even less satisfactory results: the size of 80.5% farms was estimated at up to 4 ESU, 9.3% farms – 4-8 ESU, 9.4% farms – 8-40 ESU, 0.8% farms – 40 ESU and more. According to the above authors, only farms whose area exceeds 40 ESU have real growth potential because the generated income guarantees the return of invested capital, fair remuneration for workers and fixed asset investments. Nonetheless, the majority of labor and land resources remain in the hands of small-scale owners whose farms are characterized by low output, low productivity and low economic effectiveness. The key prerequisites for improvement in agricultural effectiveness are increased acreage and specialization.

Subsidization schemes addressed to low output farms that do not supply goods for the market continues to be the subject of much controversy. Low-performance farms contribute to the preservation of an agrarian structure inherited from the past. The high rate of farmland conversion to non-agricultural uses is a serious problem in Poland and the EU, and it poses a threat to food security[11].

Globalization has a negligible effect on the economic situation of farms[12]. Agricultural production is dependent on land, an immobile factor, and food products are slowly distributed

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5 W. Michna [2009]: Źródła wzrostu i rozwoju wsi tkwią głównie w tworzeniu nowych miejsc pracy. Roczniki Nauk Rolniczych, Seria G, T. 96, z. 4: 140.

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7 W. Józwiak [2006]: Funkcjonowanie i role społeczne najmniejszych gospodarstw rolnych. Wieś i Rolnictwo nr 2.

8 A. Woś [2003]: Szanse i ograniczenia przekształceń strukturalnych polskiego rolnictwa. Komunikaty, Raporty, Ekspertyzy z. 491, IERIGŻ, Warszawa.

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11 J. Wilkin [2011]: Przyszłość wspólnej polityki rolnej Unii Europejskiej - próba podsumowania dyskusji. Wieś i Rolnictwo 1/150: 30.

12 M. Adamowicz [2008A]: Teoretyczne uwarunkowania rozwoju rolnictwa z uwzględnieniem procesów globalizacji i międzynarodowej integracji. Roczniki Nauk Rolniczych, Seria G, T. 94, z. 2: 50.

across markets. Globalization leads to the industrialization of agriculture, it decreases the share of farming in the economic surplus and income generated by the agricultural sector.

The rate and progression of changes in Polish rural areas will be determined by the level of incomes in the agricultural sector. A special role will be played by enterprising farmers who will generate revenues from both farming and non-farming activities[13]. For the Polish agricultural sector to become fully harmonized with EU requirements, massive spending is required to develop modern infrastructure (commodity exchanges, wholesale markets, market information systems, marketing options in agriculture, export promotion). Such measures call for the consolidation of Polish farms and improved organization of commodity producers. Poland's agricultural policy should promote rural areas as locations that support not only farming production, but also progress of civilization. EU structural funds are increasingly often utilized in support of the above goal[14].

Rural inhabitants' passive attitude towards the search for new solutions and alternative sources of income is a factor that impedes development in the countryside. The European Union's policies, including the provisions of the Lisbon Strategy, aim to accelerate changes in rural areas and increase employment levels among its residents[15]. There are many underlying causes of rural inhabitants' passive behavior, among them the reluctance to take up new employment, fear of change, mismatch between employee qualifications and employer expectations and lack of initiative to become self-employed[16].

The key obstacles to the development of contemporary agriculture include problems with the sale of agricultural produce, liberalization of agricultural trade, low incomes in agriculture, competition within agricultural branches, collapse of traditional values, etc. European markets are characterized by agricultural overproduction, and their production systems are highly efficient[17]. In Poland, many farms are fragmented, and their owners have problems with expanding the harvested acreage.

The main factors supporting compliance with the requirements of the EU's agricultural policy include the availability of external resources and the ability of businesses, farms, food processing enterprises as well as government institutions to raise funds that promote regional growth[18]. The European Union sets stringent qualitative requirements for food products which are traded on the common market. In order to improve the quality of their produce, Polish farmers have to raise the level of capital investments and introduce organizational and technical changes in their estates[19].

Having regard to the identified challenges to rural growth, the concept of multifunctional development is discussed in successive parts of the study.

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1.2. Multifunctional Development of Rural Areas – Goals and Premises

Multifunctional development of rural areas is a concept that promotes non-agricultural activities and aims to overcome the stereotypical treatment of the countryside as a monofunctional area[20]. According to Kłodziński (1996), multifunctional development entails the initiation of additional non-agricultural activities in rural areas[21]. This concept was coined in response to the problems reported in the countryside, and it was not a mere attempt to increase employment. The main goal of multifunctional development is to improve living conditions and to modernize the infrastructure in rural areas. The measures initiated as part of this approach increase rural incomes, promote enterprise development and enhance the attractiveness of rural areas as potential places of employment and residence[22].

According to Zarębski (2001), the implementation of multifunctional development projects in rural areas will deliver the following benefits[23]:

- economic – development of infrastructure in rural areas, support for investment projects, increased attractiveness of the countryside as a potential residential area, improved agricultural productivity,
- social – improvement of living conditions, educational standards and safety,
- political – higher level of political stability, integration of rural communities.

The multifunctional development of rural areas is aligned with the concept of sustainable development, and it supports the achievement of balance between economic, social and environmental growth[24]. The measures initiated as part of multifunctional development projects promote good management practices in agriculture, they decrease unemployment, increase awareness of environmental issues and improve the living conditions of rural inhabitants.

The concept of multifunctional development seeks to diversify the roles and functions played by the countryside. Multifunctionality implies the development of new areas of activity. Every key function encompasses a number of complementary activities. The main and supplementary functions include[25]:

- agricultural: plant and animal production,
- forestry: development of forestry and the timber industry,
- environmental: development of organic farming,
- recreational: tourism, catering services, culture and education,
- residential: construction of holiday homes, allotment gardens,
- retail and services: sale of farming produce, recreational activities,
- industrial: development of enterprise, food processing companies and other businesses,
- alternative energy sources: geothermal and hydrothermal energy,
- demographics and culture: social and residential functions, protection and management of

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cultural landscape.

Otoliński and Wielicki (2003) have proposed to divide agricultural functions into old and new roles. The primary functions include the production of food as well as raw materials for the processing industry. The new functions expand the traditional farming tasks to include the supply of renewable sources for the production of bioplastics, the supply of biomass for the generation of renewable energy, generation of solar and wind energy, environmental protection, nature conservation and landscape cultivation[26].

1.3. Objective and Methods

The main aim of this study was to identify the factors that support rural development. The survey was carried out as part of project No. NN112 386240, and it covered 169 farms with diversified sources of income. The analyzed farms were classified into four groups based on their production profile and sales structure:

- 30 ostrich farms (where ostrich production generates more than 40% of sales, and each of the remaining activities – less than 30% of sales),
- 27 fallow deer farms (where fallow deer production generates more than 40% of sales, and each of the remaining activities – less than 30% of sales),
- 20 goat farms (where goat production generates more than 40% of sales, and each of the remaining activities – less than 30% of sales),
- 92 farms with diverse income-generating activities (where each activity generates less than 30% of sales).

Information about the surveyed farms' productive output was acquired from associations of ostrich, goat and deer breeders as well as from Agricultural Advisory Centers (ODR). The study was carried out in two FADN regions: Pomorze and Mazury (provinces of Warmia-Mazury, Pomerania, West Pomerania and Lubusz) Mazowsze and Podlasie (provinces of Podlasie, Mazowsze, Łódź and Lublin).

Purposive sampling was used to target farms which:

- were willing to participate in the survey,
- were members or partners of Agricultural Advisory Centers (ODR),
- generated alternative sources of income.

The study was carried out with the involvement of diagnostic surveys and questionnaires.

1.4. Farmers' Opinion about Factors Contributing to Multifunctional Development

The study analyzed the following factors that contribute to rural development: municipal spending on environmental protection and improvement of living standards, implementation of solutions that promote growth in rural areas. The study aimed to survey farmers' opinions about investment schemes that are most needed in rural areas. The majority of the respondents signaled the need for investment projects in the area of environmental protection, construction of wastewater treatment plants and cultural facilities. Farmers who generate alternative sources of income showed particular interest in the promotion of culture in the coun-

[26] E. Otoliński, W. Wielicki [2003]: Kierunki rozwoju wsi i gospodarstw rolnych. Roczniki Akademii Rolniczej w Poznaniu CCCLVIII: 107.

tryside. The polled subjects were also supportive of investment schemes aiming to build sports fields, swimming pools, residential estates and schools. Sports facilities, including swimming pools, are in low supply in rural areas. Young people residing in the countryside have limited access to such amenities in comparison with their peers in urban areas. The respondents from all surveyed groups gave least support to the construction of new churches. The reported need for higher spending on education results from the fact that the condition of school buildings and educational standards in rural areas are significantly lower than in the cities. In comparison with their peers in urban areas, rural youths have fewer opportunities to attend extracurricular courses, develop their interests or learn foreign languages.

The surveyed respondents also pointed to the importance of infrastructure development projects, including the construction of roads, water supply networks and sewage mains systems. These results indicate that farmers are aware of the growing demand for infrastructure in rural areas (Table 1).

Table 1. The most needed investments in the municipality in the respondents' opinion (%)*

Specification	Farms with varied sources of income	Breeding farms		
		ostriches	fallow deer	goats
Residential construction	17.4	26.7	14.8	15.0
Cultural facilities	36.9	30.0	25.9	40.0
Churches	4.3	3.3	3.7	5.0
Sports fields, swimming pools	26.1	23.3	18.5	25.0
Environmental protection, wastewater treatment plants	56.5	40.0	59.3	50.0
Construction or renovation of school buildings	11.9	6.6	7.4	10.0
Other	17.4	13.3	18.5	25.0

Source: own data.
** Respondents were allowed to choose more than one answer.*

The respondents were asked to indicate factors that promote the development of rural areas. The owners of farms with a diverse source of income and the owners of ostrich and fallow deer farms emphasized the importance of scenic value. This answer was dictated by the fact that some of the respondents rely on agritourism to supplement their farm income. Agritourist farms are situated in the vicinity of lakes and forests which attract tourists. According to the owners of goat farms, the most important factor that stimulates rural development is convenient location (proximity of the city) which facilitates transport, farming operations and contacts with prospective markets. As regards other growth-promoting factors, the respondents were divided in their opinions. For the owners of farms with a diversified production profile, people and friendly attitudes were an important criterion of success (Table 2). The development of rural areas is largely determined by the local residents' attitudes, their openness to change and willingness to adapt to common market requirements. The owners of ostrich farms emphasized the importance of the estate's convenient location. Fallow deer breeders claimed that fertile soils were an important prerequisite for rural development. Soil quality determines crop yield, and it largely contributes to the effectiveness of agricultural production. For goat

breeders, the key determinants of rural growth were scenic value, a friendly community and the proximity of potential markets.

Table 2. Natural and social factors that contribute to rural development in the respondents' opinion (%)*

Specification	Farms with varied sources of income	Breeding farms		
		ostriches	fallow deer	goats
Natural resources (timber and other)	18.5	33.3	37.0	35.0
Fertile soil	15.2	30.0	33.3	25.0
Convenient location (proximity of urban areas)	31.5	50.0	22.2	55.0
Scenic value	78.3	63.3	55.6	45.0
Friendly community	38.0	30.0	22.2	45.0
Proximity of potential markets, convenient transport	19.6	23.3	18.5	45.0
Other	1.1	6.7	0.0	20.0
Undecided	10.9	0.0	7.4	0.0

Source: own data.
* Respondents were allowed to choose more than one answer.

The respondents were also asked to specify economic solutions that would benefit rural development (Table 3). The majority of subjects from all surveyed groups emphasized the need for greater spending on infrastructure development. These results suggest that farm owners recognize the importance of infrastructure in the multifunctional development of rural areas. The owners of farms with a varied production profile and goat breeders pointed to the need for higher agricultural subsidies. Farmers are increasingly aware of the benefits that follow from European integration, direct subsidies and the Rural Development Program for 2007-2012. The effectiveness and competitive edge of the agricultural sector would be greatly impaired without state subsidies and the Common Agricultural Policy of the European Union. For ostrich and fallow deer breeders, investments in regional development were most conducive to rural growth. Measures of the type contribute to the multifunctional development of rural areas, environmental protection and the conservation of natural resources.

The respondents were also of the opinion that rural development would significantly benefit from the introduction of systems that support the owners of small enterprises. The promotion of non-agricultural production is a growth catalyst and a vital source of alternative income for farmers.

Table 3. Economic solutions that contribute most to rural development in the respondents' opinion*

Specification / variable	Farms with varied sources of income	Breeding farms		
		ostriches	fallow deer	goats
Investments in regional development, resource availability	31.5	43.3	33.3	35.0
Increased spending on infrastructure development	68.5	83.3	81.5	75.0
Systems that support small business owners	31.5	33.3	33.3	30.0
Increased agricultural subsidies	38.0	40.0	22.2	45.0
Encouraging external investment	12.0	10.0	7.4	20.0
Sale of enterprises to foreign investors	1.1	0.0	3.7	5.0
Sale of land to foreign investors	1.1	0.0	7.4	5.0
Other	2.2	3.3	7.4	20.0
Undecided	9.8	0.0	7.4	0.0

Source: own data.
** Respondents were allowed to choose more than one answer.*

The sale of farms and land to foreign investors was the least popular option for the majority of respondents. These results indicate that farmers are very attached to their land and that land ownership is a measure of farmers' independence.

1.5. Conclusions

The multifunctional development of rural areas stimulates the growth of farming, tourist, economic and environmental functions. It reduces unemployment, increases farm incomes and contributes to the preservation of the region's cultural heritage. This theory is validated by the results of the discussed survey, where most respondents were of the opinion that the municipal authorities should increase spending on investments in the area of environmental protection, wastewater treatment and the construction of cultural facilities.

According to the polled subjects, the factors that are most conducive to rural development include scenic beauty, a friendly community and convenient location. The results of the study indicate that farmers have a well-developed awareness of environmental issues. The fact that none of the respondents pointed to education as a prerequisite for rural development is, however, a cause for concern.

Farmers recognize the need for the infrastructure development in the countryside. Infrastructure construction projects improve living standards and bridge the urban-rural divide. Farmers would also gladly welcome higher state subsidies which support the introduction of modern solutions and increase the competitive advantage of the agricultural sector. According to farm owners, the creation of systems that stimulate non-agricultural production would provide rural inhabitants with a vital source of alternative income.

The multifunctional development of rural areas will be determined by the availability of funds for agricultural and non-agricultural projects. To support the achievement of the above goal, the existing priorities of the Common Agricultural Policy should not be radically modified in the 2014-2020 period.

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2

DETERMINANTS OF MULTIFUNCTIONAL DEVELOPMENT OF RURAL AREAS – THE EXAMPLE OF THE REGION OF WARMIA AND MAZURY

Katarzyna Pawlewicz

2.1. Resources and Determinants of Multifunctional Development

In Poland, rural areas occupy 291 300 km^2 and account for more than 93% of national territory. They are inhabited by nearly 15 million people, i.e. 38.9% of Poland's population, of whom half are engaged in farm activities. Rural areas account for 97.5% of the territory of the Region of Warmia and Mazury, and their inhabitants have a 40% share in the region's population[27]. Those territorially expansive areas hold vast potential which should be appropriately developed and managed.

Rural areas and agriculture are highly diversified in terms of their organizational structure and level of development. Those variations are a reflection on the region's history, and they are also shaped by natural, demographic, economic, social and cultural factors[28].

The multifunctional development of rural areas comprises various types of non-farm production and service activities that create new jobs. In highly developed countries, off-farm operations are regarded as the key driver behind social and economic activation of rural areas[29].

The development of non-farm activities entails a departure from the monofunctional character of rural areas which relies mainly on crop and livestock production[30]. For the change

[27] Charakterystyka obszarów wiejskich w 2008 r. [2010]: Główny Urząd Statystyczny. Urząd Statystyczny w Olsztynie, Olsztyn: 106, 112.

[28] F. Wysocki [2010]: Metody taksonomiczne w rozpoznawaniu typów ekonomicznych rolnictwa i obszarów wiejskich. Wydawnictwo Uniwersytetu Przyrodniczego w Poznaniu, Poznań p. 9 for B. Klepacki. Polityka strukturalna Unii Europejskiej jak element łagodzenia dysproporcji regionalnych [In:] Regionalne zróżnicowanie produkcji rolniczej w Polsce. Instytut Uprawy, Nawożenia i Gleboznawstwa, Państwowy Instytut Badawczy, Raporty 3, 2006, Puławy: 19-31.

[29] A. Matczak A., D. Szymańska [2000]: Wielofunkcyjność – klucz do rozwoju wsi podmiejskiej. Przykład gminy Wielka Nieszawka w strefie podmiejskiej Torunia [In:] B. Górz [Ed.] Szanse rozwoju rolnictwa i obszarów wiejskich ze szczególnym uwzględnieniem pogranicza polsko-ukraińskiego. XVI Ogólnopolskie Seminarium Geograficzno-Rolnicze, Zakład Geografii Ekonomicznej Uniwersytetu Marii Curie-Skłodowskiej, Komisja Geografii Rolnictwa i Gospodarki Żywnościowej Polskiego Towarzystwa Geograficznego, 2000, Lublin: 187.

[30] M. Kłodziński [1997]: Istota wielofunkcyjnego rozwoju terenów wiejskich [In:] M. Kłodziński, A. Rosner [Ed.] Ekonomiczne i społeczne uwarunkowania i możliwości wielofunkcyjnego rozwoju wsi w Polsce. Wydawnictwo SGGW, 1997, Warszawa: 41.

process to commence, rural areas have to evolve in various directions to acquire a competitive edge in a modern economy[31].

The process of multifunctional development of rural areas implies more than the creation of new jobs. It is a broader concept that seeks to promote local development, growth of enterprise, strategic planning, diversification of farm activities and development of infrastructure[32]. For this reason, a comprehensive approach to rural and agricultural development is required.

The development potential of Polish rural areas lies in the following resources and opportunities[33]:

- absorption of surplus farm labor into non-farm activities or agricultural support services without the need for relocating members of the local community,
- creating an attractive environment for members of the rural community through landscape shaping, improved access to consumer goods, recreational opportunities, etc.,
- stimulating economic activities that complement farm work in the areas of agritourism, food processing, production and consumer services, etc.,
- creating a supportive environment for settlers from urban areas who have their own sources of income and search for healthy lifestyle options, including freelancers, pensioners, persons who commute to work in the city, professionals who rely on technological advancements, etc.,
- creating a supportive environment for entrepreneurs seeking new business opportunities in areas that are characterized by an abundance of natural resources, scenic environment, cheaper labor, lower taxes, closer family ties, sentimental value, etc.,
- promoting the growth of tourism in rural areas by developing tourist facilities, recreational centers, tourist accommodation, camping sites, tourist services, etc.

The main objective of measures that instill positive changes in rural areas on both the regional and local scale is to improve the living conditions of the local community, enhance the competitiveness of local businesses, create equal access to opportunities for external support and boost the economic potential of a given territorial unit[34].

The development of rural areas is determined by numerous factors, mostly the availability of resources and the presence of a supportive environment for growth. The contributors to rural development can be divided into internal factors (a given area's strengths and weaknesses in view of the available resources) and external factors (opportunities and threats presented by the external environment).

External factors create both opportunities (i.e. a supportive environment that should be utilized by rural inhabitants) and threats (i.e. an unsupportive environment which can inhibit rural growth if adequate preventive measures are not initiated). Those factors are shaped by growth trends as well as key social and economic factors such as[35]:

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31 M. Feltynowski [2009]: Polityka przestrzenna obszarów wiejskich. W kierunku wielofunkcyjnego rozwoju. CeDeWu Sp. z o. o., Warszawa: 141.

32 M. Kłodziński, op. cit.: 41.

33 J. Borkowski [2001]: Obszary wiejskie – niewykorzystany potencjał rozwojowy [In:] L. Kolarska–Bobińska, A. Rosner, J. Wilkin [Ed.] Przyszłość wsi polskiej. Wizje, strategie, koncepcje. Instytut Spraw Publicznych, Warszawa: 38-39.

34 Z. Brodziński [2011]: Stymulowanie rozwoju obszarów wiejskich na poziomie lokalnym na przykładzie gmin województwa warmińsko-mazurskiego. Wydawnictwo SGGW, Warszawa: 141-142.

35 A. Potoczek [2003]: Polityka regionalna i gospodarka przestrzenna. Agencja TNOIK i Centrum Kształcenia i Doskonalenia Kujawscy, 2003, Toruń: 46-49.
M. Szczurowska, K. Podawca, B. Gworek. [2005]: Wielofunkcyjny rozwój terenów wiejskich szansą dla wsi. Ochrona Środowiska i Zasobów Naturalnych Vol. 28: 52.

- demographic factors, i.e. trends and phenomena related to population size, migration, population structure and demographic processes,
- economic factors, i.e. the local community's purchasing power, indebtedness, economic growth, financial phenomena (e.g. inflation), economic condition, business performance and structural changes in the local economy,
- technical factors associated with the introduction of new technologies, materials, production and communication systems,
- legal and institutional factors relating to legal regulations, the presence and location of institutions in the social and economic system which create an operating framework for local enterprises and projects,
- cultural and social factors, such as changes in lifestyle, value systems, sociological processes and phenomena,
- ecological factors, including the rational use, allocation, protection and management of natural resources.

The external environment, namely the strengths and weaknesses of a given area, is shaped by the availability of material and non-material resources and limitations to resource ownership. The predominance of weaknesses over strengths can significantly inhibit local development.

A rural area is characterized by the following internal factors[36]:

- a municipality's economic, technical and scientific potential, human resource availability, (e.g. number of businesses, employment in various sectors of the economy),
- availability of technical and social infrastructure (e.g. coverage of sewer, gas supply and water supply networks),
- environmental condition and natural resources (e.g. forests, farmland, protected areas),
- a municipality's financial resources,
- the local authorities' involvement in local development, their management skills, willingness to create a supportive environment for enterprise growth, ability to raise funds for public utility projects,
- local community's involvement, creativity, level of education and culture (e.g. level of professional activity).

Agriculture is not the only domain of activity in rural areas where the natural environment, infrastructure and institutional framework also play an important role. For this reason, rural inhabitants can take up a variety of alternative activities that provide them with an additional source of income. Rural areas offer vast resources that enable members of the local community to derive incomes from diversified sources, including agritourism, forestry, preliminary food processing or handicraft.

Multifunctional development of rural areas is a highly complex concept. It combines local development with the growth of enterprise, infrastructure, agriculture and forestry. Multifunctional development demands comprehensive management solutions that account for a broad range of factors.

[36] M. Szczurowska M., K. Podawca, B. Gworek, *op. cit.: 52*.

2.2. Objective and Methods of the Study

The objective of this study was to classify municipalities in the Region of Warmia and Mazury based on the attained level of multifunctional development.

In our work, we relied on the data supplied by the Local Data Bank of the Central Statistical Office[37] for 2002-2010 covering 100 municipalities, including 33 mixed urban-rural municipalities and 67 rural municipalities, in the Region of Warmia and Mazury. In mixed urban-rural municipalities, only the data concerning their rural sections were taken into account.

The level of development is determined by ranking objects (e.g. regions, businesses, municipalities or rural areas) with regard to the investigated structural aspect – a complex phenomenon that cannot be measured directly or expressed by a single trait (e.g. the farms' developmental skills, level of social and economic development in municipalities, level of multifunctional development of rural areas)[38]. Complex phenomena, including multifunctional development of rural areas, are described with the use of synthetic variables. A set of multiple explaining variables is replaced with a single synthetic variable to reduce the number of variables, facilitate estimation and, in some cases, to eliminate parameter values which are inconsistent with the direction in which single explaining variables influence the explained variable. The above approach also limits the number of equations required to build a model. The main disadvantages of the proposed method are interpretation difficulties[39].

There are various methods of creating synthetic variables that rely on selected diagnostic variables. In our study, we deployed a popular method developed by Z. Hellwig[40].

Diagnostic variables are selected from a set of potential variables characterizing the studied phenomenon. The following indicators of the level of multifunctional development were identified based on a review of the available literature[41]:

- x_1 – population density,
- x_2 – number of entities entered into the REGON business register per 10,000 inhabitants,
- x_3 – employment in the sector of market services,
- x_4 – employment in agriculture in terms of 100 conversion hectares,
- x_5 – employment in industry,
- x_6 – usable living space,
- x_7 – tourist accommodation capacity,
- x_8 – share of forests in total area,

[37] http://www.stat.gov.pl/bdl/app/strona.html?p_name=indeks access: 20/12/2011 – 8/01/2012.

[38] F. Wysocki, op. cit.: 9.

[39] M. Cieślak [2001]: [Ed.]. Prognozowanie gospodarcze. Metody i zastosowanie. Wydawnictwo Naukowe PWN, Warszawa: 119.

[40] Z. Hellwig, op. cit. pp. 307-327; D. Strahl, op. cit.: 28-29.

[41] T. Borys [2005]: Wskaźniki zrównoważonego rozwoju. Wydawnictwo Ekonomia i Środowisko, Warszawa.
T. Borys [2008]: Zaprojektowanie i przetestowanie ram metodologicznych oraz procedury samooceny gmin na podstawie wskaźników zrównoważonego rozwoju w Systemie Analiz Samorządowych (SAS). Raport z realizacji pracy. Uniwersytet Ekonomiczny we Wrocławiu. Jelenia Góra – Poznań.
Z. Brodziński [2011]: Stymulowanie rozwoju obszarów wiejskich na poziomie lokalnym na przykładzie gmin województwa warmińsko-mazurskiego. Wydawnictwo SGGW, Warszawa.
J. Salamon [2007]: Klasyfikacja funkcjonalna obszarów wiejskich województwa świętokrzyskiego [In:] Inżynieria Rolnicza 8(96).

- x_9 – share of protected sites in total area,
- x_{10} – share of farmland in total area,
- x_{11} – coefficient of professional activity,
- x_{12} – number of farms engaged in on-farm and off-farm activities,
- x_{13} – coverage of water supply network,
- x_{14} – coverage of gas supply network,
- x_{15} – coverage of sewer network.

The numerical description of a set of objects can be presented in the form of observation matrix X:

$$X = \begin{bmatrix} x_{11} & x_{12} & \cdots & x_{1m} \\ x_{21} & x_{22} & \cdots & x_{2m} \\ \cdots & \cdots & \cdots & \cdots \\ x_{n1} & x_{n2} & \cdots & x_{nm} \end{bmatrix},$$

where: x_{ij} – value of the j^{th} attribute of the i^{th} object ($i = 1, 2, \ldots, n$; $j = 1, 2, \ldots, m$).

The values of attributes, i.e. diagnostic variables, can have different physical dimensions, which renders them unfit for a direct comparison. To enable such a comparison, the studied parameters have to be normalized (by eliminating the effect of units of measurement). For the purpose of normalizing variables, the analyzed parameters were standardized in line with the below formula:

$$z_{ij} = \frac{(x_{ij} - \bar{x}_j)}{S_j}, \qquad (j = 1, 2, \ldots, m),$$

where:

$$\bar{x}_j = \frac{1}{n} \sum_{i=1}^{n} x_{ij},$$

$$s_j = \sqrt{\frac{1}{n} \sum_{i=1}^{n} (x_{ij} - \bar{x}_j)^2},$$

The above transformations produce a matrix of standardized parameter values *Z*.

$$z = \begin{bmatrix} z_{11} & z_{12} & \cdots & z_{1m} \\ z_{21} & z_{22} & \cdots & z_{2m} \\ \cdots & \cdots & & \cdots \\ z_{n1} & z_{n2} & \cdots & z_{nm} \end{bmatrix},$$

where: z_{ij} is the standardized value of $x_{ij.}$

The resulting matrix was used to determine the "pattern of development". The "pattern of development" is an abstract object P_0 (rural area) with the following coordinates:

$$P_0 = [z_{01}, z_{02}, \ldots, z_{0j}]P_0,$$

where: $z_{0j} = \max\{z_{ij}\}$, when Z_j is a stimulant, and $z_{0j} = \min\{z_{ij}\}$, when Z_j is a destimulant.

The above indicates that the "pattern of development" is represented by a hypothetical municipality with the most desirable values of the analyzed variables.

The Euclidean distance between every evaluated object P_i (rural areas) and the identified "pattern of development" was calculated using the below formula:

$$q_i = \sqrt{\sum_{j=1}^{m}(z_{ij} - z_{0j})^2},$$

The resulting values of q_i were used to calculate the value of Hellwig's synthetic measure of development which was applied to evaluate the examined municipalities. The above indicator takes on the following form:

$$S_i = 1 - \frac{q_i}{q_0}, \qquad (i = 1, 2, \ldots, n),$$

where:

$$q_0 = \bar{q}_0 + 2s_0,$$

$$\bar{q}_0 = \frac{1}{n}\sum_{i=1}^{n} q_i,$$

$$s_0 = \sqrt{\frac{1}{n}\sum_{i=1}^{n}(q_i - \bar{q}_0)^2}.$$

In most cases, Hellwig's synthetic measure of development S_i takes on values in the range of (0,1). The closer the value of the indicator is to one, the higher the level of development in the studied object. The closer a municipality is to the "pattern of development", the higher its level of multifunctional development.

The investigated municipalities were classified based on their level of multifunctional development using standard deviation and arithmetic mean of Hellwig's synthetic measure of development.

Four classes (four levels of multifunctional development) were identified[42]:

- class I (very high level of multifunctional development) $S_i \geq \overline{S_i} + s_{S_i}$,
- class II (high level of multifunctional development) $\overline{S_i} \leq S_i < \overline{S_i} + s_{S_i}$,
- class III (moderate level of multifunctional development) $\overline{S_i} - s_{S_i} \leq S_i < \overline{S_i}$,

[42] F. Wysocki, *op. cit.: 167-168, 300.*

- class IV (low level of multifunctional development) $S_i < \overline{S_i} - s_{S_i}$,
- where:
- S_i – value of the synthetic measure calculated using Hellwig's pattern of development,
- $\overline{S_i}$ – arithmetic mean of synthetic measure S_i,
- s_{S_i} – standard deviation of synthetic measure S_i.

2.3. Indicators of Multifunctional Development

Hellwig's synthetic measure of development was used to classify rural areas in the Region of Warmia and Mazury with regard to their level of multifunctional development. The studied areas were grouped into four classes. Indicator values are presented in Table 1. The classes of rural areas characterized by different levels of multifunctional development are shown in Table 2.

The values of the synthetic measure of multifunctional development in 100 rural areas belonging to rural municipalities and mixed urban-rural municipalities in the Region of Warmia and Mazury ranged from 0.012 to 0.449. The highest value of the index was noted in the rural municipality of Dywity, and the lowest – in the municipality of Rychliki.

Our results indicate that nearly one-half of rural areas in the Region of Warmia and Mazury were characterized by a moderate level of multifunctional development (46%), implying that they were class III objects. Only 12% (class IV) of the analyzed areas showed low levels of development. The majority of those objects were situated along the Polish-Russian border, along the administrative boundaries of the Region of Pomorze-Pomerania, and (excluding Frombork) far from major transport routes. The remaining areas were characterized by high (26%) and very high (16%) levels of multifunctional development. The majority of those objects were situated in the vicinity of large and medium-sized cities, mostly Olsztyn (6 areas) and Elbląg (1 area). This group of objects was also inclusive of urban municipalities and their surrounding areas, including Giżycko, Mrągowo, Szczytno, Ostróda and Iława (Fig. 1).

The results of the analysis are illustrated in Figure 1.

Table 1. Values of the synthetic measure of multifunctional development in rural areas of the Region of Warmia and Mazury

No.	Rural municipalities / rural areas in mixed urban-rural municipalities	S_i	No.	Rural municipalities / rural areas in mixed urban-rural municipalities	S_i	No.	Rural municipalities / rural areas in mixed urban-rural municipalities	S_i
1.	Dywity	0.453	35.	Węgorzewo	0.184	69.	Lidzbark	0.125
2.	Stawiguda	0.452	36.	Kętrzyn	0.181	70.	Jeziorany	0.124
3.	Gietrzwałd	0.420	37.	Lubawa	0.177	71.	Janowo	0.122
4.	Giżycko	0.405	38.	Olecko	0.176	72.	Pisz	0.121
5.	Ostróda	0.364	39.	Dubeninki	0.175	73.	Godkowo	0.120
6.	Iłowo-Osada	0.347	40.	Gronowo Elbląskie	0.174	74.	Wielbark	0.117
7.	Iława	0.300	41.	Świętajno	0.174	75.	Braniewo	0.117
8.	Jonkowo	0.296	42.	Bartoszyce	0.174	76.	Płoskinia	0.115
9.	Elbląg	0.287	43.	Ruciane-Nida	0.168	77.	Kiwity	0.114
10.	Sorkwity	0.285	44.	Ryn	0.167	78.	Orneta	0.113
11.	Mrągowo	0.281	45.	Milejewo	0.166	79.	Stare Juchy	0.113
12.	Szczytno	0.274	46.	Miłomłyn	0.163	80.	Janowiec Kościelny	0.109
13.	Purda	0.268	47.	Markusy	0.162	81.	Pasłęk	0.109
14.	Kurzętnik	0.267	48.	Lubomino	0.160	82.	Świątki	0.108
15.	Jedwabno	0.262	49.	Reszel	0.158	83.	Prostki	0.107
16.	Barczewo	0.262	50.	Olsztynek	0.158	84.	Bisztynek	0.105
17.	Rybno	0.253	51.	Rozogi	0.157	85.	Orzysz	0.103
18.	Piecki	0.252	52.	Kolno	0.156	86.	Tolkmicko	0.099
19.	Łukta	0.251	53.	Gołdap	0.154	87.	Kalinowo	0.096
20.	Biskupiec	0.250	54.	Kowale Oleckie	0.152	88.	Kozłowo	0.089
21.	Kruklanki	0.248	55.	Lidzbark Warmiński	0.152	89.	Pieniężno	0.084
22.	Świętajno	0.233	56.	Pasym	0.150	90.	Barciany	0.084
23.	Nowe Miasto Lubawskie	0.232	57.	Dobre Miasto	0.148	91.	Miłakowo	0.080
24.	Pozezdrze	0.230	58.	Susz	0.147	92.	Lelkowo	0.078
25.	Dąbrówno	0.219	59.	Budry	0.142	93.	Zalewo	0.074
26.	Banie Mazurskie	0.218	60.	Biskupiec	0.139	94.	Górowo Iławeckie	0.071
27.	Grodziczno	0.216	61.	Grunwald	0.138	95.	Kisielice	0.063
28.	Miłki	0.215	62.	Dźwierzuty	0.136	96.	Frombork	0.051
29.	Małdyty	0.213	63.	Młynary	0.136	97.	Biała Piska	0.040
30.	Ełk	0.210	64.	Działdowo	0.135	98.	Korsze	0.040
31.	Wydminy	0.199	65.	Morąg	0.132	99.	Sępopol	0.028
32.	Płośnica	0.193	66.	Wieliczki	0.128	100.	Rychliki	0.021
33.	Srokowo	0.193	67.	Wilczęta	0.125			
34.	Mikołajki	0.192	68.	Nidzica	0.125			

Key: S_i – value of the synthetic measure calculated using Hellwig's pattern of development
Source: own study based on data from the Local Data Bank of the Central Statistical Office43.

[43] http://www.stat.gov.pl/bdl/app/strona.html?p_name=indeks access: 20/12/2011 – 8/01/2012.

Table 2. Rural areas in the Region of Warmia and Mazury grouped into classes corresponding to their level of multifunctional development

Specification	Class I	Class II	Class III	Class IV	Total
	very high level of multifunctional development	high level of multifunctional development	moderate level of multifunctional development	low level of multifunctional development	
Rural areas of the Region of Warmia and Mazury	16 (16%)	26 (26%)	46 (46%)	12 (12%)	100 (100%)

Source: own study based on data from the Local Data Bank of the Central Statistical Office[44].

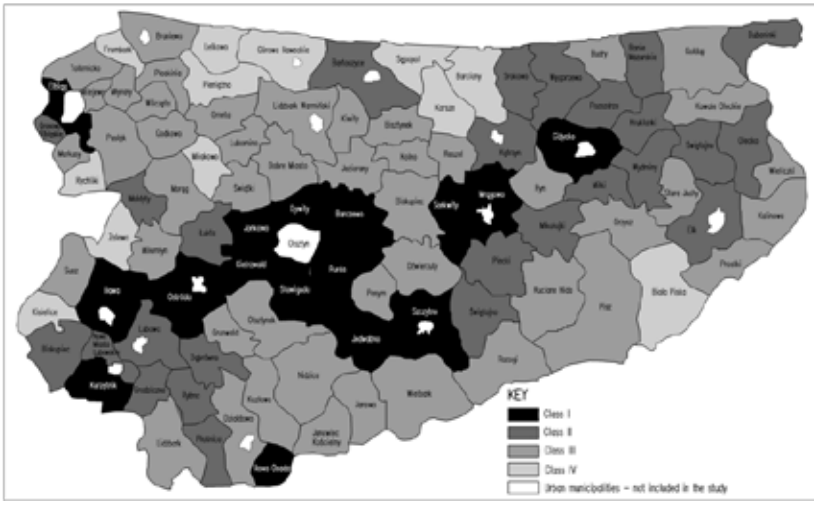

Fig. 1. Visualization of the synthetic measure of multifunctional development of rural areas in the Region of Warmia and Mazury

Source: own study based on data from the Local Data Bank of the Central Statistical Office[45].

2.4. Conclusion

Our analysis of rural and mixed urban-rural municipalities in the Region of Warmia and Mazury revealed significant variations in the level of multifunctional development of rural areas. The level of development was most profoundly affected by spatial factors, i.e. the direct proximity of cities and major transport routes. The most highly developed objects were areas situated in the immediate vicinity of Olsztyn, whereas the lowest levels of multifunctional development were noted in areas situated further from the region's capital city and major transport routes.

[44] op. cit.

[45] http://www.stat.gov.pl/bdl/app/strona.html?p_name=indeks access: 20/12/2011 – 8/01/2012.

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PART II
AGRICULTURAL, ECONOMIC AND ENVIRONMENTAL FUNCTIONS OF RURAL AREAS

3

EVALUATION OF FARMS WITH ALTERNATIVE SOURCES OF INCOME[46]

Piotr Bórawski, Adam Pawlewicz

3.1. Alternative Sources of Income in the Concept of Multifunctional Development

Rural development is determined by the local residents' attitudes towards the generation of alternative sources of income. As a result of European integration and social and economic transformations in the countryside, only 8% of rural inhabitants derive their incomes solely from agriculture and only 47.5% farms sell their produce on the market[47]. Rural inhabitants are increasingly likely to diversify their sources of income and pursue non-farm livelihoods. Farm incomes are significantly affected by direct subsidies as well as various types of business activity that support the generation of income from non-agricultural sources. Agritourism is a vital branch of the local economy which provides farmers with an alternative source of income. In addition to purely economic gain, agritourism also promotes the rise of environmental awareness in the local community. Agritourist farms contribute to the preservation of the region's traditions, and service providers improve their skills and knowledge by attending training courses[48].

Agritourism has been studied by various researchers, among them Niewadomski (2010). According to the above author, the development of agritourism is determined by natural attractions such as forest cover, share of grasslands and the region's vitality in terms of population growth. Agritourism is closely related to farms, agricultural production and farmer families[49].

Poland's membership in the European Union has created new opportunities for agritourist activities as part of the Rural Development Program for 2007-2013, Measure 3.1. Development and diversification of economic activities providing alternative income. Farms are entitled to subsidies of up to PLN 100,000 which include 50% eligible costs[50]. Those funds can

[46] The survey was carried out as part of a habilitation degree project with the support of grant No. NN112 386240 from the Ministry of Science and Higher Education.

[47] M. Kłodziński [2004]: Wielofunkcyjny rozwój wsi jako szansa poprawy sytuacji dochodowej ludności. Wieś jutra 7(12):4.

[48] A. Kaczmarska [2010]: Możliwości rozwoju agro i ekoturystyki w Polsce na przykładzie województwa śląskiego. Acta Scentiarum Polonorum Oeconomia 9(3): 211-223.

[49] K. Niewiadomski [2010]: Czynniki różnicujące rozwój gospodarstw agroturystycznych w Polsce. Wieś i Rolnictwo 2/147: 203.

[50] http://www.prow.sbrr.pl/index,5,75,232,pl.html

be used for the construction, expansion and reconstruction of tourist facilities in rural areas[51].

Ostrich, fallow deer and goat breeding also offers an alternative source of income. Farms of the type are still rare, but they continue to attract growing popularity. The success of such enterprises is determined by the farmer's knowledge and perseverance because the discussed types of activities are wrought with many problems, such as the scarcity of funding resources.

The development of non-farm activities complements the concept of multifunctional and sustainable development. In line with the provisions of the rural development policy, government ministries supervising various branches of the national economy are expected to cooperate. Dynamic growth of the countryside requires greater participation of the local community, and this process creates new jobs, reduces unemployment and increases the significance of non-farm activities.

The concept of multifunctional development of rural areas advocates the search for alternative sources of income. This approach became popular in consequence of social and economic transformations that had taken place in the countryside and the ensuing decrease in farm incomes[52]. The success of the multifunctional development strategy varies throughout Poland – the highest levels of entrepreneurship are noted in western and central parts of the country, whereas eastern provinces continue to be plagued by the highest unemployment rates.

The concept of sustainable development supports the achievement of balance between economic, social and environmental growth[53]. Sustainable development ties together the concern for the carrying capacity of natural systems with the social challenges facing humanity and future generations.

In view of the fact that multifunctional development creates vast opportunities for rural growth, this paper examines the functioning of farms that rely on alternative sources of income to boost their livelihoods.

3.2. Objective and Methods

The aim of this study was to evaluate the functioning of farms with alternative sources of income. The survey was carried out as part of project No. NN112 386240, and it covered 169 farms. The analyzed farms were classified into four groups based on their production profile and sales structure:

- 30 ostrich farms (where ostrich production generates more than 40% of sales, and each of the remaining activities – less than 30% of sales),
- 27 fallow deer farms (where fallow deer production generates more than 40% of sales, and each of the remaining activities – less than 30% of sales),
- 20 goat farms (where goat production generates more than 40% of sales, and each of the remaining activities – less than 30% of sales),
- 92 farms with diverse income-generating activities (where each activity generates less than 30% of sales).

The study was carried out in 2011 with the involvement of direct surveys and questionnaires as the main data-collection tools. The questionnaire comprised open and closed format

[51] P. Bórawski [2010]: Finansowanie działań umożliwiających pozyskiwanie alternatywnych źródeł dochodów przez właścicieli gospodarstw. Acta Scientiarum Polonorum Oeconomia 9(3): 27.

[52] M. Zajdel [2006]: Pozarolnicza działalność gospodarcza indywidualnych gospodarstw rolnych. Acta Scientiarum Polonorun seria Oeconomia 5(2): 80.

[53] M. Adamowicz [2005]: Zrównoważony i wielofunkcyjny rozwój rolnictwa a agronomia. Annales Universitatis Marie Curie-Skłodowska sectio E Vol. LX, Lublin: 73.

questions. Various sources of promotional information were evaluated by the polled subjects on a five-point scale. The respondents were asked to grade the specified sources of information on a scale of 1 to 5 points, where 5 points were assigned to sources regarded as highly significant. The results were presented in tabular form, and they were processed by descriptive analysis. Purposive sampling was used to target farms based on the information supplied by the associations of ostrich, goat and deer breeders as well as agritourist farms.

3.3. Respondents' Opinion about Conditioning of Farms Development

Promotional techniques play an important role in the development of alternative income-generating activities. Effective advertising enables a farm to sell its produce independently, and it also directs more tourist traffic to the region. The most popular form of advertising were roadside signs (Table 1). The results of our survey indicate that most promotional tools are deployed locally, and farmers choose the cheapest forms of market communication due to a shortage of funds. Press ads were also a frequently chosen alternative. Farm owners advertise their produce, such as ostrich eggs and goat milk cheese, in local and regional newspapers and magazines.

Table 1. Promotional methods used by farm owners (points)

Specification	Breeding farms			Farms with varied sources of income
	ostriches	fallow deer	goats	
Roadside signs	43.3	33.3	35.0	73.9
Press advertising	23.3	18.2	5.0	32.6
Radio advertising	3.3	3.7	5.0	2.2
Advertising on cars	10.0	7.4	-	5.4
Promotional prices	10.0	11.1	5.0	13.0
Event sponsoring	-	7.4	-	4.3
Participation in community events	20.0	11.1	5.0	10.9
Participation in trade fairs	6.7	3.7	-	1.1
Other	3.3	14.8	15.0	43.8
None	30.0	40.7	65.0	8.7

Source: compiled based on own data.

All of the surveyed farms advertised their services on the Internet. They also resorted to other promotional techniques, mainly word-of-mouth advertising where satisfied customers recommend the service to their family and friends (Table 1). The Internet emerges as the most effective advertising tool due to its broad reach and the ability to selectively reach consumer segments.

Despite the above, many farmers who generate alternative incomes do not rely on any means of promotion. The above applies particularly to the owners of goat farms (65%), fallow deer farms (40.7%) and ostrich farms (30%). A high percentage of those entrepreneurs report

poor sales, yet they do not advertise their products. The above could indicate that farm owners are not aware of the potential of advertising on a modern market.

The respondents were asked to name and evaluate the types information which is useful in running a business (Table 2). Information regarding market prices was most highly rated by fallow deer (3.9 points) and ostrich (3.8) breeders. Farmers attempting to expand their business would like to receive the highest possible price for their goods and services, and they are also interested in addressing their offer to foreign clients.

The respondents' remarks concerning the recipients of their advertising are also noteworthy. Farmers who breed animals are often unable to target their customers. For this reason, they declared an interest in information about the potential buyers.

Marketing information was deemed as important by the owners of farms with a varied production profile (3.7) as well as ostrich and fallow deer breeders (3.1 points each). These results suggest that farmers disregard the importance of marketing knowledge; therefore, they have a weak grasp of the market in which they operate.

Table 2. Types of information that would benefit farm businesses (points)

Farm		Information about			
		prices	customers	marketing	other
Farms with varied sources of income		3.5	3.5	3.7	0.5
Breeding farms	ostriches	3.8	3.5	3.1	0.4
	fallow deer	3.9	3.4	3.1	0.8
	goats	3.2	3.5	2.7	0.8

Source: compiled based on own data.

Farmers rely on various sources of business information. The respondents were asked to indicate the preferred sources of information about animal breeding. The highest number of respondents from all surveyed groups pointed to press, radio and television as the key sources of such information (Table 3). It should be noted, however, that the access to information about ostriches, fallow deer and goats is limited in conventional media. For this reason, the selected sources of information about animal breeding are relatively non-specific. In order to gain a competitive advantage on contemporary markets, farmers need access to diverse sources of information. In the modern world, the traditional role of farmers as agricultural producers is shifting towards estate management. As noted by Ciupiał (2010), agricultural producers should rely on various sources of data, and they should be able to use that information in practice[54].

According to a substantial number of the surveyed goat breeders (40%) and owners of farms with a diverse production profile, Agricultural Advisory Centers (ODR) are a useful source of information. Not all of the polled subjects were keen on working with advisors, however.

Farmers often model their management practices on the example of similar businesses. This source of knowledge was recognized as important by ostrich breeders and farms generating alternative incomes. The conduct of other agricultural businesses provides farmers with valuable information about shared problems and the available remedies.

[54] M. Ciupiał [2010]: Wykorzystanie źródeł informacji w gospodarstwach rolniczych Małopolski o różnym kierunku produkcji. Inżynieria Rolnicza 4/122: 40.

Table 3. Key sources of business information indicated by farm owners (%*)

Farm		Sources of information				
		Press, radio, television	**Neighbors and other people**	**Businesses with a similar profile**	**Advisors**	**Other**
Farms with varied sources of income		72.8	19.6	43.5	34.8	14.1
Breeding farms	ostriches	63.3	16.7	46.7	23.3	6.7
	fallow deer	51.9	14.8	25.9	25.9	33.3
	goats	65.0	20.0	35.0	40.0	25.0

Source: compiled based on own data.
** Respondents were allowed to choose more than one answer.*

A relatively high number of fallow deer breeders (33.3%) and goat breeders (25%) pointed to other sources of information, including trade magazines, professional literature, training courses organized by Agricultural Advisory Centers and the Internet. Ostrich, fallow deer and goat breeding are rare vocations in Poland; therefore the relevant information is most readily available in specialist publications. Modern tools, such as the Internet, provide users with extensive access to information; nevertheless, the available knowledge is highly dispersed and fragmented. The quality of available information affects the quality of farming decisions. Succinct and comprehensive information contributes to higher yield, improved production efficiency and higher quality of end products[55].

The respondents were asked to indicate the value of monthly expenses which are required to meet the farm's basic subsistence needs, maintain an average standard of living and a comfortable lifestyle. The highest amount of spending needed to meet basic subsidence means, maintain an average standard of living and a comfortable lifestyle was declared by fallow deer breeders and owners of farms with alternative incomes (Table 4). The above results indicate that those groups of farmers have multiple needs and that they are likely to undertake various types of activities to satisfy them.

The lowest monthly expenses were given by goat and ostrich breeders. This could suggest that those respondents lack motivation to actively search for new sources of income in their respective fields of business. Those groups of farmers also declared the lowest monthly spending required maintaining a comfortable lifestyle.

[55] A. Szeląg-Sikora, M. Ciupiał [2008]: Liczba źródeł informacji rolniczej a poziom wyposażenia gospodarstw rolnych w techniczne środki produkcji. Inżynieria Rolnicza 6/104: 190.

Table 4. Monthly expenses declared by the respondents (PLN)

Farm		Monthly spending required to		
		meet basic subsistence needs	maintain an average standard of living	have a comfortable lifestyle
Farms with varied sources of income		2 998.9	4 101.1	5 664.1
Breeding farms	ostriches	2 866.7	3 783.3	5 516.7
	fallow deer	3 241.0	4 407.4	7 203.7
	goats	2 275.0	3 125.0	4 075.0

Source: compiled based on own data.

The owners of farms pursing alternative income-generating activities were asked to evaluate their families' standard of living[56]. The majority of respondents were of the opinion that the generated incomes were sufficient to maintain an average standard of living (Table 5). These results call for optimism, and they indicate that most polled subjects recognize their business activities as meaningful. Some respondents evaluated their standard of living as very high, and the above group was inclusive of goat and fallow deer breeders. These results suggest that farmers are satisfied with their level of affluence and generated incomes.

Table 5. Attained standard of living in the farmers' opinion (%)

Specification	Breeding farms			Farms with varied sources of income
	ostriches	fallow deer	goats	
Very high	3.3	7.4	25.0	3.3
Average	33.3	55.6	35.0	34.8
Satisfactory	30.0	22.2	10.0	33.7
Very modest	16.7	3.7	30.0	14.1
Does not meet all needs	16.7	11.1	-	14.1

Source: compiled based on own data.

Families whose standard of living is satisfactory or modest are able to satisfy their basic needs, but they lack financial resources that could be invested to develop their business. The needs of those families are satisfied as regards food and shelter, but their future prospects are bleak. Low standards of living could be indicative of a farmer's reluctance to improve his financial situation, but they could also result from the lack of growth opportunities on the market.

The success of farm businesses is largely determined by the owners' qualifications and personal predisposition. Farming qualifications took on a new, formal significance after the Polish Parliament had adopted the Act on shaping the agricultural system of 11 April 2003.

[56] Standard of living can be defined as ,,the degree to which a society's material and cultural needs are satisfied by goods and services available on the market as well as public goods in a given unit of time and space. Basic needs include: food, shelter, health care, education, recreation, social security and essential furnishings" (Luszniewicz [1982]: Statystyka społeczna: podstawowe problemy i metody. PWE, Warszawa.

The above Act emphasizes the importance of farming qualifications in the process of acquiring farm land, applying for structural pensions or EU structural funds. Qualifications are also important in changing economy because they help farmers to adjust their holdings to Common Market requirements and new possibilities connected with European integration. In view of the above, the respondents were asked to indicate the types of qualifications which are most helpful in generating alternative sources of income. According to the majority of respondents, the ability to calculate the profitability ratios of a business was the most important skill (Table 6). This knowledge can be used to calculate costs, revenues, the minimum size of a profitable herd and future earnings. Business planning, including setting and pursuing goals, was regarded to be the second most important skill of a farm operator. Planning skills enable farmers to take risks and test the profitability of new business opportunities.

Table 6. The qualifications, skills and knowledge required to run a farm in the respondents' opinion (%)*

Specification	Breeding farms			Farms with varied sources of income
	ostriches	fallow deer	goats	
Farming knowledge	23.3	48.1	40.0	22.8
Calculation of profitability	63.3	40.7	70.0	67.4
Accounting skills	23.3	22.2	40.0	31.5
Technological knowledge	46.7	3.7	55.0	17.4
People management skills	13.3	22.2	40.0	29.3
Knowledge of organizational techniques	13.3	18.5	25.0	29.3
Planning skills	36.7	40.7	50.0	58.7
Intuition	36.7	29.6	50.0	47.8
Other	10.0	11.1	20.0	9.8

Source: compiled based on own data.
** Respondents were allowed to choose more than one answer.*

Agricultural knowledge was recognized as the most important factor by fallow deer (48.1%), goat (40%) and ostrich breeders (23.3%). Farming knowledge enables operators to make rational decisions concerning plant and animal production. Farmers with extensive agricultural knowledge have greater chances of success, and they make fewer mistakes. Other skills and traits that were highly valued by the respondents included courage, commitment and perseverance in performing farm tasks. The breeding of ostriches, fallow deer and goats is a highly challenging activity, it is burdened by high risk and uncertainty, and therefore, farmers have to be conscientious in their efforts and prepared for problems that accompany this line of work. Farmers can raise their qualifications be pursuing university degrees in agriculture, horticulture, veterinary medicine, animal husbandry and landscape architecture. Secondary school degrees are also available in agriculture and related fields.

3.4. Conclusion

Farmers who supplement their income through alternative enterprises can benefit from skills and qualifications relating to planning and management, in particular the ability to calculate the profitability of a business undertaking. Contemporary farmers are business operators who have an in-depth knowledge of the market environment.

The pursuit of alternative income opportunities requires effective cooperation, the exchange of information with similar businesses, shared promotional schemes at the regional level and improved access to preferential loans. In our study, most respondents relied on cheap, local methods of advertising, mainly due to a shortage of funds. Farmers should search for innovative promotional tools to market their unique products. Low sales in the farming sector often result from insufficient knowledge about effective marketing strategies. The results of our study attest to the above, and according to the respondents, information about prices, customers and marketing is vital for running a farm.

Most respondents evaluated their families' standard of living as average or satisfactory. The above could suggest that the surveyed farms are struggling with financial difficulties. Low sales figures also contribute to deterioration in the financial situation of farmer families. In order to successfully tap into alternative income opportunities, farmers have to broaden their knowledge and understanding of the market, expand their customer base and search for new, including foreign, markets.

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4

LIVESTOCK PRODUCTION IN KAZAKHSTAN. SITUATION, PROBLEMS AND POSSIBLE SOLUTIONS

Ainur Yesbolova, Mariusz Maciejczak

4.1. Agriculture in Kazakhstan

The paper aims to describe state of the art and the conditions of development of livestock sector in Kazakhstan. The Republic of Kazakhstan, located in Central Asia, is bounded in the north by Russia; in the east by China; in the south by Kyrgyzstan, Uzbekistan, and Turkmenistan; and in the west by the Caspian Sea and Russia. Kazakhstan covers an area of 2 724 900 km^2. More than two thirds of Kazakhstan's terrain consists of deserts and arid wastelands. Most of the remainder is steppes and hilly upland areas, fringed by high mountains in the east and southeast. Nevertheless, Kazakhstan hosts a significant agricultural sector and a consumer base that benefits from the recent strong performance in economic growth, which is supported by the sustained high world prices for oil.

Agriculture is one of the key sectors of the economy of Kazakhstan. The level of development of this sector has always been and continues to be a determining factor in economic and socio-political stability of the Kazakhstan society. As one of the priority directions for development of the Kazakhstan's economy - agriculture has been considered as a sector with enormous potential and large reserves. Kazakhstan's agricultural sector is focused on grain and livestock production, and significant geographic specialization among the five major regions exists in terms of the agribusiness and the food supply chain. Fish industry and animal husbandry are predominant in Western Kazakhstan, irrigated agriculture and sheep breeding in Southern Kazakhstan, food processing industry in Eastern Kazakhstan, and grain, milk and meat production in the largest agrarian area of Northern Kazakhstan. Kazakhstan initiated privatization and restructuring programs already in 1993, resulting in 90% of agriculture being under private ownership and management according to the current estimates.

According to different estimates, currently there are some 110 thousand companies in agricultural production sector working in all regions of Kazakhstan. A constraint in these companies is the availability of sufficiently trained human resources for R&D, management and marketing activities. Additional constraint is the low level of technological sophistication. Obsolete machinery is used in the production process due to problems of access to finance. According to official estimates, some 85% of the machinery currently being used in Kazakhstan is at least 12 years old and urgently requires replacement and huge amount of investment: 320 million USD according to some estimates. The scarcity of up-to-date agricultural machinery is considered one of the most pressing matters in the way of developing a modern agricultural

sector. Additionally the nonexistent seed growing industry is considered a serious constraint for agriculture sector growth. Therefore the improvement of educational as well as the introduction of new technologies in agriculture will gradually improve the situation in the raw materials sector for the food producers.

Climatic conditions of Kazakhstan enable the growth of almost all plants from the moderate thermal zone and the breeding of all kinds of livestock. Thus, livestock is an important branch of agriculture of Kazakhstan. It produces 47% of the volume of gross agriculture product. The importance of this branch is determined not only by its high share in agricultural gross domestic product, but also its great influence on the economy of agriculture and is essential as foodstuffs for domestic and foreign consumers. Traditionally, farmers raise sheep and cattle, while hog, horse and camel herding is also well developed in Kazakhstan.

The majority share of the livestock sector is cattle. Most cattle are kept in private farms, which are considered as a limit of the growth of the population and consequently the production of quality products. In Kazakhstan the annual growth of cattle breeding is stable and increasing 4% annually. This figure is low, considering the industrial development of animal husbandry conditions.

In the times of Soviet Union at the territory of Kazakhstan had up to 10 million head of cattle. In the period of transition of both social and economic processes, the cattle herd in the country declined significantly and, accordingly to the Statistics Agency of the Republic of Kazakhstan, has a little more than 6 million animals. At the same time Kazakhstan is the first in the world in terms of pasture per one head of cattle with more than 25 hectares. On this basis the territory of the Republic may feed an additional five million head of cattle.

Kazakhstan has great potential for growing competitive production in sphere of animal industries and delivery of production to the markets of Russia, Iran, Saudi Arabia and Egypt. Also the Republic Kazakhstan has great opportunities for export of meat production to Russia, as Russia imports annually 1,5 million ton meat from Argentina and Brazil. Kazakhstan is closer, so the transactional costs are naturally lower[57].

According to statistics, the world's exports of beef is shared by Brazil, which produces 28% of total exports, Australia (20%), India (11%), New Zealand (8%), United States, and Uruguay (7%). Other countries share the remaining 19%. Today, one out of three kilograms of beef sold in the world is from Brazil. It should be noted that the increase of exports of Brazilian beef is marked also in Kazakhstan. Thus, in 2004 Kazakhstan imported 376 tons of beef from Brazil; in 2006 these figures had increased to 8,912 tons, i.e. over 23 times more[58].

Livestock is an important branch of agriculture of Kazakhstan. It produces 47% of the volume of gross agriculture product in Kazakhstan. The importance of this branch is determined not only by its high share in agricultural gross domestic product, but also its great influence on the economy of agriculture and is essential as foodstuffs producer for domestic and foreign consumers. However this sector faces many problems. The paper aims to presents them and possible solutions.

[57] Ministry of Statistics of the Republic of Kazakhstan [2011]: Kazakhstan in 2010. [Ed.] A.A.Smailov.

[58] A. Yesbolova, G. Abdikerimova [2011]: Current status of livestock in South Kazakhstan Oblast: International Journal "The scientific world of Kazakhstan", ISSN -1815-9486.

4.2. Materials and Methods

The analysis presented in this paper is based on the Program for the Development of agriculture in the Republic of Kazakhstan for the years 2010 - 2014 introduced by the Resolution of the Government of the Republic of Kazakhstan from October 12, 2010, ą 1052[59]. Additionally, information from the books, scientific and statistical journals, laws and regulations of the regional and municipal authorities are used. The statistical data were collected from reports of the Ministry of Agriculture and Ministry of Statistics of the Republic of Kazakhstan.

The research was conducted on the basis of different scientific methods: sampling, grouping, and comparative systems analysis as well as abstract-logical method.

4.3. Agriculture Production in Kazakhstan

Production of gross agricultural output in Kazakhstan amounted 9.9 billion US dollars in 2010. Crop production was worth up to 4.6 billion US dollars, livestock 5.3 billion US dollars[60]. Compared with 2009, gross agricultural output in the country decreased by 11.7%. The decrease is considered due to reduced crop production by 22.6%. The value of livestock products produced grew by 2.6%.

For the study of agriculture in Kazakhstan the number of registered agricultural groups over the past five years should be considered, which is presented in the table 1.

Table 1. The number of agricultural units in the Republic of Kazakhstan

Title/ year	2006	2007	2008	2009	2010	Rate of increase or decrease 2010 to 2006, %
Total of agricultural units:	196 417	200 812	201 890	201 072	200 876	102.2
number functioning	161 962	173 132	174 608	174 651	175 636	108.4
including:						
State agricultural enterprises	65	65	79	25	35	53.8
Non-agricultural enterprises	4 919	5 224	5 203	5 145	5 408	109.9
Farms	156 978	167 843	169 326	169 481	170 193	108.4

Source: Ministry of Statistics of the Republic of Kazakhstan, 2011

[59] The Program for the Development of agriculture in the Republic of Kazakhstan for 2010 - 2014 years. [2010]: www.minagri.kz web site of Ministry of Agriculture of the Republic of Kazakhstan.

[60] Ministry of Statistics of the Republic of Kazakhstan [2011]: Kazakhstan in 2010. [Ed.] A.A. Smailov.

The data in the Table 1 shows that over the past five years, the total number of enterprises increased by 4459 units, including the non-agricultural enterprises, which increased by 489 units, and farms increased by 13,215 units. The number of state agricultural enterprises decreased however by 30 units over the period 2006-2010. The reason is because the state agricultural enterprises have proved unprofitable in the market of agricultural products.

For the analysis of cattle breeding in Kazakhstan should be studied also the main indicators of livestock by types of farms, which is presented for the period 2006-2010 years in the table 2.

Table 2. Main indicators of livestock in farms of all categories in Kazakhstan (thousand heads)

Type	2006	2007	2008	2009	2010	Rate of increase 2010 to 2006, %
Cattle	5457.4	5660.4	5840.9	5991.6	6095.2	111.6
including: Cows	2442.6	2569.0	2605.6	2675.4	2717.3	111.2
Sheep	14334.5	15350.3	16080.0	16770.4	17369.7	121.2
Horses	1163.5	1235.6	1291.1	1370.5	1438.7	123.6
Camels	130.5	138.6	143.2	148.3	155.5	119.2
Pigs	1281.9	1304.9	1352.7	1347.3	1326.3	103.4
Birds	26215.5	28239.3	29506.8	30148.4	32686.5	124.7

Source: Ministry of Statistics of the Republic of Kazakhstan, 2001, 2011

Analysis of the table 2 indicate that the growth in groups in all categories of farms of the country from 2006 to 2010 years is distributed as follows: increased in 637.8 thousand heads of cattle, including cows: 274.7 thousand units, 44.4 thousand heads of pigs, and horses -275 thousand units, with sheep and goats increased by 3035 thousands heads, camels -25 thousands heads.

The most common areas of specialization of livestock farms in Kazakhstan at present still remains: in cattle breeding - dairy, meat, dairy and meat, in pork - beef; in poultry - egg, meat, broiler (table 3).

Meat, milk and eggs are staples of the population due to their high nutritional value. Without them, it seems to be impossible to provide a high level of nutrition.

In 2010, Kazakhstan produced 937.4 thousand tons of meat, of which 406 thousand tons was beef, 142.9 thousand tons was lamb, 206 thousand tons was pork, 103 thousand tons was poultry meat, and 73 thousand tons was horse meat. However, global demand is even higher and interest in Kazakhstan's meat comes from such countries as Saudi Arabia, Japan, Russia, France, Britain, and Iran. World leaders - Argentina and Brazil - are working at maximum capacity[61].

Therefore Kazakhstan has the opportunity to occupy a niche in the global market for meat production. It needs to be noted that Kazakhstan in the production and export of grain is in the top ten global exporters of flour for the third consecutive year, ranked first. This, however, cannot be said about livestock breeding. Therefore recently the State Program of development of

[61] A. Yesbolova, G. Abdikerimova [2011]: Current status of livestock in South Kazakhstan Oblast. International Journal "The scientific world of Kazakhstan", ISSN -1815-9486.

livestock breeding was launched. The prerequisites for the initiation of this program addressed the current situation in livestock production with its set of key problems. These are a general reduction in livestock because over the past 20 years, the number of cattle decreased from 10 to 6 million heads. Additionally, there is an unfortunate situation for Veterinary Services as well as there are problems on fodder production, too.

Table 3. Production of main livestock outputs in Kazakhstan

Year	Meat (slaughter weight), thousand tons	Milk, thousand tons	Eggs, million units	Wool (physical mass), thousand tons	Karakul, thousand units
1990	1559.6	5641.6	4185.1	107.9	1821.4
1991	1524.4	5555.4	4075.3	104.4	1821.4
1992	1257.5	5265.1	3564.7	96.4	1994.5
1993	1311.5	5576.5	3288.2	94.6	1879.3
1994	1206.7	5296.0	2629.3	75.3	1950.9
1995	984.8	4619.1	1840.8	58.3	1145.2
1996	836.7	3627.1	1262.4	42.2	1033.4
1997	717.4	3334.5	1265.8	34.6	361.2
1998	636.3	3364.3	1388.4	25.2	214.3
1999	634.9	3535.2	1512.4	22.3	152.3
2000	622.6	3730.2	1692.2	22.9	129.9
2001	654.5	3922.9	1855.3	23.6	124.4
2002	672.6	4109.8	2102.1	24.8	127.6
2003	693.2	4316.7	2276.7	26.8	164.5
2004	737.1	4556.8	2316.8	28.5	145.6
2005	762.2	4749.2	2514.0	30.4	191.9
2006	808.6	4926.0	2494.7	32.4	129.3
2007	838.7	5073.2	2664.2	34.2	90.6
2008	874.2	5198.0	2989.1	35.2	115.0
2009	896.3	5303.9	3306.4	36.4	78.8
2010	937.4	5381.2	3720.3	37.6	72.6

Source: Ministry of Statistics of the Republic of Kazakhstan, 2001, 2011

Against all these problems one should mark that there is a very favorable price condition of the market. Since Kazakhstan has 182 million hectares of pasture, which gives a huge potential that only few countries in the world have, it seems obvious that livestock in Kazakhstan can be enlarged and, most importantly, be profitable. In addition the Customs Union with other Central Asia countries and harmonization of veterinary standards will make export to Russia possible, which constitutes of success factors with regard to institutional conditions[62].

[62] A. Dautov [2011]: "Kazakhstan aspires to world leadership in the meat market" /article for *«BNews.kz»*. http://www.bnews.kz/ru/news/post/58225/

On other hand, farmers must comply with the advanced technology of growing, feeding, and housing of livestock. Today, cattle are mainly in part-owner units (87%). This constitutes of a significant problem. This is due to the fact that the cattle are grazing near settlements, leading to pasture degradation. A solution for that could be to breed cattle with traditional systems. This could reduce the cost of feed; animals could spend 6 to 9 months of grazing on natural pastures. Since feed costs on average make up 60% of livestock production costs, old systems could reduce the cost of meat.

Another factor of development that should be considered is the genetic transformation of animals. At present, statistics shows that the middle weight per cattle head in Kazakhstanis 156 kg. Meanwhile, the middle weight in the USA, Australia, Canada, and Brazil is 250-300 kg. In monetary global terms, it is 1.5 billion dollars in additional revenue for the Kazakh farms.

4.4. SWOT Analysis of the Livestock Sector in Kazakhstan

In 2010, the Republic of Kazakhstan produced 937.4 thousand tons (in slaughter weight) of cattle, which exceeds the level of 2009 by 4.5%. On average, 22% of produced meat is used for industrial processing. However the bulk of produced meat is used for personal consumption. The level of consumption of meat and meat products by the population is by 39% higher than the average statistical national rate of consumption, which is 48 kg / year for 1 person). With this regard it needs to ne noted that there is a significant level of dependence on import of processed products: sausages, approximately 40%, and canned meat - 52%. More than 90% of the supply of sausages and canned food is imported from Russia, Poland, etc.[63] [Program 2010].

Table 4 presents SWOT analysis of cattle sector of Kazakhstan.

63 The Program for the Development of agriculture in the Republic of Kazakhstan for 2010 - 2014 years. [2010]:www.minagri.kz web site of Ministry of Agriculture of the Republic of Kazakhstan.

Table 4. SWOT analysis of cattle sector of Kazakhstan

Strengths	Weaknesses
- In the south-eastern Kazakhstan Climatic conditions are favorable for grazing (low-cost) sheep; - in the North, Central, West and East regions there is a surplus unused grassland suitable for transhumance of livestock; - The competitiveness of Kazakhstan Meat market in Russia.	- Small-scale production, more than 80% livestock is in the personal part-time farm; - Reducing the area under feed crops, reducing the volume of production and high cost of feed; - Sporadic cases of registration centers especially dangerous diseases of animals and birds in some regions; - Low proportion of breeding and pedigree livestock; - High level of dependence on import of meat products; - The seasonal nature of production livestock production.
Opportunity	**Threat**
- With population growth is expected increase of meat consumption. In this case, potential beef market for Kazakhstan is Russia. The entry of Kazakhstan into the Customs union raises competitiveness of domestic beef; - Production of ecologically clean production (without using genetic engineering), as well as establishing production of meat industry standards of „Halal" is potential output domestic producers of meat markets of Arab countries and the Middle East.	- High level of competition from major meat-importing countries: Argentina, Brazil, Australia, New Zealand. These countries export large amounts of frozen meat, which allows them to offer meat at prices significantly lower than the product of Kazakhstan production; - A ban on the exportation of products in connection with outbreaks of especially dangerous diseases of animals.

Source: own elaboration

4.5. Discussion and Conclusion

The major system-wide problems in the agricultural sector of Kazakhstan mentioned in different scientific papers and reports from industry are as follows[64]:

- Backwardness of agricultural technologies, physical and moral deterioration of the durable equipment;
- Small-scale agricultural production;
- Low genetic potential of seeds used and farmed livestock;
- Weak food supply, degradation of pastures;
- Lack of a uniform system of identification of farm animals and the electronic database on it;

[64] A. Yesbolova, G. Abdikerimova [2011]: Current status of livestock in South Kazakhstan Oblas. International Journal "The scientific world of Kazakhstan", ISSN -1815-9486.

- Lack of quality raw materials for industrial processing and the low share of domestic value-added products in the domestic food market;
- Availability of essential food products, which are not met domestic needs;
- Absence of national standards for measurement methods of food on the modern equipment, low level of harmonization of standards with international requirements;
- Low levels of investment in the agricultural sector;
- Lack of implementation of scientific developments into production;
- Lack of qualified personnel;
- Lack of development of rural co-operatives;
- Insufficient financial resources to fully meet the needs of rural producers in credit facilities.

Taking the above into account to support the development of livestock in Kazakhstan, among others it is necessary to define a list of priority species of animals with high genetic potential for productivity, make changes to the mechanisms and regulations grant to increase the proportion of breeding animals through the use of artificial insemination and the widespread introduction of biotechnology methods for embryo transfer. It is also necessary to strengthen the inspection of work in the field of veterinary medicine and livestock breeding and improve the food supply.

Speaking of food supply, it is necessary to note a major problem in the agricultural branch - there is no special program for the production of coarse and succulent fodder. The main feed for cattle for many years and remains lucerne and cane, waste obtained after processing of rice.

According to experts, with such a diet, animals are not terrible, but good yields and weight gain are impossible. In addition to hay and Lucerne, the diet of cattle must be included corn, animal feed, oil cake, additives, and various vegetables. Only with such a diet can yields increase and the time for additional weight gain shorten.

In order to develop the livestock industry in Kazakhstan, it is necessary to improve the breeding, and transfer the meat from the farm homestead to the industry. It is needed to make meat production more stable. Now the slaughtering is unstable, there are large deviations between the production periods. Also the development of consolidated enterprises (cooperatives) and the solution of marketing problems through the cluster approach could be a solution. In addition creation of a market infrastructure for processing, harvesting, storage and export products is needed as well as advisory and advocacy and practical work on the rational use of distant pastures among farmers.

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5

ATTRACTING INVESTMENT FOR MULTIFUNCTIONAL RURAL DEVELOPMENT

Olena Voronyans'ka, Volodymyr Ternovsky

5.1. Market Economy in Ukraine

In the period of restructuring of the social market economy in Ukraine there have been significant shifts in the direction of decentralization of governance and empowerment of local government as spokesmen for the interests of territorial communities. Most of the issues of regional and local economic development within the competence of local authorities that must be solved in this community meet the principles of the European Charter of Local Self-Government. At the same time a significant number of problems remain. Most of them are financial, and without solving the financial problems long-term social and effective development of local communities is impossible.

Successful economic development of communities is directly dependent on the activity of investment processes. Achievements of the priorities of socio-economic development and the required rate of economic growth must be supported by resources for capacity investment, increasing of the investment in fixed assets, sources of investment and prioritization of investments. To solve these problems the governments develop an investment policy that defines the methods of stimulating activities of economic entities, to support and promote domestic and foreign investors to investment more and implement the major targets of development programs. Implementation of the investment policy is possible only if an efficient investment mechanism exists. Thereby the issues related to the formation the investment mechanisms both at the national and regional levels become very important.

The purpose of this article is to analyze the current situation of government funding of local communities and finding ways to attract investment for the development of the territorial community in Ukraine.

5.2. Investments in Ukraine

The incomes of local budgets are crucial for the material and financial base of local governments. This is explained by the fact that the communal facilities, as well as joint ownership, predominantly related to non-manufacturing sector and do not provide significant cash flows to local governments. The communal organizations act as nonprofit organizations and their budgets are financed from local ones.

According to Ukrainian law only city councils of cities with a population over then five hundred thousand people may use foreign loans[65]. Therefore, local loans are not widespread in Ukraine. The main reasons for the unpopularity of local loans are:

1) lack of a real conversion of land ownership, which creates. Uncertainty of legal relations of ownership of land and other natural resources;
2) lack of infrastructure stock market;
3) unresolved legal and institutional placement procedures for local loans turnover;
4) uncertainty of payment from the government to the population when local authorities who published securities cannot meet their financial obligations;
5) lack of available funds in businesses and people;
6) distrust for government securities.

Thus, it is clear that at this stage of development of local self-government, the real basis of their financial independence and efficiency must come from the incomes of local budgets.

In accordance with the Budget Code of Ukraine, local budget revenues include revenues that are taken into account when determining intergovernmental transfers (earned revenue) and are not counted in determining intergovernmental transfers (regulatory revenue). The dynamics and structure of revenues of Melitopol district is showed in Table 1.

It is shown that the revenues are taken into account when determining intergovernmental transfers take a total income of the local budget share in the range 17-19%, which exceeds the amount of income which are not counted in determining intergovernmental transfers in 2-3 times. This trend shows the current dependence of the formation of local budget revenues from the decisions of the central government. The lack of autonomy of the local budget also indicates a large proportion of transfers in the fiscal revenue of Melitopol district.

Table 1. General fund revenues of the consolidated budget of Melitopol district

Revenues, ths.	2006	2007	2008	2009	2010	Deviations	
						+/-	%
Revenues, which are considered when determining intergovernmental transfers	9 387.7	12 465.6	16 523.3	18 421.9	22 859.3	13 471.6	243.5
% of total	19.2	17.9	17.9	18.1	17.9	-1.3	-
Revenues that are not considered when determining intergovernmental transfers	4 853.0	5 055.3	6 128.7	5 461.6	5 729.8	876.8	118.1
% of total	9.9	7.2	6.7	5.4	4.5	-5.4	-
Transfers	34 660.4	52 311.4	69 536.6	77 988.3	99 039.7	64 379.4	285.7
% of total	70.9	74.9	75.4	76.6	77.6	6.7	-
Total	48 901.0	69 832.3	92 188.6	101 871.8	127 628.8	78 727.8	261.0

Source: calculated according to the financial department of Melitopol district administration.

[65] The law of Ukraine "About investment activity" 18.09.1991, №1560-XIIhttp://www.rada.kiev.ua

Incomes of local budgets of Ukraine in accordance with the budget classification are divided into: tax revenues, nontax revenue, income from capital transactions, government specialized funds, official transfers. In Table 2 we could look on it composition and structure.

The communal tax takes the first place in the local government tax and fees. It is reducing because of the reduction of the wage base of enterprises that pay this tax. Market fee has a tendency to decrease based on reducing the number of taxpayers in Melitopol district.

Attracting investment is the most optimal solution for the problem of insufficient funding. We have to define the factors that make Ukraine an investment-attractive country. It would be large natural resource sector, cultural affinity with the European and North American countries, high level of education and training and a large consumer market comparing to developed countries.

Table 2. Composition and structure of local taxes and fees Melitopol district

Revenues, ths.	2006	2007	2008	2009	2010	Deviations	
						+ -	%
Communal tax	69.8	67.7	60.2	60.6	55.4	-4.4	79.3
% of total	66.5	64.0	58.4	59.1	52.6	-4.0	-
Market dues	0.5	-	0,8	-	1.7	1.2	369.6
% of total	0.4	0.0	0.8	0.0	1.6	1.2	-
The fee for the issuance of permits for placement of retail objects and service	33.1	34.0	39.6	40.3	46.0	12.8	138.7
% of total	31.6	32.1	38.5	39.3	43.6	12.1	-
Tax on advertising	1.5	4.1	2.4	1.7	2.3	0.8	150.7
% of total	1.5	3.9	2.3	1.7	2.2	0.7	-
Total	104.9	105.8	103.0	102.6	105.3	0.4	100.4

Source: calculated according to the financial department of Melitopol district administration.

Ukraine offers high investment potential opportunity in machine building, chemical, energy and the financial sector. The least attractive segment is agriculture, which over the past 10-15 years, did not receive sufficient investment. The largest determent to investors is the worn out agri-equipment and slow return on investment. Presently, agriculture is fully funded by the government. The most attractive regions of Ukraine are Kyiv, Kharkiv, Donetsk, Dnipropetrovsk, Lviv, Odessa region. In 2009 foreign direct investment in Ukraine's economy was 5.643 billion, a decrease of 51.6% compared with 2008. EU invested 4.016 billion (71.3% of total), CIS countries – 1.065 billion (18.9%) from other countries – 553.1mln (9.8%). In general, increase of the total amount of foreign capital in the economy taking in to the account revaluation losses and exchange differences amounted to 4.410 billion.

Total foreign direct investments in Ukraine on January 1st, 2010 totaled 40.027 billion an increase of 12.4% in investments from the beginning of 2009, and per capita amounted to $872.6.The investment in Ukraine is increasing, however, it is sufficient to reach the development level of Western Europe.

To continue to attract significant amounts of foreign investment in Ukraine, it is necessary to improve the management of investment activities in the country as a whole and regionally. The main reasons for low investment attractiveness of regions of Ukraine are[66]:

- Lack of development in securities markets, land, real estate and other market institutions and the corporate sector as a whole;
- Insufficient capacity of the domestic market;
- High tax pressure of business and administrative overregulation;
- Low competitiveness of many Ukrainian goods on world, create unprofitable investments in their production;
- Lack of integration into the global economy;
- Lack of a consistent investment policy and appropriate mechanisms for its realization at the local level;
- Lack of reliable information, which reduces the efficiency of cooperation between market participants;
- Inactive of local authorities.

Investment-grade rating indicates that regions of Ukraine, among other things, have low professional level of local officials who demonstrate lack of responsibility in creating a favorable investment climate. This is one of the reasons for the low efficiency of their efforts to increase investors' interest to invest in regional development and expansion of production constraints.

Regions remain, so to speak, dependents of the state. They do not have reliable economic incentives to develop its economic complex[67].

The experience of attracting foreign capital to other countries, especially former socialist block, has shown the following lack of appropriate investment climate, imperfect market mechanism, unstable political situation, low level of entrepreneurs and professional skills, lack of interested partners, lack of attractive investment projects, shortcomings of the tax system, the lack of an effective system of insurance investments, excessive monopoly in the economy, ultra-high inflation, current question of private land ownership, currency inconvertibility[68].

Considering Ukraine in general, lets analyze the MelitopolZaporozhye region. According to the 2008 census foreign investors invested in Zaporizhia region's economy 245.3 million dollars The main forms of involvement have been received in the form of cash contributions (65.3% of invested capital), and movable and immovable property (30.5%). The share of other forms of investment was 3.7% (Fig. 1).

66 M. Lend'el [2001]: Special institution of rural development: European experience. Millennium, Kyiv.
67 N. Tatarenko [2000]: Investment theory. KNEU, Kyiv.
68 Ibid.

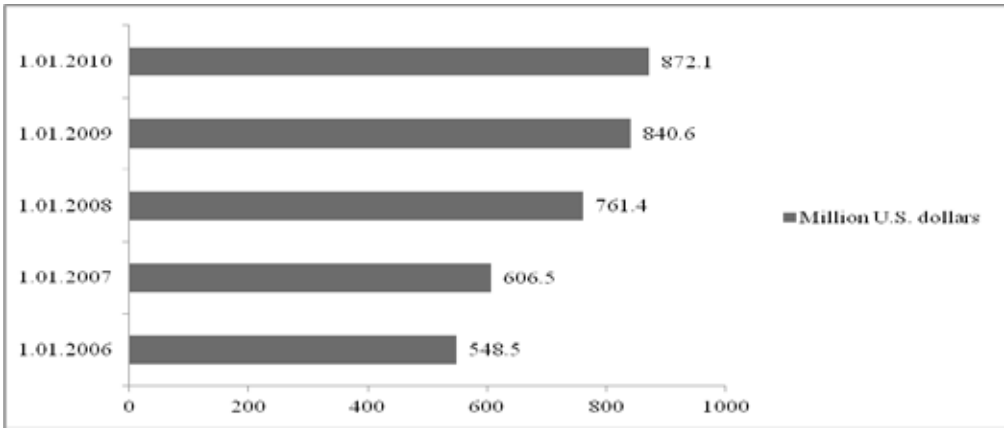

Fig.1. The dynamics of foreign direct investments in the Zaporozhye region (cumulative from the beginning of investment)

Source: according to the data from the Statistic Department of Zaporozhye region.

At the same time, foreign capital in the form of direct investments decreased by $ 20.2 million, mainly due to withdrawal of cash contributions (70.4%).

It should be noted that in 2008 there was a change of ownership by non-residents of capital between countries at $ 14.3 million dollars. That ultimately did not affect the overall foreign investment in the regional economy, but has changed its structure by country-investors. Thus, the ownership of capital has moved from Hungary to Estonia 44.3%, from Bermuda (12.5%) from the United Kingdom to Cyprus (35.0%). The exchange rate differences of -151, 5 million dollars that influenced the decreased the total foreign direct investment. By then, there was an increase of 63 million dollars direct investment at the beginning of the year (compared to the end of the previous year). Thus, the absolute increase in foreign direct investment in 2008 was equal to 74.2 million dollars. Net capital inflows to non-residents of the region's economy were 2.1 times lower than in 2007.

On January 1st, 2009, foreign direct investment in the regional economy amounted to 835.6 million dollars compared to the beginning of 2008, and per-capita of non-residents increased by 9.8%. A year ago there was an increase of direct foreign investment by 25.5%.

In addition, the total outstanding loans and loans received by the regional enterprises from direct investors was 3.8 million dollars. Given the debt which in accordance with the Manual on Balance of Payments IMF is considered direct investment, direct non-residents of the aggregate capital in the economy of the area on January 1, 2009 amounted to 839.5 million.

It should be noted that the Zaporozhye region is seventh in attracting foreign direct investment with 2.3% of all foreign direct capital invested in Ukraine. In the Zaporozhzhya area 392 enterprises accounted for foreign direct investment. The dominant share of the capital of non-residents (89.5%) invested in the economy is in the city of Zaporizhzhya.

Direct investment in the region came from 52 countries, with the two of them accounted for more than half of the volume. On January 1st, 2009, the first place takes Cyprus, the second - took Sweden with 31.7% and 20.2% of the total, respectively. Among the biggest investors is South Korea - 18.0%, Switzerland - 4.2%, Estonia - 4.1%, Denmark - 3.6%, United Kingdom - 3.2%, Slovakia - 2.5%, British Virgin Islands - 2.0%, U.S. - 1.5%, Germany - 1.4%.

On January 1st, 2009 the European Union invested in Zaporozhzhya area 589, 4 million dollars which is 70.5% of its total direct investment. Investment from CIS countries was $ 8.0 million.

The money of the residents, mostly concentrated in manufacturing (68.9%) of total direct investment), namely, mechanical engineering (25.6%), manufacture of food products (25.5%), metallurgy (15.0%), chemical and petrochemical industry (1.3%). The commercial enterprises accounted for 12.3% of the total investment in the enterprise, the main activity of which were real estate transactions, leases, engineering - 9.3%. In comparison with data from January 1, 2008 the increase foreign direct investment in food production was 1.5 times, in trade by 35.0%, and enterprises engaged in real estate transactions, leasing, engineering– by 6.7%. However, there was a reduction in the amount of foreign direct investment in the metallurgical industry (24.4%), chemical and petrochemical industry (4.1%) and machinery (2.1%).

Investment in food production includes investors from Sweden 168.4 million dollars, Denmark 29.7, Ireland 7.5, the United Kingdom 2.4, Switzerland 1.9 and Hungary 1.1 in mechanical engineering - from Korea 150, Estonia 34.1, Bermuda 9.7, Italy 7.8, Cyprus 4.4, Canada 3.4, in metallurgical production - from Cyprus 109.3, the United Kingdom 9.9, the British Virgin Islands 4.0, U.S. 2.2 in the chemical and petrochemical industry - from Germany 8.0, USA 1.9 and Cyprus 0.7 million.

In trade involved direct investment from Cyprus of 87.7 million dollars, USA 4.5, the United Kingdom 4.4, Moldova 1.6, the Russian Federation 1.4, Germany 13 million dollars. The main activity of which were real estate operations, leasing, engineering, the greatest amount of direct investments owned by non-residents of Switzerland 32.8 million, Cyprus 24.1, the British Virgin Islands 12.6 and Austria 1.9, Belize 1.6 and the United Kingdom 1.3 million dollars. The largest amount of debt and loans obtained by the regional enterprises from direct investors on January 1st, 2009 were from Estonia and the Russian Federation $ 1.0 million for each country.

Direct investment from the region in the economies of other countries on January 1st, 2009 amounted to 14.4 million dollars. A large portion of this investment 86.8%, was from the enterprises, the main economic activity which is processing. Nearly 80.0% of the total investments was directed to Russia.

The main forms of involvement have been received in the form of cash contributions (49.4%), and movable and immovable property (45.6% of invested capital) (fig. 2).

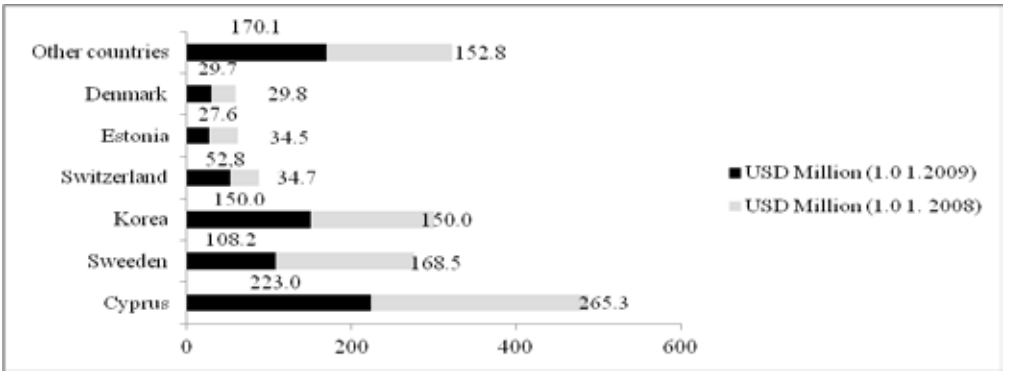

Fig. 2.Geographic structure of direct foreign investment

Source: according to the data of State Statistical Service in Ukraine.

At the same time, foreign capital in the form of direct investment fell by 5,7 million dollars, mainly due to withdrawal of securities (47.3%) and cash contributions (44.9%).

Revaluation of capital has reduced the total volume of direct foreign investment of 0.1 million dollars and exchange rate difference - by 4.4 million dollars.

It should be noted that in 2009 there was a change of ownership of non-residents on capital between countries at $ 1.3 million dollars that ultimately did not affect the overall foreign investment in the regional economy, but has changed its structure in the context of investor countries. Thus, the ownership of capital is moved from Belize to St. Kitts and Nevis (66.7%) and the British Virgin Islands (33.3%) from the United Kingdom to Panama (100%).

The transition from the category of portfolio investment to direct and vice versa during the reporting period did not occur.

Thus, the absolute increase in foreign direct investment for 2009 equal to 31,6 million dollars. For 2008 the capital inflow of non residents in the economy of the region amounted to 74.2 million dollars.

On January 1st, 2010 foreign direct investment in the economy of the region amounted to 872.1 million dollars. Against the volume from beginning of 2009 per capita residents increased by 3.8%. A year ago there was an increase of direct foreign capital by 10.4%

In addition, the total outstanding loans and loans received by the regional enterprises from direct investors amounted to 47 million dollars. Given the debt which, in accordance with the Manual on Balance of Payments IMF is considered as direct investment, direct aggregate capital of nonresidents in the economy of the region on January 1, 2010 amounted to 919,1 million dollars.

It should be noted that the Zaporozhye region is in eighth place in attracting foreign direct investment. In the economy of running 2.2% invested in Ukraine, direct foreign investment (hereinafter data are exclusive of borrowed capital).

The presence of foreign direct investment enterprises in the region 388 are held accountable. The dominant share of the invested capital in the economy of Zaporizhzhya of non-residents is 89.5%. Per capita of the region is 477.5 dollars of foreign direct investment, Zaporozhye – 997.5 per capita.

Direct investment in the area is drawn from 53 countries. On January 1st, 2010 the first place in terms of foreign direct investment takes Cyprus, the second - took Sweden with 30.3% and 21.4% of the total, respectively. Among the biggest investors were South Korea - 17.2%, Estonia - 3.9%, Switzerland - 3.9%, Denmark - 3.4% United Kingdom - 3.1%, Slovakia - 2.4%, Ireland - 2.1%, the British Virgin Islands - 2.1% Austria - 1.9%.

Compared with the January 1, 2009 there was an increase in direct investment in Ireland 2.3 times, Sweden 10.9%, Austria 6.8%, British Virgin Islands 1.3%[69].

On January 1st, 2010 the region's economy from the European Union attracted 623.8 million dollars of foreign capital (71.5% of total direct investment) from CIS countries - 7.6 million dollars (0.9%). Nearly 80.0% of investment from EU countries accounted for its members such as Cyprus, Sweden and Estonia. Among the CIS countries leading is the Russian Federation (75.4%).

The capital of the region's investors is manufacturing with 70.2% of total direct investment of which is food production 28.0%, machinery (24.5%), metallurgy (14.4%), chemical and petrochemical industry (1.9%). Trade accounted for 11.3% of the total. The main part of the trade is the real estate transactions, leases, and engineering - 8.8%.

Compared with January 1st, 2009 increase of foreign direct investment in food production is 14.7%.

Investment in food production from Sweden is 186.8 million dollars, Denmark 29.7 million dollars and Ireland 17.9 million dollars. In mechanical engineering - from Korea 150

[69] State statistic service of Ukraine, http://www.ukrstat.gov.ua/

million dollars, Estonia 33.9 million dollars, Bermuda 9.7 million dollars and Italy 7.8 million dollars in metallurgical production - from Cyprus 109.2 million dollars and the United Kingdom 10.2 million dollars in the chemical and petrochemical industry - from Germany 8.2 million dollars and Austria 6.0 million dollars.

Investment in trade involve direct investment from Cyprus 82.4 million dollars, USA (5.1 million dollars), and the United Kingdom (4.4 million dollars).

In enterprises, the main activity of which were real estate operations, leasing, engineering, the greatest amount of direct investments owned by non-residents is from Switzerland 32.1 million, Cyprus 24.3 million dollars and the British Virgin Islands 12.9 million dollars.

The largest amount of debt and loans obtained by the regional enterprises from direct investors, as of 1st January 2010 were from Austria (41.3 million dollars), the Russian Federation (1.9 million dollars) and U.S. (1.0 million dollars). Most of the loan capital provided by the companies involved the chemical and petrochemical industry (88.5%) and real estate operations, leasing, engineering (4.1%).

Direct investment from the region in the economies of other countries on January 1, 2010 amounted to 14 million dollars. A large proportion of them (86.7%) was below the enterprises, the main economic activity which has been processing industry. More than 75% of total investments were directed to Russia.

Significant investor was Cyprus, which has invested in the economy of Zaporizhzhya region in sectors such as manufacturing, primarily in the manufacture of basic metals and fabricated metal products, increasing the annual investment rate to 11.2%[70].

In the Zaporozhye region has received industry investment 43.4 times more than agriculture. Investment in agrarian sector of the regional economy grew by 84.2%. This growth is not sufficient for sustainable economic development[71].

Investment attractiveness of the territory is determined by the geographic location, climate, natural resources, infrastructure, environment, industrial-economic complex, and professionally qualified managers; partnership of government, business and public policy, regulatory, corporate culture and public opinion.

Elements of investment potential of the area join the groups of factors that directly determine the amount of investment income and may attract investors.

For this moment in Ukraine one effective way of attracting foreign investment for development of the area is a joint project of the European Union and United Nations Development Program "Local development-oriented community," which was launched in 2007. Funding is provided by the European Commission within the framework of the EU technical assistance and co-financed by the UN Development Program in Ukraine through the introduction of a transparent mechanism for joint decision-making.

The goal of this project is to create an enabling environment for sustainable socio-economic development of local communities by promoting self-organization, development and implementation of small amounts of public initiatives in all regions of Ukraine and the Autonomous Republic of Crimea.

The project sets the task of reviving the public initiative and addresses it to the solution of social problems on the particular territory. There are five key tasks of the Project:

1. Help the executive authority of local government to form in rural communities an "economic subculture" of existence. The main idea of this task is to move people from passive recipients of government administrative services to the level where they are partners in the provision and receipt.

[70] State statistic service of Ukraine, http://www.ukrstat.gov.ua/

[71] Statistic department of Zaporozhye region http://www.zp.ukrstat.gov.ua/

2. Assistance to local partners in forming an ongoing dialogue on principle "Community initiative - The responsibility of the community - Support from the government".
3. Transfer to rural communities key world experience in self-control of its own territory and accumulation of resources to develop their potential.
4. The provision of specific financial assistance (support of the "first" priority of the community) and facilitating in attraction of potential grants, donor funds for the project partners.
5. Disseminate the experience among other rural communities of the Zaporozhye region of Ukraine as a whole.
See blow the proposed funding scheme for "first" initiative of the community (Fig. 3).

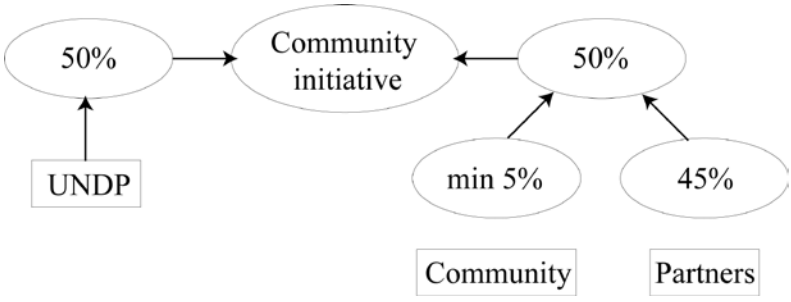

Fig. 3. Financial conditions for the implementation of the "first" initiative of the community
Source: own studies.

Development and implementation of public initiatives correspond to a certain sequence of actions needed to determine the priority issues, identifying the donors and the scheme of interaction with the local authorities and organizations that implement the project of social initiatives. On fig.3 is the typical scheme for the implementations of the initiatives by the partners' community of the project that fully reflects the essence and course of action of the community from the appearance of the idea to the final stage of its implementation.

It should be noted that the community by itself chooses the priority for procurement of materials or construction, does all the administrative procedures, and reports to the donors.

In Melitopol area should be noted next projects that take part in the competition for funding (table 3).

Table 3.The list of the projects and the development programs of Melitopol region that take part in the Ukrainian competition of the projects and development programs of local government in 2009-2011

Name of project	Year			Sources of funding		
	Developed	Implementation	Total, thousand UAH	The found of the competition (government budget)	Local budget	Partners
The delimitation of lands of state and communal ownership, as an additional source of income to the budget of the development of material and financial base of the town and village councils in Melitopol region	2009	Won, but was never implemented. Funds came in late November	1472	500	100	872
Introduction of innovative technologies for the improve of the supply of high quality water for the population and household waste disposal	2009	-	632	385	80	167
Improvement of the lives of socially disadvantaged groups and saving of natural resources in v. Tikhonovka	2009	-	104	40	17	47
Testing of medical care in the transition to family doctor service and medical insurance (Novogorodkovsky village council)	2009	2010	268	100	30	138
Melitopol district sports complex "REGION – SPORT" Zaporizhia Oblast	2010	-	1770	500	270	1000
The innovative system for combining of local initiatives to create a social entrepreneurship center in the region	2010	-	656	100	30	526
Strengthening the system of preschool education on the territory of the v. Terpenie. Restoration work of the kindergarten and improvement of education	2010	2011	1090	100	200	790

Source: calculated according to the financial department of Melitopol district administration.

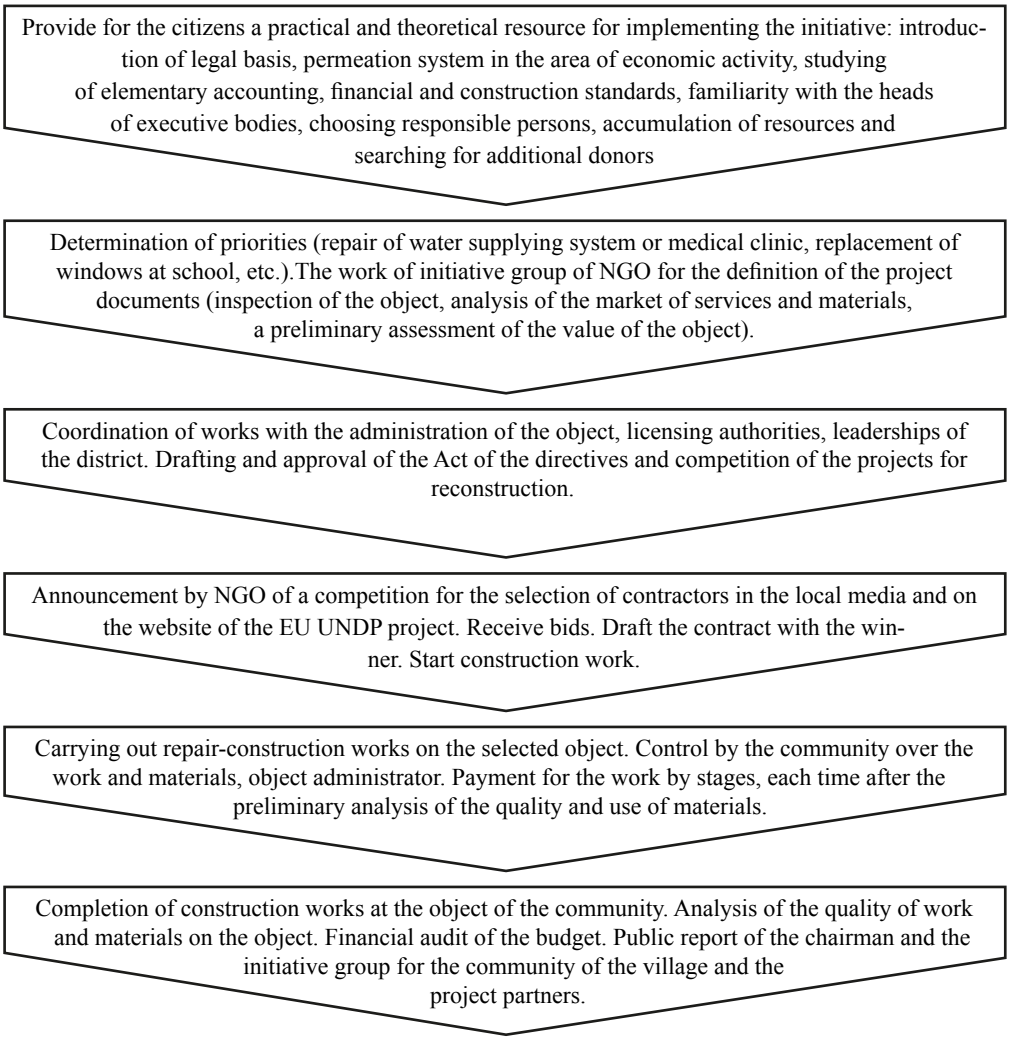

Fig. 4. The main priorities of investment in Ukraine

Source: own studies.

5.3. Conclusion

The possibilities seem to us very important and those which outweigh risks and open wide the way to improve the living conditions within the territorial areas. These include: attracting grant support from other donors and the budgets of all levels, mediating principles of the Project to other areas and the development agenda of local councils, the world's receipt of a positive experience of fundraising, improving the socio-economic status at the level of rural areas, improve morale (level of consciousness) of citizens in rural areas.

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6

ECONOMIC PROGRESS AND THE DECLINE OF THE COUNTRYSIDE

James W. Dunn

6.1. Economic Progress in the U.S. Countryside

Economic progress raises incomes and the standard of lives of the people and allows a nation to provide many services to its citizens. However, it doesn't help all regions equally and some area face dramatic change. Progress in agriculture and transportation has dramatically changed the countryside and the villages therein. Mechanization of agriculture has reduced the number of people required to produce a crop and improved productivity dramatically. The United States has less than 1% of its population directly involved in commercial agriculture, yet produces surpluses of numerous agricultural products. It is a major exporter of corn, wheat, soybeans, cotton, chicken, pork, apples, and many other products. The number of farms has decreased steadily, as capital has been substituted for labor. Most of the factories are in cities and the labor to produce these capital goods is located there. At the same time that agriculture has advanced, so has transportation. Roads are better, cars are more affordable, and rural residents can travel more easily and affordably. Other advances in the economy such as a wider variety of goods and bigger stores with more variety have changed consumption habits. Internet commerce has done the same. All of these advances and many more have transformed the villages and their character. Worstell[72] and Collantes[73] each study these issues, as do others. This paper will discuss this phenomenon and its effects.

6.2. Agriculture

Over time, agricultural productivity has grown dramatically. Mechanization is a major cause. A modern tractor can easily plant in an hour more area that a horse and man could plant in a day. Harvesting is even faster. Yields of seeds are vastly greater. Fertilizer is more affordable and farmers are using it more widely. Lime has been added to land to control acidity. Irrigation controls water availability. Herbicides and pesticides control weeds and insects. Animal agriculture has advanced as well, with better genetics, a better understanding of nutrition, cow comfort, and mechanization of milking the cows. In total, the advancements

[72] J. Worstell [2011]: Villages, vertical integration, abandonment: sustainability in evolving Ukrainian landscapes. Paper presented at Diverse Landscapes of Ukraine: A Celebration of Twenty Years of Independence. Pennsylvania State University, September 30.

[73] F. Collantes [2007]: The Decline of Agrarian Societies in the European Countryside: A Case Study of Spain in the Twentieth Century. Agricultural History , Vol. 81, No. 1 (Winter): 76-97.

of agricultural science have allowed dramatically fewer people produce much more food. The farmers that remain are much more prosperous than their predecessors. Figures 1 and 2 illustrate the productivity differences for corn and milk. These products are typical.

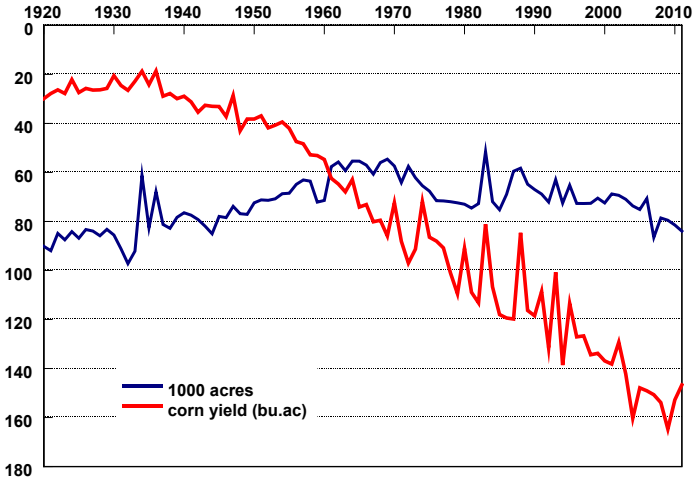

Fig. 1: U.S. Corn Yield and Acres, 1920-now (1990=1)

Source: US Bureau of Census.

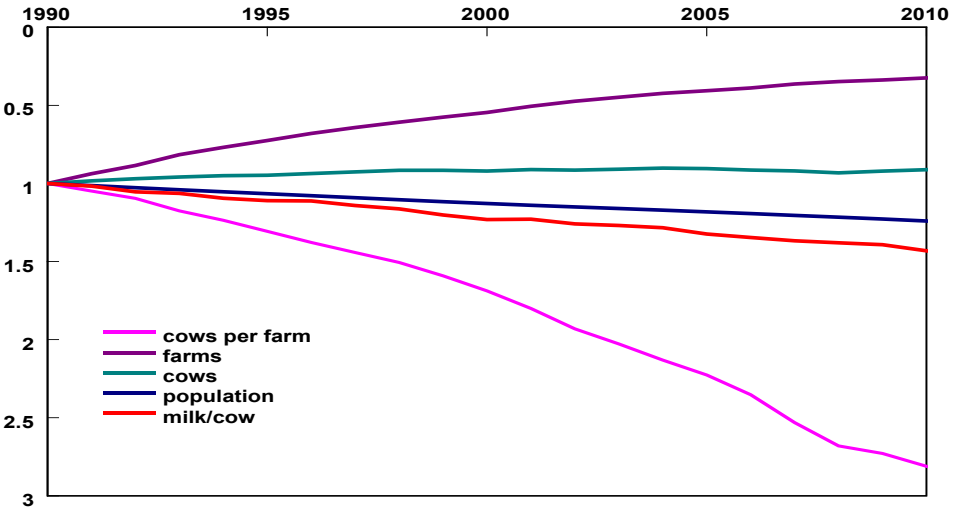

Fig. 2: Milk/Cow, Population, & Cows 1990-2010

Source: US Bureau of Census.

In 1930, 21.5% of the US workforce was employed in agriculture[74]. In 2000, 1.9% of the workforce was employed in agriculture[75]. In 2005, I published a paper that discussed the effect of European Union membership on Poland's dairy industry. Included was this sentence. "If Poland's quota does not increase there will be far fewer dairy farms in Poland. This will cause economic problems caused by migration to cities."[76]. Piotr Szajner[77] in a recent study shows the same types of changes in Poland's dairy industry (Fig. 3) that are seen for the United States in Figure 1.

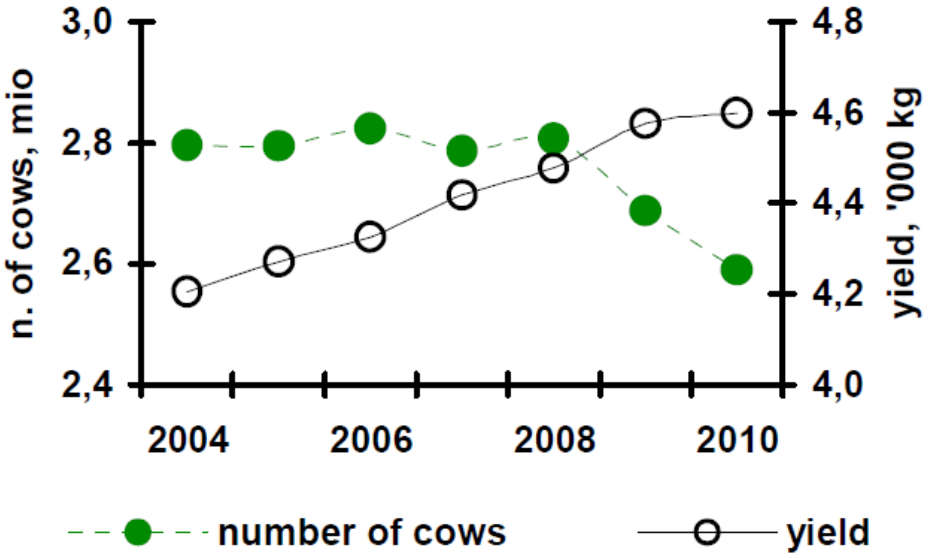

Fig. 3. Changes in Poland's dairy industry

Source: Szajner P., Institute of Agricultural and Food Economics, National Research Institute. An Assessment of Polish Dairy Market – Situation and Outlook. (http://ec.europa.eu/agriculture/markets/milk/hlg/acadbl12_szajner_doc_en.pdf)

This has only taken a few years, even in the presence of quotas. Without quotas, the pace of change will accelerate.

6.3. Food Processing and Distribution

Modern food processing factories are larger, with more mechanization, greater labor pro-

[74] C. Dimitri, A. Effland, N. Conklin [2005]: The 20th Century Transformation of U.S. Agriculture and Farm Policy. Electronic Information Bulletin Number 3, June (http://www.ers.usda.gov/publications/eib3/eib3.htm)

[75] Ibid.

[76] J. W. Dunn [2005]: Poland's Dairy Markets and Accession to the E.U. Polski Agrobiznes po Wejściu Unii Europejskiej – Pierwsze Efekty i Perspektywy. Ropczyce: 85.

[77] P. Szajner. Institute of Agricultural and Food Economics. National Research Institute An Assessment of Polish Dairy Market – Situation and Outlook (http://ec.europa.eu/agriculture/markets/milk/hlg/acadbl12_szajner_doc_en.pdf)

ductivity, and less waste. Combined with a better food distribution system, factories need not be as close to the producer. On a modern dairy farm, milk is cooled on the farm, hauled using an insulated truck to the factory, bottled, shipped to the retail outlet, and kept cold for the entire time. Pennsylvania has a sell-by date on milk of 17 days, and the quality should be good for another week after that if the milk is stored properly. With fewer local factories, there are fewer food manufacturing jobs in rural areas. Modern food stores are usually chains, with large-volume purchasing of items that involves whole truckload shipments from the manufacturer to the warehouse, and then full truckloads from the warehouse to the store. Lower transportation costs and volume purchases lead to lower costs of goods and lower prices in the stores. The lower food prices leave more money for consumers to buy other products. Szajner also shows the restructuring of the Polish dairy-processing industry[78]. Like the farms, the number of plants has dropped sharply and the size of the firms has grown. It is likely that this will happen across the food processing and distribution sector, just like it will with the farms. The changes in dairy processing are not finished, but have only begun. Plant consolidation will occur as further economies of scale are realized.

6.4. Retailing

With bigger stores and chain stores, a wider selection and lower prices are common, making small, local shops an expensive alternative. Rural residents may buy their bread and milk at the local shop, but periodically go to a nearby city to buy storable products, often in large quantities. Tastes and preferences change and shoppers develop a taste for fresh fruit in the winter and other goods from distant regions, all of which put the local merchant at a disadvantage. The local shops struggle to survive as the rural economy evolves.

6.5. Transportation

Over time, more people have private cars, which give them great flexibility in transportation. Highways are better and often are limited-access, divided highways where speeds of 60 miles per hour (100 kph.) or more are common. This makes a shopping trip to a nearby city affordable and easy. When combined with lower prices and wider selection, the savings on the purchases may cover the cost of the trip. Also this improved transportation system makes long-distance shipments of food possible, with container shipments from distant lands putting goods in local markets at competitive prices. Whether it is grapes in the winter or shrimp from Vietnam, globalization is real.

6.6. Some Examples from Personal Experience

My grandfather was a pharmacist and had a drug store in the small town of Elkton, SD. Twenty miles away was a small city, Brookings, SD. In 1940 Elkton lost its doctor. Then, Elkton didn't need a drugstore, because everyone went to Brookings to see the doctor. The road to Brookings was good. Many people owned cars and the passenger rail service was good, so people went there. I used to visit my grandmother in Elkton in the 1960s and the downtown was small, but had a variety of stores. It had a grocery store, a hardware store, a liquor store,

[78] Ibid.

a couple cafes, a couple bars, a variety store, a clothing store, a grain elevator, a bank, a farm implement dealer, at least two gas stations, and other stores. It had a public school and a Catholic grade school. Now there is a convenience store – gas station, a bar, a bank, and a couple other stores. There is only one school. The town is about the same size because many people live there who work in Brookings. Most buy their groceries in Brooking and almost everything else. Few people who live in Elkton work there. The farms in the area are much larger than in the past. The average farm is 188 hectares, but of the 300 commercial farms at least 40% are larger than 400 hectares. Farms originally were 64 hectares, but have consolidated rapidly since 1960 with bigger equipment. Farm families are smaller and only 1.7% of the county's population are farmers[79].

My great grandfather grew up in Bryant, SD and this county, Hamlin, has no major city. The biggest town has 768 people and is a bedroom community to Brookings. Bryant has 468 people and is losing population[80]. The downtown has very few businesses and most that remain are struggling. Many stores are empty. Often the young people move to a bigger city and don't return, especially the young women. In 2009 Hamlin County had 90 women between 25 and 29 and 132 men[81]. The town has a many retired farmers. The county has lost population steadily as the farm population has dropped, with exception of the corner nearest Brookings, which has grown recently. The average farm is 276 hectares[82]. Table 1 shows some longer-run trends in population change.

Table 1 Selected US County Population Data

Specification	1920	1940	1960	1980	2000	growth
Hamlin	8,054	7,562	6,303	5,261	5,540	-31.0%
Minnehaha	42,490	57,697	86,575	109,435	148,281	249.0%
Brookings	16,119	16,560	20,046	24,332	28,220	75.0%
Douglas	204,524	247,562	343,490	397,038	463,585	127.0%
Greeley	8,685	6,845	4,595	3,462	2,714	-69.0%
Centre	44,304	52,608	78,580	112,760	135,758	206.0%
Mifflin	31,439	42,993	44,348	46,908	46,486	48.0%

Source: US Bureau of Census.

Figure 4 shows the population change by county in South Dakota in the last decade. South Dakota's population has grown, but all of the growth has been in and near the cities. Minnehaha County holds the largest city, Sioux Falls. Since 1920, Hamlin County had lost 31% of its population.

79 US Dept of Agriculture [2007]: Census of Agriculture. County summaries. Brookings County, SD
80 Brookings County Quick Facts from the US Census Bureau [2011].
81 Hamlin County Quick Facts from the US Census Bureau [2011].
82 US Dept. … op.cit.

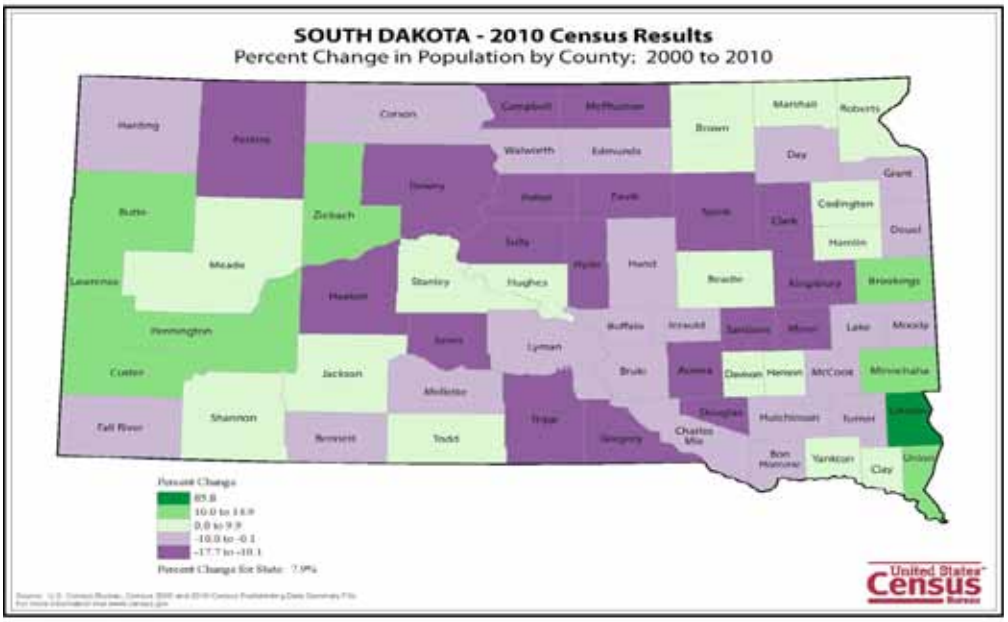

Fig. 4. Population Changes by County in South Dakota

Source: United States Census.

My mother is from Greeley, NE. Originally an Irish colonization scheme, Greeley County is the poorest county in Nebraska. The nearest city is 60 miles from Greeley. My father practiced dentistry there from 1946-48. He was the last dentist to practice in Greeley. The town itself has held its population but the rural population is much smaller. Greeley is the center of county government, which has kept some of the town's population there. There was a fire in Greeley several years ago and the north side of the downtown burnt down. It was not rebuilt. The average farm is 338 hectares[83]. Figure 5 shows the population change by county in Nebraska in the last decade. Douglas County holds Omaha, the largest city. Since 1920, Greeley County has lost 69% of its population. My mother left and so did most of her relatives. Many of their descendants live in Omaha.

[83] US Dept of Agriculture [2007]: Census of Agriculture. County summaries. Greeley County, NE

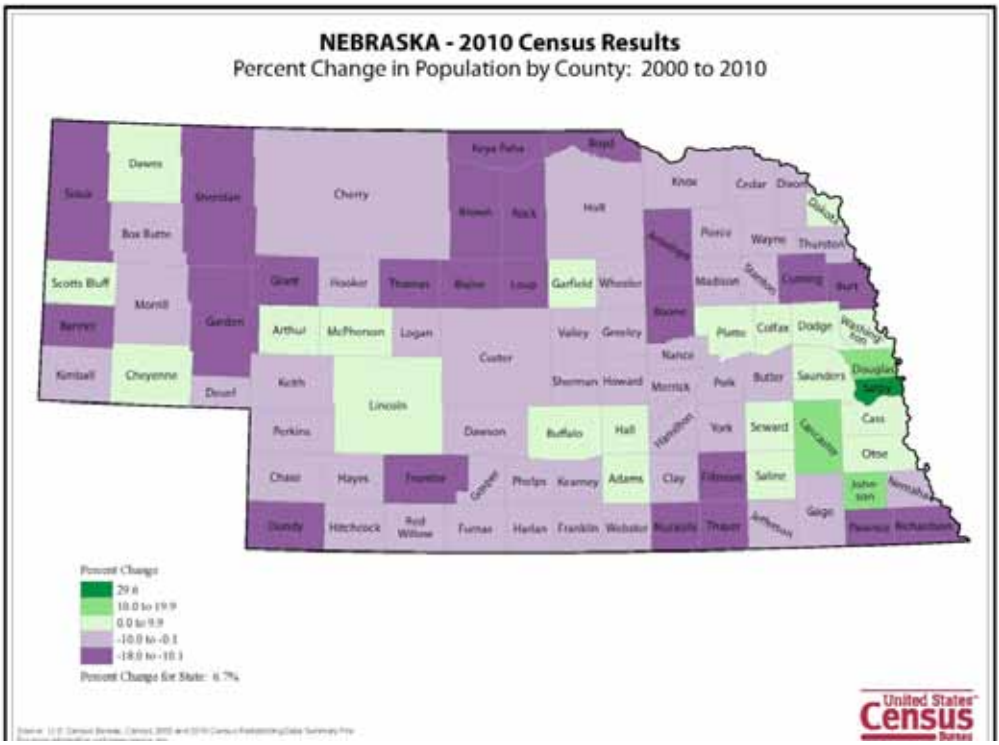

Fig. 5. Nebraska County Population Change

Source: United States Census.

I live in Pennsylvania. One thing that struck me when I moved to Pennsylvania was how many non-farmers lived in the countryside. Most areas have some manufacturing, mining, lumbering, or other rural non-farm enterprises. Like the small towns in the Midwest, the small-town businesses have disappeared, but the population had remained to a great extent. Much of rural Pennsylvania is not prosperous, but it is holding its population. Centre County includes the state's largest university. Nearby Mifflin County has held its population because it has a diverse economy. Figure 6 shows the population change by county for Pennsylvania in the last decade. The agricultural counties are in the south and east. These counties have diverse economies. The north and western counties that lost population had basic industries like coal, lumber, and others. Most of these counties depended on a small list of firms that may still operate but have cut their work force and replaced labor with capital.

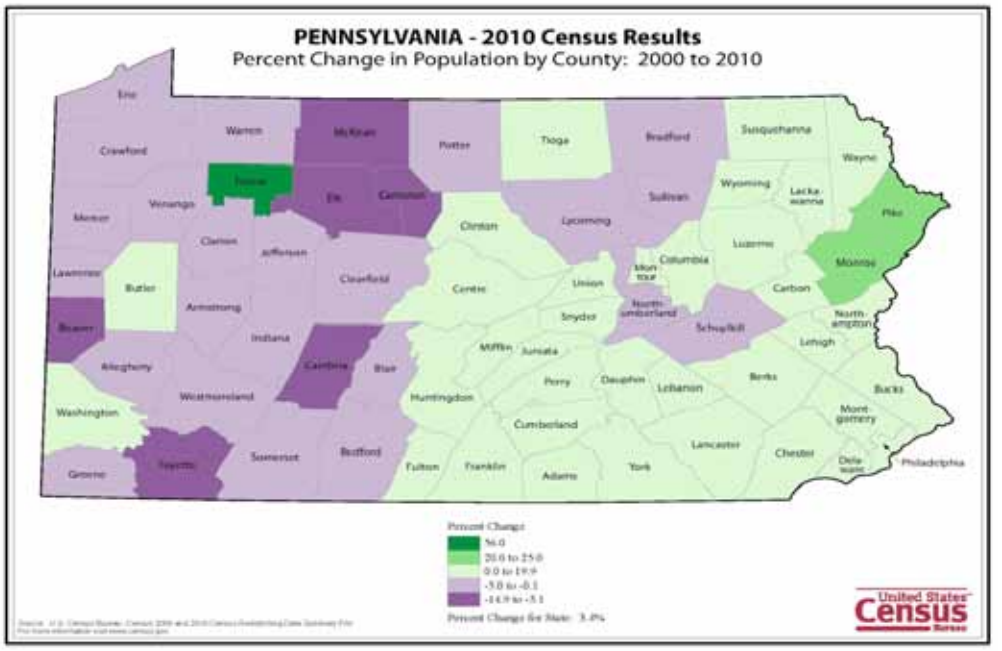

Fig. 6. Population change by county in Pennsylvania, 2000-10

Source: United State Census.

I have travelled extensively in the world. Rural Serbia, especially in Vojvodina where large-scale agriculture can operate, has exactly the same forces at work. The villages are full of vacant houses, and the young people have moved to the city. Most villagers are old. Parents build big houses in anticipation their children will move back, which rarely happens. The retail businesses are struggling.

I lived in Ireland in 1990-91. There fewer people had cars and village merchants did better. However, economic progress was hurting the villages nonetheless. Television hurt business for the local pubs, as people stayed home and watched television. The presence of supermarkets in regional centers hurt local food stores and the large general retailers hurt clothing, appliance, furniture, and other local merchants. While the village business districts were better than in rural South Dakota, it was obviously in decline. Furthermore, the rural population was old and rural non-farm employment was shrinking. Farm consolidation was having the same effect. Rural Ireland has a large tourism business as Irish Americans travel to see their ancestral homeland. However, all villages are not scenic and every year there are fewer Irish Americans only one or two generations removed from the old country.

I lived in Australia in 1997-98. The same phenomena occurred. People who lived in the Outback, hundreds of miles from a city would travel to a major city once per year, buy a container of household necessities, non-perishable food, etc. and have it brought by truck to their home. Like the residents of rural South Dakota, they bought perishables nearby, but storable products far away, and paid for their trip with the savings. All of these purchases were lost sales for the local merchants.

In Ukraine and other parts of the former Soviet Union, very large, state farms were the norm with very large and inefficient work forces. Most of these farms are now pseudo-private

farms and have cut their work force greatly. The villagers that remain are mostly subsistence farmers with small plots, and most of the young people have left the villages and gone to the cities or emigrated. The villages, which all had small shops, have few, if any, stores now, and most villagers shop in the cities. The organization of agriculture and the restrictions on population movement delayed the trends seen elsewhere, but largely agricultural regions, and other regions with simple economies, face these same trends with progress. My discussion has focused on agriculture, but mining, lumbering, and other extractive industries face similar trends.

6.7. What does this mean for Poland?

This pattern of population loss and decline of small business in rural areas is undeniable. Having said this, some inferences can be drawn. First, technological advances mean more capital and less labor for industries large enough to justify the expenditure on research. If the local economy is more diverse, the decline is less. With modern communication, industries not bound to a location can move elsewhere. This movement can be driven by many factors, including cost of doing business, labor productivity, the availability of factors of production, business climate, lifestyle issues, and others. Rural areas can attract businesses as well as lose them. South Dakota has gained manufacturing jobs from neighboring Minnesota because of favorable tax and other state-government policies. Colorado with its rich outdoor life has attracted many businesses that could be elsewhere. Of course, few of these businesses are in locations that are isolated with few amenities.

Poland's agricultural and rural development stalled under communism. However, Poland now has access to modern technology, science, and can reorganize its agriculture in response to market forces. This creates the possibility for Poland to catch up fast. With modern genetics and management, its dairy herd can leap forward in milk per cow. Of course, the membership in the European Union will limit this somewhat, but with the end of quotas, the lower wage rates and cheaper land could see the establishment of dairy herds in Poland by investors from the Netherlands or Britain. This would dramatically restructure the dairy industry, with fewer small herds and lower levels of labor per cow. It would also increase milk per cow dramatically. This would mean fewer jobs in dairy on the farm, but more milk production. The dairy processing industry is already restructuring, but more will happen. Similar changes can occur in other parts of agriculture. Wage rates in agriculture will rise, but workers will be fewer. The rural population, which is already shrinking, may drop more rapidly, especially in areas with few non-agricultural jobs. Even now, the villages I have visited have a lot of old people, but not many young families. As the national economy does better, more jobs will be created, but usually not in the villages. People can commute from places near population centers, but the more rural areas will probably experience long-term decline. As the old people die, the rural population will shrink further. Of course this affects rural institutions, such as churches and schools.

Once the transition stabilizes, income will be higher, but the rural communities will be different. Community leaders and local governments should plan accordingly. If tourism is a possibility, can it be fostered? Does the area have something that would be interesting to a tourist? Would the diaspora like to visit their home village and see where their families lived? Would a local family history center help the descendants of a former villager find the old family home, or some living relatives? Could the community build a couple of traditional houses from 1600, 1800, and 1900, with furnishings that illustrate the lifestyle? Are there sites of historic battles nearby? Was there an important monastery or castle or church in the area? Are there locally

produced souvenirs that might be a keepsake for a visitor and create jobs for someone in the community? Things like this don't just happen. Someone has to have some vision and organizational skills to develop this potential. People must welcome visitors and those involved in tourism must have language skills and outgoing personalities. It is easy to overstate how easy this is, or how easy it is to anticipate what an outsider will find interesting.

Every village cannot do the same thing, but if the traditional rural life is going to survive, it must adjust to changing circumstances. Often we don't understand how fluid tradition is. When people sit down to discuss the past, they often romanticize how attractive the simple life in the village was. Usually it was a lot of very hard work for very little gain and a tough life. Few people that want to go back to farming like their grandfathers would want to live like their grandfathers, with no electricity, farming with horses, having a very limited diet in the winter, and the rest of the "good old days." Nevertheless, the sense of community and close relationships, knowing your extended family well and other aspects were and are positive. Keeping rural communities vibrant is a goal worth pursuing.

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7

DIVERSIFICATION OF PRODUCTION AS A FORM OF ENTERPRISE DEVELOPMENT IN RURAL AREAS

Natalia Machałek

7.1. Entrepreneurship in Rural Areas

The contemporary farming sector is undergoing various types of changes, and rural areas cease to be perceived exclusively as agricultural production space. Unlike other EU Member States where agricultural producers are entitled to higher subsidies, the Polish agricultural sector has not yet been fully aligned with the European Management Standards. For this reason, rural producers search for alternative or additional sources of income to supplement their livelihoods[84]. The diversification of farm production can significantly increase the owner's earnings. Alternative income-generating activities minimize the risk associated with the production and sale of agricultural goods.

Contemporary rural entrepreneurship is not restricted to farming production, and it involves non-agricultural activities that contribute to higher production dynamics, improve the profitability of farms and create new jobs. Rural entrepreneurship improves livelihoods, and it provides members of the local community with social security. Non-farm activities are often combined with agricultural production, while some estate owners abandon farm production and generate their incomes solely from alternative sources[85].

Enterprise creation supports the diversification of employment, thus increasing the incomes of local farm owners. For members of the local community, entrepreneurship implies new opportunities for generating earnings from non-farm and alternative activities. The development of rural enterprise should be backed by a supporting social and economic environment[86].

According to Zając (2010), the European model of agriculture supports diversification of production in rural areas. Small and medium-sized family farms can exist alongside large-scale estates that cater to the needs of the food processing industry. Small farms can specialize in the production of high quality goods and services (regional products, off-farm activities, agritourism) which will enable them to survive on the market due to an absence of competition

[84] K. Chyłek, K. Brodzińska [2006]: Czynniki warunkujące funkcjonowanie i rozwój firm agrobiznesu na obszarach wiejskich. Zeszyty Problemowe Postępów Nauk Rolniczych, No. 514: 113.

[85] P. Gabryjończyk, M. Iwańska [2010]: Stan i kierunki rozwoju przedsiębiorczości na obszarze LGD „Krzemienny Krąg". Acta Scientarium Polonorum Oeconomia, 9(2): 73.

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from large-scale producers. The aim of the European model of agriculture is to ensure that agriculture responds to key concerns such as environmental protection, social and economic mobilization of rural areas[87].

In rural areas, the very nature of farm activity supports the creation of enterprise. Farmers have always been self-employed, they worked independently and at own risk. The diversity of management and production methods contributed to significant variations in farm profile. In addition to mechanisms that govern production and marketing strategies, forces of nature pose an equally important challenge which influences production directly or indirectly. The objective of agricultural production is also changing in rural areas. Farms initially catered to own sustenance needs, but contemporary estates have to develop effective strategies to market their products, including in cooperation with other agricultural producers. Rural entrepreneurs can no longer focus solely on farm activities. They have to search for additional sources of income by initiating activities that are not strictly related to agricultural production (agritourism, business) or alternative sources of financing from projects such as ostrich or fallow deer farms that are still niche markets[88].

Multifunctional development of rural areas should be coordinated by the competent authorities and promoted not only by local entrepreneurs, but also by agricultural advisory centers. Those institutions operate throughout the country, they identify a farm's needs, provide knowledge and organizational support. Advisory centers were set up with the aim of promoting rural development, shaping enterprising attitudes among farmers during training courses and supporting sustainable development of rural areas. The centers assist farmers and entrepreneurs by suggesting the most effective course of action that should be taken to solve a specific problem. Those institutions encourage estate owners to initiate innovative projects and secure additional source of income to improve production profitability and make the region attractive for new investors[89].

According to Kropsz (2009), non-farm activities provide members of the rural community with an additional source of income. At present, agricultural activities generate low earnings which are often insufficient to cover basic living costs. Farmers do not have to wind up their estates, but they can start alternative businesses that will supplement their livelihoods. Non-farm activities compensate for the low incomes from agriculture, they create new jobs, increase production dynamics and boost rural entrepreneurs' confidence levels. They create a competitive market for other businesses and foster cooperation between market actors[90].

The expansion of agricultural operations, the establishment of other agribusiness ventures and off-farm activities contribute to enterprise creation. The success of such undertakings requires diversification of the supplied products, effective use of the existing resources and market demand for the offered goods. New approaches to enterprise management and organization need to be developed. The creation of enterprise is a process that should involve the rural community, agricultural advisory centers and business leaders[91].

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87 D. Zając [2010]: Wielofunkcyjność gospodarstw rolników-przedsiębiorców. Acta Scientarium Polonorum Oeconomia 9(2): 230.

88 A. Hałasiewicz [2006]: Przedsiębiorczość wiejska [In:] A. Hałasiewicz [Ed.] Przedsiębiorczość na obszarach wiejskich –wybrane aspekty. FAPA Warszawa: 48.

89 A. Parzonko [2010]: Doradztwo a zachowania przedsiębiorcze na obszarach wiejskich. Acta Scientarium Polonorum Oeconomia 9(2): 143.

90 I. Kropsz [2009]: Przedsiębiorczość pozarolnicza jako źródło dodatkowych dochodów. Journal of Agribusiness and Rural Development 3(13): 125.

91 A. P. Wiatrak [2003]: Instytucjonalne wsparcie rozwoju przedsiębiorczości na terenach wiejskich. Folia Universitas Agriculturae Stetinensis Oeconomia 232(42): 233.

7.2. Objective and Methods

The objective of this study was to evaluate the diversification of a farm's production profile and to determine the correlations between diversification measures and farm development. The experiment was carried out in 2010 in 65 randomly selected rural enterprises in Olsztyn district. The surveyed subjects were farm owners who engaged in various types of non-agricultural activity to diversify their production profile. The survey involved interviews and questionnaires with open-ended and close-ended questions. The results are presented in tabular form.

7.3. Motivation and Opportunities for Starting Business Activity

Rural enterprise development is a broad problem area. Local entrepreneurship should rely on the production of high-quality goods and services. By diversifying their production profile, farmers can generate additional income, supplement their existing earnings and process locally manufactured products. The demand for goods and services supplied by alternative forms of activity should be surveyed before the new business is set up.

Table 1. Motivation for starting alternative business activity

Specification	n*	% respondents
Convinced by family members	17	16.6
Convinced by friends	7	6.8
Positive local examples	10	9.8
Generation of additional income	28	27.4
Job loss	14	13.7
Capital investment	10	9.8
Continuation of family business	11	10.7
Other	5	4.9
Total	102	100%

Source: own study.

** Respondents were allowed to choose more than one answer.*

The factors motivating farmers to start an alternative business are presented in Table 1. The respondents were able to choose more than one answer, which is why the total number of responses in the questionnaire amounts to 102. The highest number of surveyed subjects was motivated by the willingness to earn additional income (27.4%). The second most important motivating factor was suggestions from family members (16.6%). For the third largest group of respondents, job loss was a critical event that encouraged them to take up entrepreneurial activities (13.7%). A private business provides the owner with a guarantee of long-term employment without the risk of job loss.

Business success is determined by a variety of factors, and the respondents were able to choose more than one answer in the questionnaire. As shown in Table 2, the largest group of entrepreneurs (14.1%) was of the opinion that capital is a critical success factor in business. Location and market knowledge were also recognized as key contributors to success (9.8%).

Table 2. Critical success factors in business

Specification	n	% respondents
Capital	13	14.1
Prime location	9	9.8
Planning skills	8	8.7
Market knowledge	9	9.8
Good choice of business area	5	5.4
High quality of offered products	5	5.4
Other	43	46.7
Total	92	100%

Source: own study.

Local enterprises will grow and develop a competitive edge in areas which are characterized by simple infrastructure, supportive regional policy and identified consumer expectations. Some subjects regarded planning skills as a critical success factor (8.7%). The noted results indicate that the respondents have a rational approach to business and profitability calculations, and they intend to invest and expand the range of offered products in the future.

Table 3. Opportunities for increasing business proceeds

Specification	n	% respondents
Are available	11	16.9
Are mostly available	31	47.7
Are mostly unavailable	19	29.2
Are unavailable	4	6.1
Total	65	100%

Source: own study.

The data indicated in Table 3 show that most rural entrepreneurs recognized the existing opportunities for increasing their business earnings (47.7%). The second largest group of respondents (29.2%) was skeptical about the availability of new income-generating opportunities. Some polled subjects (16.9%) were of the opinion that opportunities for income maximization were definitely available. Only 6.1% of the respondents were pessimistic about their ability to increase business proceeds.

Table 4. Opportunities for business growth

Specification	n	% respondents
Market development	28	43.1
Expanded product range	16	24.6
Specialization	21	32.3
Total	65	100%

Source: own study.

The three most significant factors supporting business growth in the respondents' opinion are presented in Table 4. A high 43.1% of the polled subjects were of the opinion that local

businesses could thrive on positive changes in the market environment. Specialization was regarded as a critical factor by 32.3% of the respondents who argued that they could increase their performance by narrowing down their business profile. The resulting products and services would be characterized by unique attributes, high quality and competitive prices. According to 24.6% of entrepreneurs, higher levels of business growth could be attained by expanding their production profile, including through the diversification of income-generating activities. Additional areas of activity, such as agritourism or animal production, would improve the financial performance of their businesses.

Rural enterprise growth should receive support from the local authorities. The communication between prospective entrepreneurs in rural areas and advisory institutions should rely on the flexible flow of comprehensive information. This approach fosters development and cooperation between business and the authorities. It engages members of the local community and promotes the initiation of non-farm activities in the countryside.

Table 5. Sources of information and advice on business development

Specification	n	% respondents
Agricultural Advisory Centers	19	29.2
Experts	7	10.7
Colleagues	5	7.6
Own research	13	20.0
Professional literature	11	16.9
Consultants	3	4.6
Other	5	7.6
Does not seek advice	2	3.1
Total	65	100%

Source: own study.

As demonstrated by Table 5, the highest number of respondents (29.2%) sought advice from Agricultural Advisory Centers. The centers' experts have the required knowledge, and they offer practical guidance on how to start a business in rural areas. They organize training courses for farmers who are willing to become self-employed. Their efforts contribute to the growth of enterprise, they actively prevent unemployment and mobilize members of the local community. But, 20% of the polled subjects claimed to be doing their own research, which suggests that contemporary entrepreneurs recognize continuous education as a critical success factor. Professional literature was the preferred source of knowledge for 16.9% of the respondents who had an interest in diversifying their sources of income.

Table 6. Institutions that offer support in the process of starting a business

Specification	n	% respondents
Banks	10	15.4
Agricultural Advisory Centers	17	26.1
Agency for Restructuring and Modernization of Agriculture	13	20
Municipal Office	6	9.2
Other	9	13.8
None	10	15.4
Total	65	100%

Source: own study.

Farmers who decide to generate additional income from off-farm activities and alternative forms of production find it difficult to make all the relevant decisions and complete the start-up process. The central and local authorities should implement growth-promoting policies that foster a supportive environment for the creation of enterprise in rural areas. Table 6 lists institutions that promote local business undertakings. According to 26.1% of the respondents, Agricultural Advisory Centers are the most pro-active institutions that promote local business growth. The Agency of Restructuring and Modernization of Agriculture was regarded as a significant contributor to rural development by 20% of the polled subjects. Grants and support schemes enable farmers to start a business, develop alternatives to traditional agricultural production and generate higher earnings. Only 15.4% of the surveyed farmers were of the opinion that banks foster a supporting environment for the diversification of rural incomes. Low-interest preferential loans are increasingly available to land owners who can rely on this form of assistance to boost production and improve profitability.

Table 7. Sources of farm income

Specification	n	% respondents
Only agricultural production	20	30.7
Mainly agricultural production	16	24.6
Partial agricultural production	16	24.6
Alternative activity	13	20.0
Total	65	100%

Source: own study.

The results of this study indicate that many rural entrepreneurs continue to derive their incomes solely from agriculture. As demonstrated by Table 7, on-farm activities were the only source of income for a high 30.7% of the respondents. Most of their earnings (90%) were generated from agricultural production, whereas alternative activities accounted for 10% of their incomes. Off-farm activities were undertaken by 20% of the polled subjects, and they had a 60% share of their total earnings, whereas agricultural production accounted for 40% of their incomes. Active measures should, therefore, be undertaken to support the diversification of rural production, maximize farm incomes, boost their profits and the owners' satisfaction. Respondents who generated 50% of their earnings from agricultural production (24.6%) were involved in off-farm activities that accounted for the remaining 50% of their incomes. The most

popular forms of off-farm activities were agritourism, purchase of non-timber forest products and vehicle repair. Additional sources of income improve rural livelihoods.

Table 8. Activities undertaken to supplement farm incomes

Specification	n	% respondents
Specialization	7	10.7
Expansion of farm area	14	21.5
Off-farm activities	13	20.0
More effective use of market information	11	16.9
Consulting decisions with experts	16	24.6
Other	4	6.1
Total	65	100%

Source: own study.

The key goal of every farm business is to increase income levels. Enterprises aim to maximize profits in the shortest time possible, while minimizing their losses. Nevertheless, these are only theoretical assumptions, and success is determined by a wide range of factors that are both dependent and independent of the business environment. The data presented in Table 8 show that 21.5% of the respondents were hoping to maximize their incomes by expanding the area of their farms. According to 24.6% of polled subjects, higher profits could be achieved by consulting business decisions with experts. Agricultural advisors provide entrepreneurs with support in the process of diagnosing the market and estimating business profits. Only 16.9% of farmers were of the opinion that improved access to market information was the key contributor to success. Off-farm activities were seen as the most effective way of improving rural livelihoods by 20% of the respondents.

Table 9. Solutions and instruments that are most conducive to rural development

Specification	n	% respondents
Investments in regional development	14	21.5
Funds for infrastructure development projects	25	38.5
Higher State aid for farmers	25	38.5
No opinion	1	1.5
Total	65	100%

Source: own study.

As demonstrated by the data in Table 9, 38.5% of the respondents were of the opinion that the availability of funds for infrastructure development projects was the key driver behind rural growth. An equal number of subjects argued that the volume of State aid should be increased to maximize the profitability of agricultural production. According to 21.5% of farmers, more State aid should be channeled to regional investments that boost enterprise growth in rural areas.

7.4. Effects of Entrepreneurship Development

Various authors have suggested that rural development is correlated with enterprise growth. The challenges undertaken by active members of the local community motivate rural inhabitants to supplement their incomes through the pursuit of alternative activities. Through their perseverance, determination and refusal to give up, rural entrepreneurs not only satisfy their basic life needs, but they also contribute to business activation in the region. They are members of an elitist group which shapes production trends[92].

By diversifying their production profile, farmers can make better use of locally available material and non-material resources. Farms can generate additional incomes by becoming engaged in alliterative or non-farm production.

Rural areas would substantially benefit from projects aiming to improve local infrastructure, better access to consulting institutions specializing in agriculture and rural enterprise, housing and community programs that would raise living standards in rural areas.

The development of rural enterprise should be based on cooperation between businesses and public entities. Entrepreneurs need unlimited access to business information that will enable them to gain a competitive advantage on the market.

Public institutions should promote the creation of rural enterprises to reduce unemployment and counteract social alienation. Banks and institutions should provide farmers with detailed and comprehensive information about the available support options.

The natural environment is the greatest asset and a key tourist attraction in rural areas. For this reason, the initiation of off-farm and alternative activities should be accompanied by measures that actively protect the natural surroundings.

Small and medium-size enterprises are unable to compete with large-scale producers. They should find an appropriate market niche and supply customers with unique and high-quality products. Rural businesses need to identify the strengths that will enable them to address different groups of consumers than those targeted by large corporations.

The creation of enterprise in rural areas will reduce unemployment, and it could limit the migration of local inhabitants to cities in search of work.

The effectiveness of rural development policies is largely determined by the involvement of institutions that come into direct contact with rural areas and local entrepreneurs who themselves undertake profit/loss risk. The authorities should promote enterprise creation and give support to rural entrepreneurs through various support schemes.

To further their development, business owners should invest in modern means of production. Better machines and equipment will increase output and ensure uninterrupted flow of production.

It is important that consulting institutions provide rural entrepreneurs with professional help in solving business problems. The cooperation between business owners and consultants should involve unrestricted flow of information to dispel the entrepreneur's fears and queries. Banks, Agricultural Advisory Centers, municipal offices, the Agency for Restructuring and Modernization of Agriculture should initiate support schemes to encourage the growth of rural enterprise, encourage enterprising attitudes and behavior, thus reducing unemployment. Support measures for farm businesses should not be offered only by institutions that promote

[92] T. Marcysiak, A. Szczęchor [2009]: Inicjatywy przedsiębiorcze indywidualnych gospodarstw rolnych w województwie kujawsko-pomorskim [In:] S. Zawisza [Ed.] Rozwój przedsiębiorczości i zespołowej działalności gospodarczej w rolnictwie w świetle integracji z Unią Europejską. Wyd. UTP Bydgoszcz: 85.

business growth. Other public institutions, including city offices, regional offices and self-government organizations, should also participate in this process.

The creation of enterprise in rural areas requires great determination on behalf of the owner and his family members who will support the undertaking. Above all, every business venture has to generate profits. The critical success factors include the availability of capital for business investments, a positive business outlook, good location, product's uniqueness and market knowledge. Rural areas offer many opportunities for increasing income, but it is up to the farmer to decide whether he will expand the range of supplied goods and services or narrow down his production profile. A more developed market facilitates the flow of information between consumers and producers. In rural areas, the business environment should receive active support from the State and the local authorities. Rural business enterprise grants will enhance the profitability of non-farm activities and alternative forms of employment. Infrastructure development projects and increased State aid for local businesses should be the pillars of regional development policy to stimulate the growth of rural enterprise.

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8

KNOWLEDGE MANAGEMENT AND DIFFUSION OF INNOVATIONS IN THE PROCESS OF RESTRUCTURING AGRICULTURE AND FOOD INDUSTRY COMPANIES

Krzysztof Firlej

8.1. Evolution of the Era of Information, Knowledge and Innovation

The doctrine of economic science emphasises the growing importance of information and knowledge for civilization development. A. Toffler states that in the history of mankind we have faced the so-called third wave following the agrarian and industrial revolution – the era of information and knowledge[93]. P. Drucker predicts formation of a new type of society – "knowledge-based society" and along with that knowledge-based economy[94]. No matter how we call the currently shaping social macro-systems (various names are used: network society, knowledge society, digital society, post-industrial society) and fundamental transformations taking place simultaneously in the economy, it needs to be emphasised that knowledge occupies the central place of transformations. It contributes to the development of societies, their economies and their companies. Knowledge combined with creativity, efficient innovation processes and the so-called innovative culture conduce measurable increase of their competitiveness. To increase this competitiveness it is necessary to take into account mutual relations and dependencies occurring during the implementation of innovation processes, creation of organizational aspects of management in the processes of modernization and revitalization of the companies. Each company is a collection of unique resources which constitute different types of assets enabling the implementation of the strategy leading to the increase of efficiency, effectiveness and competitiveness. One of such resources is knowledge which, if it is properly used, should generate the company's profit. It can be observed that knowledge, information, its quality and timeliness are stimulants of the companies' success which is expressed in the increase of their competitiveness and better position on the market. The era of "new economy" determines economic success which is measured not only by the company's market share, the size of the possessed assets, customers or the size of the conquered market, but also by the success in knowledge management and the ability to use the intellectual capital of the company which constitutes its value. According to M. G. Woźniak, the last two decades of the 20th century are perceived in the history as a period of knowledge-based economy (KBE) popularization which

[93] W. Kotarba [2006]: Ochrona wiedzy a kapitał intelektualny organizacji. PWE, Warszawa: 14.

[94] G. Kobyłko, M. Morawski [2006]: Przedsiębiorstwo zorientowane na wiedzę. Centrum Doradztwa i Informacji Difin sp. z o. o., Warszawa: 32.

by being able to act becomes commonly available[95]. The use of the strategic entrepreneurs' competence has a significant relation to the intensive development of entrepreneurship which in the food industry means strengthening of ties between particular links of food production and inclusion of agriculture in the social division of labor i.e. strengthening its bond with the industry.

In the world of business innovations are a key to increase profits and market share, but they are also associated with costs and risk. The word innovation comes from Latin *innovatitis* which means renewal, creating something new. For the precursor of the innovation theory, J. Schumpeter, innovations were the first use of a particular invention, a novelty on the national scale, but also – lowering the degree of aggregation – a novelty for the companies and for an individual[96]. Modern definitions emphasise the importance of innovation in the organizational sense because organization is one of the factors determining the efficiency of implementation of technical innovations. Confrontation of different definitional approaches to innovativeness shows plurality of aspects affecting its creation and development. On the other hand, OECD terminology indicates that innovation activity consists of a number of actions of scientific (investigative), technical, organizational, financial and business (commercial) nature the aim of which is to develop and implement new or significantly improved products and processes[97]. The problem of distinguishing product innovation from process innovation became the subject of discussion. The division into product and process innovations was analysed and described by W.J. Abernathy. He distinguished the group of radical product innovations dominant in the early stages of industry development[98]. The second type of innovations is incremental process innovations leading to the improvement of production process by minimizing the costs and improving the efficiency and quality. Process innovation is currently becoming the major source of competitive advantage in the mature phase of the industry. A slightly different definition of the types of innovations was proposed by W. Wiszniewski who states that product innovation is the introduction on the market of a product which technological features or application differ significantly from previously manufactured products or the functioning of which has been significantly improved and which, at the same time, can provide for the customer objectively new or increased benefits, while process innovation is the adaptation of new or significantly improved methods of production or delivery of products[99]. It is associated with the changes in the field of organization, technology, human resources, methods of work, equipment or the combination of such changes. At the turn of the centuries innovations gained the rank of a new technology which was called "industrial religion of the late 20th century". Among numerous different approaches a common and indivisible feature of innovation can be generated which states that innovation is related to changes and emphasises the fact of applying the changes in practice. In this project the problem of innovation will be presented in relation to its influence on the companies' competitiveness. The definition created by OECD explains that: "competitiveness is the ability of companies, industries, regions, nations, and supranational regions to

[95] M. G. Woźniak [2011]: Teoretyczne problemy spójności społeczno – ekonomicznej mechanizmu rynkowego w kontekście gospodarki opartej na wiedzy http://www.univ.rzeszow.pl/ekonomia/zeszyty/Zeszyt10/2.pdf, access 2.06. 2011.

[96] J. Schumpeter [1960]: Teoria rozwoju gospodarczego. PWN, Warszawa: 104.

[97] The OECD Bologna Ministerial Conference [2011]: Enhancing SME Competitiveness. Organization for Economic Co-Operation and Development, France: 14.

[98] W.J Abernathy [1978]: The Productivity Dilemma – Roadblock to Innovation in the Automobile Industry. The Johns Hopkins University Press, Baltimore: 68-81.

[99] W. Wiszniewski [1999]: Innowacyjność polskich przedsiębiorstw przemysłowych. Wydawnictwo Instytutu Organizacji i Zarządzania „Orgmasz", Warszawa: 9.

generate relatively high and stable income and employment level in the global perspective". According to P. Krugman, competitiveness is a way to increase productivity by the increase rate in one company in relation to others[100]. In the market economy, the companies are not able to affect the price level on their own – because it depends on market forces of supply and demand. They can only increase competitiveness of their products – which creates a sum of producer and consumer surplus. So far, in our country, as the main challenges related to competitiveness have been considered: cost reduction, innovation of products and services, increase of productivity, increase of products' quality, modernization of management processes and improvement of relations with the customer. Competitiveness can be affected by all business entities which have cooperative and competitive relationships with the company. M. Gorynia defines competitiveness of a company as its ability to achieve competitive capability[101]. However, it is difficult not to agree with the opinion that competition and competitiveness should be combined and as a competitive company we should perceive a company which business activity in the long run leads to the increase of the market value.

8.2. Factography, Aim and Research Methodology

For the purpose of visualization of knowledge management and diffusion of innovations problems in the process of integrated development, empirical research was conducted in 29 companies with the seat in malopolskie province in 2010**.** The research was conducted, as previously, with the division into selected branches of agriculture and food industry and in the form of confrontation with the research conducted in 2006 (when 289 companies were examined[102]). The aim of the conducted research was to carry out the analysis of microeconomic conditions which currently influence the innovativeness and competitiveness of agriculture and food industry companies to the most significant extent i.e. they influence the need to introduce modern methods of management, evaluation of the possessed factors of production and the need of their modernization, evaluation of the current socio-demographic factors and the state of infrastructure[103]. The research was conducted with the owners or managers of the companies. The level of the examined factors was about to eventually determining the relationship between the existing and future state of the company in seven years after the accession of our country to the European Union. The main aspects of the research focused on the interest of the companies in innovativeness and creation of competitive position on the local and domestic markets.

[100] P. Krugman [1994]: Competitiveness: A Dangerous Obsession. Foreign Affairs 73(42).

[101] M. Gorynia [2001]: Międzynarodowa konkurencyjność polskich przedsiębiorstw – wyniki badań empirycznych. 7th Congress of Polish Economists, Session IV „Przedsiębiorczość i Konkurencyjność". Journal 8: 4-8.

[102] K. Firlej [2008]: Rozwój przemysłu rolno-spożywczego w sektorze agrobiznesu i jego determinanty. Wyd. UE w Krakowie, Kraków: 187-237.

[103] K. Firlej [2011]: Aspekty innowacyjności jako instrument konkurencyjności regionu małopolskiego. Studia i Materiały Polskiego Towarzystwa Zarządzania Wiedzą, Bydgoszcz.

8.3. The Effectiveness of Restructuring and Modernization Processes in Agriculture and Food Companies – the Results of the Research

In order to carry out the analysis of restructuring and modernization processes in Polish agriculture and food companies, empirical research was conducted in 289 companies located in małopolskie province with the division into selected branches of agriculture and food industry. The respondents were the owners or managers of the companies. The determinants deciding about the level of development of the companies of selected branches of agriculture and food industry were external, internal, system and organizational factors which to the greater or lesser extent decide about their functioning. The study of the determined factors provided lot information defining the dependence of the existing and future state of the companies on the limiting conditions of the environment as exogenous variables. The research was conducted in 2006 and 2010, in three and seven years after the full accession of Poland to the European Union. The research conducted in 2010 concerned microeconomic conditions which were treated as determinants of innovativeness in the development of competitiveness of agriculture and food companies in malopolskie province. In the testes examining the relation between the selected answers in 2006 survey the chi-square test for cross tabulations was used[104]. Under each table the test result and the number of degrees of freedom are presented and statistical significance is marked. Three levels of statistical significance were used 0,05 also marked * (significant statistically), 0,01 (**) (very significant statistically) and 0,001 (***)(extremely significant statistically). These are three typical levels of statistical significance used in statistical analysis. The choice of the test (chi-square for cross tabulations) was dictated by the nature of the examined features (survey questions). Answers to each survey question – if we treat them as random variables – are categorized variables (i.e. measured features grouped into classes e.g. profit, turnover) or nominal variables (ordinal or not). The only test examining the relation between such features which can be applied is the chi-square test for cross tabulations. When identifying the state of the agriculture and food industry companies its most important branches were chosen for research. The choice was purposive. The research involved companies from grain branch (30), confectionery branch (96), dairy branch (36), fruit and vegetable branch (78) and meat branch (49). The average range of employment in the examined companies amounted to 9-49 people and average turnover of the examined companies was in the range of 1 000 001 – 10 000 000 PLN while the average profit was 100 001 – 1 000 000 PLN. When it comes to the achieved turnover, the best were the companies from dairy branch which achieved the highest turnover in the range of 1 000 001 – 10 million PLN (43.4%) and over 10 million (9.7%). High turnover over 10 million PLN was also achieved by other branches: meat (8.0%), confectionery (4.7%), fruit and vegetable (4.1%) and grain (3.3%). The highest profit was achieved by the companies from dairy branch, among which the profit exceeding 10 million PLN was achieved by 3.1% and the profit in the range of 1 000 001 – 10 000 000 was achieved by 21.9%. After 1990 an average of 15.3% of the companies changed the forms of property ownership which can be perceived as a small percentage in relation to the transformations taking place during that period in our country. In the examined companies the most changes occurred in grain branch (24.1%) and the fewest in fruit and vegetable branch (8.5%). The empirical research defined the relation between the use of the European Union financial support and the height of the companies' turnover (Fig. 1) and the use of the European Union financial support and the achieved profit (Fig. 2).

[104] K. Firlej, op. cit.:194-237.

The test result $\chi 2 = 22.220$; df = 3; $p < 0{,}001$ *** meant that there was statistically extremely significant relation between the height of the company's turnover and the use of the European Union financial support. The European Union financial support accompanied companies with high turnover (Fig. 1).

The test result $\chi 2 = 8.873$; df = 2; $p < 0{,}05$ * meant that there was statistically significant relation between the achieved profit of the companies and the use of the European Union financial support. The European Union financial support accompanied higher profits (Fig. 2) which positively verifies the research hypothesis that it accompanied the restructuring and modernization processes and therefore contributed to taking over by them the intended position in the country or in the structure of the European Union economy. From the analysis of the financial statements of the examined companies it can also be concluded that they had enough equity securing the profitability of the sales in the future. The examined companies were limiting the costs of sales, significantly decreasing employment and getting rid of the redundant components of the fixed assets quite often thanks to which they were generating considerable part of the profits (e.g. Advadis S.A. [Joint-stock company] in Cracow).

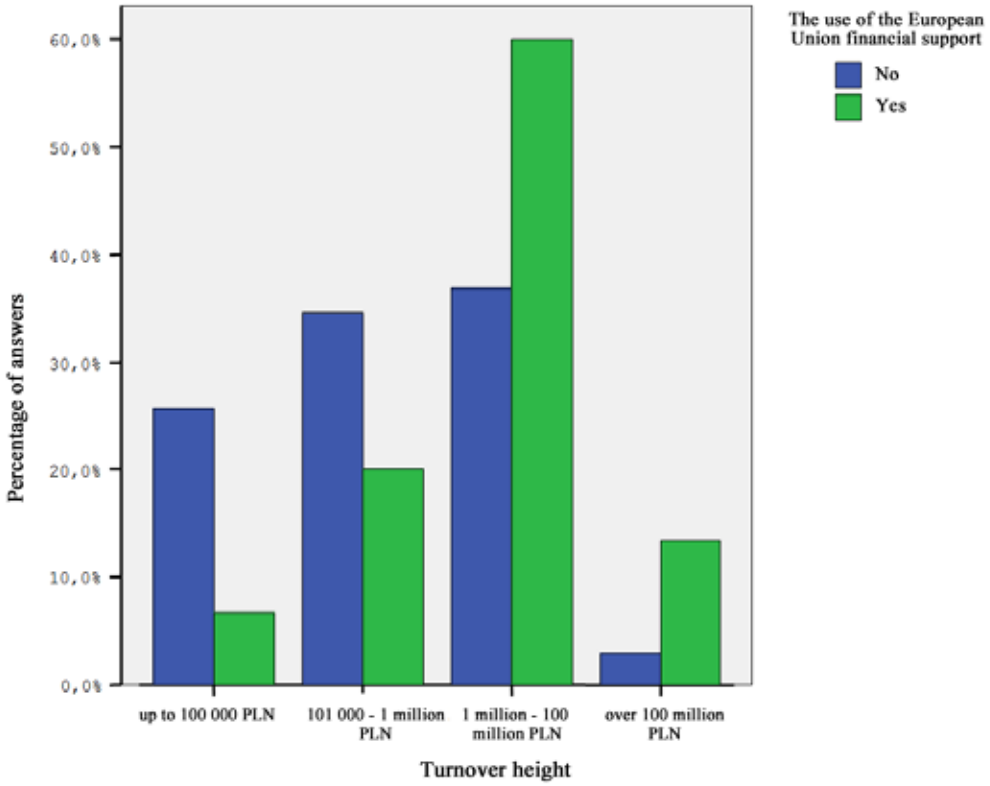

Fig. 1. The use of the European Union financial support vs turnover

Source: author's own study based on survey research.

The recovery processes included remedial restructuring of improperly functioning areas of the companies as well as developmental restructuring which means introduction of changes enabling achievement of strategic goals. Most of the companies' Boards were interested in car-

rying out the restructuring processes in the selected spheres of business activity and put special emphasis on market and product restructuring, organizational restructuring and employment restructuring. These processes concerned the assets and finances of the examined companies and their property to a much lesser extent. External factors included also the forms of using financial support which the companies can receive from the European Union structural funds. The companies were also asked if they were going to use them in the following twelve months to improve their position on the market. To the first question only 19.3% of the examined companies said "yes" and 80.7% said "no". It means that in practice an average of less than one fifth of the companies was using this kind of support.

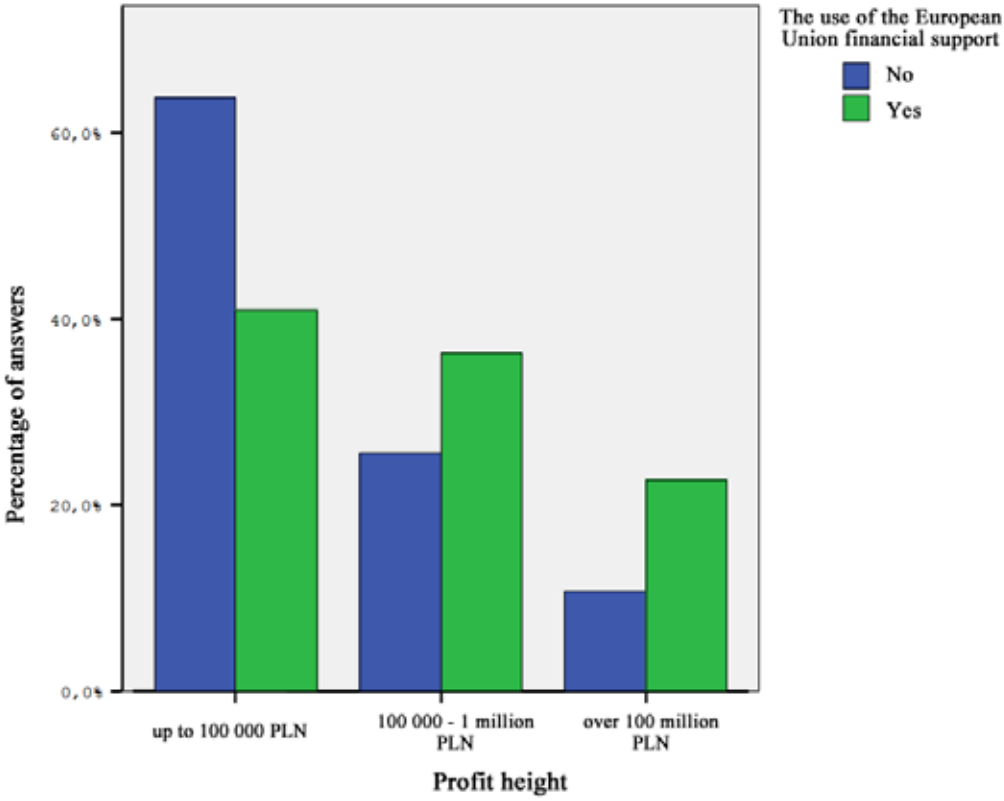

Fig. 2. The use of the European Union financial support vs profit

Source: author's own study based on survey research.

When it comes to different branches, most of the companies using the available support belonged to the meat branch (27.8%) and dairy branch and the fewest to the confectionery branch (12.5%). The situation related to the use of financial support in the future is also unfavourable. Among the examined companies 21.3% plan to use financial support, 42.0% not and 36.7% are undecided. The majority of the companies which plan and declare such actions belong to the meat branch (34.0%), dairy branch (25.7%) and fruit and vegetable branch (20.5%). Less interested were confectionery branch (15.8%) and grain branch (10.3%).

Summing up the assessment of the overall influence of the external factors on the development of the companies of selected food industry branches it can be concluded that some of them contributed to their development significantly while the others constituted a group

supporting such activities. It should be emphasised that the respondents did not indicate the factors which could, to a large extent, prevent their companies from proper functioning. We can deduce from the results of the conducted research that the most important factors were competition on the market, Polish accession to the European Union and transformations of the economy the purpose of which was to improve the company's situation on the market. Among the factors improving the current functioning of a company were continuous improvement of the quality of public services, improvement of the contact with the institutions, the interest of public authorities in the removal of the barriers related to the company's functioning, improvement of the local climate for business activity and the possibility of using the European Union financial support.

8.4. Innovativeness and Competitiveness – the Results of the Research

Activities which were conducted at the examined companies were: the evaluation of the modern management methods implementation, enquiry about the methods of managing the company, determination of the degree to which the management and employees know the vision of the company, recognition of the opportunities to adapt the strategy to the market conditions and the degree of its implementation, recognition of the ways of achieving the company's success, recognition to what extent employees participated in solving problems, recognition of the works aimed at searching for new organizational, technical and technological solutions, recognition of the level and tendencies concerning employment in the last few months, recognition of the use of Employment Agency services and subsidized employment, recognition of the quality of qualifications, recognition of the way and effectiveness of recruiting employees. What is more, during the research it was attempted to observe the difference between the state existing in 2007 and 2010 at the companies which tried to improve their innovative actions. One of the many criteria in the conducted research was the way of managing the company in the aspect of its innovativeness and its increase of competitiveness. In the case of the examined criterion four versions of the answer were suggested: very good, good, average and weak (Table 1). It should be emphasised that the only possible opinion was subjective opinion on the way of managing the company of the management itself which can, unfortunately, slightly distort the correctness of the answers. The conducted research found that the influence of the way of managing the company on its competitiveness was perceived as very good by 42.7% of the respondents, which turned out to be better by 12.3% compared to the result in 2007 (30.2%) and as good it was perceived by 38.4% (in 2007 by 59%).

Table 1. Evaluation of the way of managing the company in the aspect of innovativeness and the level of competitiveness

Influence of the way of managing the company on its competitiveness	Grain branch		Confectionery branch		Dairy branch		Fruit and vegetable branch		Meat branch		Total
	No. of answers	%	No. of answers	%	No. of answers	%	No. of answers	%	No. of answers	%	%
Very good	12	41.4	14	48.3	10	34.5	14	48.3	11	37.9	42.4
Good	11	37.9	12	41.4	9	31.0	11	37.9	14	48.3	38.4
Average	5	17.2	3	10.3	8	27.6	4	13.8	4	13.8	16.7
Weak	1	3.5	-	-	2	6.9	-		-	-	2.5
TOTAL:	29	100	29	100	29	100	29	100	29	100	100

Source: author's own study based on survey research

The answer "average" was chosen by 16.7% of the companies and "weak" by 2.1%. The results were also compared according to the branches. When evaluating the influence of the way of managing the company on its competitiveness it should be noticed the two best scores at the same level gained confectionery branch and fruit and vegetable branch (48.3%), and when it comes to the companies rated as "good" the best score achieved meat branch (48.3%). Dairy branch (6.9%) was the weakest. Despite the clear diversity in perceiving the way of managing the company as well as the influence of innovativeness on its competitiveness, an apparent increasing tendency can be observed in the field of the need to implement modern management methods and in the need of a great interest of the companies in the novelties in this area. Unfortunately, in their statements, the respondents poorly evaluated public relations of their companies105 which should be perceived negatively as a lack of reconciliation of company's actions policy and public interest.

In the post-accession period a continuous development of agriculture and food companies has been observed and recapitalization of companies resulting in reduction of the influence of the basic factors limiting their functioning leads to systematic improvement of their position on the local, domestic and international market. Based on the interviews carried out at the examined companies it was found that:

- knowledge, information and their quality and timeliness are for a company the factors enhancing success which is expressed in the increase of their competitiveness and better position on the market,

[105] Public relations – function of management the aim of which is to assess social attitudes towards an organization, to reconcile the policy and organization's activities with the public interest and to conduct activities aimed at gaining public understanding and acceptance. A. Mazurkiewicz [2005]: Współpraca służb public relations z mediami [In]: M. Adamowicz, [Ed.] Efektywność zarządzania marketingowego. Wyd. SGGW, Warszawa: 334-342, [adapted from:] G.E. Belch, M.A. Belch [1999]: Advertising and Promotion. An Integrated Marketing Communications Perspective. Irvin Mc Graw-Hill: 514.

- the use of modern techniques in current functioning of companies helps in an organized way to rationally manage possessed qualifications and skills and the possessed capital,
- intellectual capital and actions of corporate governance should be highly positioned in the value of a company,
- management of organizational climate and culture and important role of social responsibility of an organization are necessary in building companies' competitiveness.

Research on innovativeness of agriculture and food industry companies which has been conducted so far concerns to a large extent its effects in quantity terms which means the evaluation of the number of introduced innovations during a specific period of time. Innovation activity is characterized by share of the sold production of new and modernized products or share of products of high technology in the value of the sold production. An indirect measure of economy's innovativeness is dynamics of its development, however, the relationship between the level of innovativeness and economic development can be observed only after longer periods of time. Innovativeness is sometimes assessed by means of costs of research, development and patents. Unfortunately, innovation processes of the examined companies lack dynamics and the barriers of implementation of innovation processes which are mentioned the most frequently have financial basis such as underinvestment of research and development sphere and lack of effective mechanisms of transferring research effects to the economy. Companies inhibit the innovation processes themselves often due to a poorly designed system of their organization. Numerous economists emphasise that the weakness of our economy lies not in the causes of material nature but in the sphere of consciousness. Innovativeness is not perceived as a way to achieve success and intellectual potential of employees and their creativity are often underestimated – which was also observed at the examined companies. The conducted research shows that all analysed companies undertook innovation activity in the field of the offered products, processes and organizational structure. Expenditures were related to the investment processes associated with the need to adapt production methods to the standards and norms of the Community market. Factors hampering innovation activity were those connected with knowledge, market factors and others. The most important economic barriers are: too high costs of innovations, shortage of funds and difficulties in obtaining external financing. Strong competition and uncertainty concerning demand for innovative products were the main market barriers. An important group of barriers constituted factors related to knowledge. The problem was lack of conviction about the demand for innovative products. Managers of the examined companies stated that the need for innovation resulted from the market situation and the more competitive and open the market was, the greater was the need for innovations as tools for gaining advantage. It was emphasised numerous times, pointing to several innovative strategic priorities, that the companies are developmental. The respondents were interested in obtaining foreign patents and some of them plan further development of distribution process and logisitcs. The main strategic priorities in order of their importance are: improvement of company's profitability, improvement of products' quality, increase of competitiveness, widening of the range of selling products, adaptation of methods of production to the European Union and environmental protection requirements, reduction of production costs and the increase of market share. Important tasks which should be performed in the future are: constant awareness of the need of taking up new actions, determination of their grounds, creation of new rules and models of functioning, development of competence and constant improvement of current tasks. An action leading to the improvement of competitiveness of the examined companies will be the creation of rules of functioning of regional innovation system within which the entrepreneurs could obtain free assistance in the scope of broadly defined knowledge

transfer. Rapidly developing, after Polish accession, agriculture and food industry enables development of small and medium companies in malopolskie province which often has influence on solving complicated socio-economic problems within the region. Many factors which are the stimulants of business activity of the companies functioning in the region contribute to that. To the most important of them should be included the fact that small and medium companies decide about the development of the region to the greatest extent: they dynamically affect the development of the regional economy, they are flexible when it comes to adaptation to the changing conditions of the environment, they have influence on innovations and creativity in obtaining new solutions, they have influence on development of the local and regional market and they contribute to the increase of the local level of employment.

8.5. Summary and Conclusions

The research conducted in two periods and verification of their results enabled the presentation of effects of restructuring of agriculture and food industry companies and modernization of farms in the first decade of the 21st century in Poland. An addition to them was the presentation of knowledge management and diffusion of innovations in the process of integrated development of the companies in malopolskie province. The analysed microeconomic conditions can be perceived as significant determinants of innovativeness in the development of competitiveness of agriculture and food companies in malopolskie province. Equally important are the level of organizational and technological advancement of companies, the way of managing a company, degree of knowing the vision of a company, possibilities and degree of implementation of the company's strategy which can affect functioning of a company and region. Entrepreneurs of the examined companies declare that they have sufficient knowledge to plan the company's success independently, they involve employees in solving the occurring problems and searching for new organizational, technical and technological solutions. The potential of the companies should be considered as significant and supporting their development. To sum up the analysed theoretical issues and conducted research the following conclusions can be drawn:

1. The period of transformation of Polish economy has contributed to the implementation of transformations in agriculture and food industry which were affected by privatisation and restructuring of companies;
2. Properly carried out restructuring together with implication of modern innovation processes can support modernity and competitive position of Polish agriculture and food industry companies on international markets.
3. Low innovativeness limits competitiveness of Polish economy, determines it and has influence on a large diversity of the level of economic development of different regions in Poland;
4. Increasing competitiveness in the regions by agriculture and food industry companies can contribute to the prevention of their social, economic and spatial marginalisation;
5. Creation of innovative culture can contribute to the increase of the value added in agriculture and food industry companies;
6. Innovativeness of agriculture and food industry companies is an essential condition for the increase of the region's competitiveness by the use of modern management methods in the companies, proper use of resources, their modernization and securing the proper state of infrastructure in their surroundings;

7. Current strategies of the companies introduce changes in the way of managing incidentally while they should be perceived as innovation actions leading to the increase of competitiveness;
8. In agriculture and food industry companies in malopolskie province actions in the field of modernization of machinery stock and launching new products and services on the market are rare and there is a small interest in the increase of qualifications and skills of employees;
9. Within the examined area the entrepreneurs still identify themselves with the region only to a small extent, there is a small interest in its development, increase of its competitiveness which reduces the role of corporate social responsibility.

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Mazurkiewicz A. [2005]: *Współpraca służb public relations z mediami* [In:] *M. Adamowicz,* [Ed.] *Efektywność zarządzania marketingowego.* Wyd. SGGW, Warszawa.

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9

RURAL TOURISM AS AN IMPORTANT ELEMENT OF SUSTAINABLE DEVELOPMENT OF 'NATURE MUNICIPALITIES' LOCATED IN THE PODLASKIE VOIVODESHIP – THE GREEN LUNGS OF POLAND

Bartosz Mickiewicz, Mariola Grzybowska-Brzezińska

9.1. Conditions of Tourism Development

Lately there has been an increased interest in spending free time in an active way, especially in protected areas. This is due to people's desire to return to 'nature' since they spend most of their life in an 'artificial' environment of the workplace. It can be also linked to lifestyle changes, i.e. a greater concern for health, fitness and physical performance. More and more people have begun to enjoy spending their leisure time actively surrounded by exceptional natural attractions and silence. Such an opportunity is offered by protected areas, especially natural landscape parks.

Tourism in protected areas plays a particularly important role in mitigating urban problems. Due to constant enlargement of such areas (they compose 31% of Poland now), together with numerous legal restrictions that do not allow traditional management, the creation of tourist and recreational businesses is one of the pillars of development[106].

Dobrzańska (2005) specifies a valuable natural area by using two complementary definitions. The first states that it is an area of land or sea with high biodiversity and associated natural and cultural resources, which are used in the manner that ensures the protection of this biodiversity. The other definition describes a valuable natural area as one where biodiversity is (or may be) an important factor of any business activity or which significantly restricts conventional management[107].

The development of tourism is seen as one of the effects of a significant improvement in the society's quality of life. One can observe the following tendencies in each society:

- striving for a healthy lifestyle through proper nutrition,
- rejecting bad habits, leading active lifestyles, caring about mental health and well-being, avoiding stress, developing one's interests and hobbies,
- striving for contact with nature.

[106] K. Krajewski, M. Świątkowska [2008]: Turystyka weekendowa na terenach chronionych Trójmiasta – szansa czy zagrożenie zrównoważonego rozwoju Kaszub? [In:] S. Wodejko [Ed.] Zrównoważony rozwój turystyki. Wyd. SGH, Warszawa.

[107] B. Dobrzańska, G. Dobrzański, D. Kiełczewski [2008]: Ochrona środowiska przyrodniczego. Wydawnictwo Naukowe PWN, Warszawa.

The main condition of agritourism development in protected areas is the necessity to consider its environmental potential. Sołowiej (1993) particularly stated this by analysing the situation of recreational areas of Międzyzdroje and Widełki, located in Woliński National Park[108]. As Połucha, Młynarczyk and Marks (2002) point out, risks brought by tourism are mainly connected with the destruction of environmental resources through excessive tourist penetration and increased pollution. However, this ought to be regulated by park administrators who control the number of tourists and ensure that no one takes advantage of areas which are the least resistant to the anthropogenic impact[109].

Bori-Sanz and Niskanen (2002) stress the important role of tourism in legally protected areas. According to their research conducted in three national parks in Finland, Scotland and Spain, inhabitants of these areas see tourism and recreation as the most important type of activity, next to agriculture and timber industry[110]. However, some authors seem to disagree with the claim that the development of tourism is a form of additional income for farmers. To support this opinion they state that the poorer part of our society does not take advantage of agritourism in national parks, while the rich tend to choose expensive Polish resorts or holidays abroad. But trends in the development of agritourism, especially in rural areas, do not confirm that belief. The argument above might be true as far as coastal and mountain areas are concerned, as they are rich in tourist infrastructure. The situation is quite different in areas which are rather underdeveloped in this respect, such as the Podlasie and Suwałki regions.

9.2. The Subject Matter and Methods of Research

The main aim of this research was to find out the operating conditions of rural tourism, an important element of sustainable development of Natura 2000 areas located in the Green Lungs of Poland region. Natura 2000 areas, a new kind of nature protection in Poland, are very controversial not only on a local level, but also on regional and central levels.

Since 'nature' areas have not been functioning for a long time, there is insufficient scientific data analysis and literature about them. Available publications are mostly connected to legislative issues or based solely on theory. Texts concerning the Natura 2000 network in EU-15 countries can only serve as a background for research which should be carried out in Poland. The fact that the study area is located in the Green Lungs of Poland is also of great importance. Although this term is commonly known, most publications about the Green Lungs of Poland merely deal with popular science. However, because of the importance of this area for Europe there is a necessity to thoroughly learn all aspects of its development. It applies to both natural and socio-economic resources.

This paper is based on research which used empirical data collected during interdisciplinary field studies (natural, ecological, economic, social, sociological, agricultural, etc.). Field studies, which involved an interview questionnaire, were conducted by the research team and led by the author and specially trained interviewers.

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[108] D. Sołowiej [1993]: Weryfikacja ocen atrakcyjności środowiska przyrodniczego człowieka w wybranych systemach rekreacyjnych. Wyd. Nauk. UAM in Poznań. Seria Geografia 53: 90-102.

[109] I. Połucha, K. Młynarczyk, E. Marks [2002]: Kształtowanie środowiska w ramach turystyki wiejskiej – zagrożenia i sposoby ochrony walorów przyrodniczych [In:] Agroturystyka w teorii i praktyce. UWM in Olsztyn: 147-152.

[110] M. Bori-Sanz, A. Niskanen [2002]: Nature-Based Tourism in Forests as a Tool for Rural Development - Analysis of three study areas in North Karelia (Finland), Scotland and the Catalan Pyrenees. Internal Report No. 7, European Forest Institute, Finland: 24-25.

All municipalities selected for this research were composed of 40% of 'nature' areas and located within the Green Lungs of Poland. The study included farmers involved in agritourism and tourist business in the Podlaskie Voivodeship municipalities.

The following methods and techniques were applied in this research:

1. Questionnaire - the primary source of factual data in the initial stage of the research. The gathered data will be used later for further investigation of the subject. Appropriate measures were taken in constructing and then implementing the questionnaire as a research tool in order to improve the cognitive value of the collected materials. Among others, these measures included the explanation of the purpose of gathered materials, interviewers' training and reaching the subjects personally. Pilot studies were carried out on a small group of subjects in order to formulate questions in the survey accurately.
2. Statistical methods.
3. Methods of analysis and source criticism - used to verify the findings of various sources, e.g. the Agency for Restructuring and Modernisation of Agriculture (ARMA), statistical offices, Agricultural Advisory Centres, municipal offices, local governments, banks, etc.
4. Interviews, discussions and observations were used as methods complementary to the previously adopted ones. Their main aim was to establish personal contact with the studied subjects (farmers, non-agricultural population, counsellors, leaders, experts, etc.) in order to form an opinion about the occurring phenomena.

9.3. Main Aspects of Rural Tourism and Agritourism Development

Each protected area is located in a particular territory and is a part of a geographical region. Local communities manage their lives on the outskirts of those protected areas. All parks should create additional opportunities for the economic development of local people. Protected areas, rich in natural attractions, draw many tourists. Thanks to this, there is room to create the necessary tourist base, including agritourism facilities, as an additional source of income for the rural population. People would protect wildlife and at the same time create an important community of interests. Thus, the environment is effectively protected, which is beneficial to all the parties involved. People living in the general park area identify with it and support its protection, as it helps them generate additional income from their business activities[111].

Different forms of tourism which can be found in rural areas and use their resources are the following:

- Rural tourism (associated with rural recreational areas)
- Agritourism (visiting a farm operated by its owners and their family, which includes accommodation and recreational activities)
- Ecotourism, as a form of tourism which fully takes into account the principles of ecology. The examples include tourism on protected areas, making use of their natural qualities, and also eco-agritourism, connected with staying on organic farms[112].

Because of the Polish agricultural situation and wealth, the search for different forms of

[111] Cz. Guzik [2000]: Agroturystyka w obszarach chronionych [In:] Materiały IV Krajowej Konferencji „Ochrona Przyrody a Turystyka". Wyd. WSP, Rzeszów.

[112] W. Krupińska [2008]: Wybrane problemy rozwoju turystyki na obszarach wiejskich. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu, T. IV, Z. 6. Warszawa-Bydgoszcz.

income has became imperative for farmers. This has been a phenomenon in other countries as not all farmers can keep up with the competition and make a living from agricultural activities. Hence, they look for projects that do not require much capital, undertaking, or expertise and can be implemented fast, on a small scale. These enterprises should not only take advantage of the region's natural qualities, but also exempt involved farmers from paying taxes. The projects can include agritourism or rural tourism, as forms of spending one's free time[113].

Agritourism is a form of recreation organised by families on their farms in the country. Activities included in their offer are mostly connected with rural attractions, unique to their region. Owners who are engaged in agritourism are also farmers, whose combined income comes from agriculture and tourism activities.

Rural tourism on the other hand is also developed in rural areas but outside any agricultural holdings. Instead, various operators offer many recreational facilities such as swimming pools, tennis courts and fitness trails.

However, both rural tourism and agritourism share the following features:

- rural locations,
- rural features, the small scale of the project, the use of open space, contact with nature and regional traditions,
- support of the region's nature as the development of tourism should contribute to maintaining specific landscape features that can be found only in that particular region[114].

The development of agritourism brings many benefits to both rural areas and farmers including:

- increased employment rate and rural income, which is very important for small farms and the disguised unemployment rates,
- the development of various elements of rural infrastructure (e.g. technical, service, economic, communication, etc.), which are indispensable, accompany the development of agritourism and also have significance for the social and economic development of rural areas,
- increased value of agricultural lands and construction plots,
- boost in food production and processing,
- the creation of conditions to improve rural residents' knowledge and skills, particularly for youth, in order to broaden the range of tourist services offered by municipalities, villages and farms,
- contacts between urban and rural populations foster conditions to improve villages both culturally and technolgically, and also broaden people's knowledge about living conditions in rural areas,
- improved cultural patterns and personal development of rural residents,
- maintaining of cultural continuity and traditions, which contribute to the growth of regional identity[115].

It is often suggested that agritourism helps the financing of Polish agriculture while it is being restructured and therefore could solve the economic problems of this country's villages.

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[113] K. Duczkowska-Małysz, M. Duczkowska-Piasecka [2001]: Alternatywne źródła dochodu i marketing gospodarstw rolnych na obszarach chronionych [In:] Aktywność gospodarcza i inwestycyjna na terenach wiejskich z uwzględnieniem obszarów chronionych. Materiały konferencyjne. Ekspert – SITR Spółka z o.o., Koszalin.

[114] M. Drzewiecki [1995]: Agroturystyka, założenia – uwarunkowania – działania. Instytut Wydawniczy „Świadectwo", Bydgoszcz.

[115] K. Karbowiak [1999]: Agroturystyka jedną z form pozarolniczej działalności gospodarczej. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu, T. 1, Z. 3. Rzeszów.

However, it is important to note tourist expectations, especially those of holiday makers who often spend their free time on a farm located in a protected area or in its immediate vicinity. Park managements organise guide courses for the inhabitants of neighbouring municipalities, which are supposed to broaden the range of services offered to visitors of agritourism farms. Specially trained people may offer guided tours of the park and its surroundings, drawing tourists' attention to the peculiarities of nature and the purpose of their protection. Such attractions draw visitors to parks, which proves that protected areas play a stimulating role in the development of tourism.

The dynamic development of agritourism still faces a number of barriers. As a fairly recent branch of the economy, it has had for a short time advocates who can articulate the needs and expectations, and protect the interests of a professional group of several thousands of people. Major problems connected with the development of agritourism are:

- a lack of legal norms in building regulations,
- difficult (or even impossible) access to preferential line of credit,
- inefficient system of agritourist information,
- high expectations imposed by the system of categorisation (most accommodation providers claim that the requirements involve high costs of raising standards),
- insufficient cooperation among institutions assigned to help Polish agriculture,
- a lack of cooperation among local authorities, agricultural advisory centres and agritourist associations,
- slow implementation of training systems for both counselling personnel and farmers who provide services,
- unawareness of the necessity to protect natural features of each holding and the whole region,
- appointed organisations do not promote the regions sufficiently,
- local governments lack awareness of their role in developing agritourism in their territory[116].

The possibility of tourism development, including agrtourism, is primarily determined by the attractiveness of the area - mountains, rivers, lakes, forests, along with cultural heritage and the local residents themselves. Lately, other less popular criteria connected to ecology have been taken into consideration including:

- protected flora and fauna, which allow nature tourism of an individual,
- areas under reserve protection, which allow the photography and filming of nature,
- areas with historically formed features preserved in regional craft traditions, e.g. sculpting, wickerwork, pottery, blacksmithing, beekeeping, etc.[117].

Poland has favourable conditions for agritourism development. They include an attractive natural environment, rural landscapes, ecological purity, unused housing stock and job opportunities on farms and in the countryside. It has been estimated that over 40% of the country's territory has the appropriate conditions for the development of all forms of tourism, including agritourism.

[116] A. Jaźwińska [1999]: Doradztwo rolnicze w rozwiązywaniu problemów związanych z rozwojem agroturystyki. Zagadnienia doradztwa rolniczego, kwartalnik 4. Krajowe Centrum Doradztwa Rozwoju Rolnictwa i Obszarów Wiejskich. Oddział w Poznaniu.

[117] M. Woźniak [2002]: Agroturystyka w procesie integracji polskiej wsi z Unią Europejską. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu, T. IV, Z. 6. Warszawa-Bydgoszcz.

9.4. Rural Tourism of 'Nature' Municipalities Located in the Green Lungs of Poland (Podlaskie Voivodeship)

The development of non-agricultural business in rural areas has become more of a necessity than fashion. It is due to economic and social reasons, expressed in the previously mentioned low profitability of agricultural production and low incomes of people living in the Polish countryside.

One possibility Polish villages can explore is the development of tourism and agritourism, and in this way gain additional benefits. Areas of north-east Poland, which are characterised by very low industrialisation, should take advantage of such an opportunity. The Podlaskie Voivodeship is located in the Green Lungs of Poland, which offer great opportunities to earn from tourism and recreation. It is additionally enhanced by the presence of national parks such as Białowieża National Park and other nature reserves.

Today it is easy to notice why rural residents decide to enter the tourist business besides farming - they take advantage of favourable natural conditions (water reservoirs, forests, topography, landscapes) and the presence of historical and natural monuments. Such activity is called agritourism. Interest in non-agricultural activities has arisen in rural areas mainly because they create new job opportunities, which in turn help fight disguised unemployment, which has disturbingly grown in the Podlasie region. Although many studies show that most of the work on agritourism farms is done by the owners who use their own savings, any renovation or adaptation work involved hiring many unemployed people from the area.

Among all the surveyed owners of agritourism farms, 70% was represented by female respondents and only 30% by men. This may indicate that women are more decisive and adventurous when it comes to risk-taking when faced with changing economic conditions (Fig.1.).

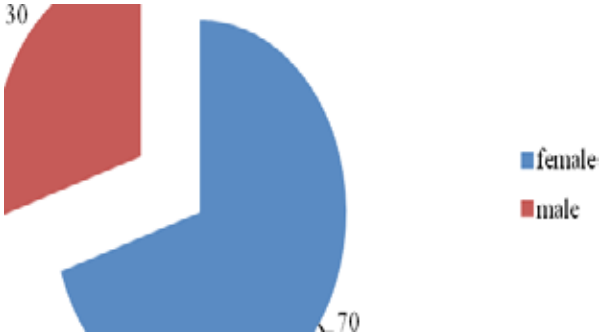

Fig. 1. The gender structure

Source: own data.

After the analysis of respondents' age, it was found that the two largest groups of agritourism farm owners (44%) was constituted by people between the ages of 36 and 45, and 46 and 55. Only 2% of the subjects fell within the age range of 26 to 35 years old (Fig.2.).

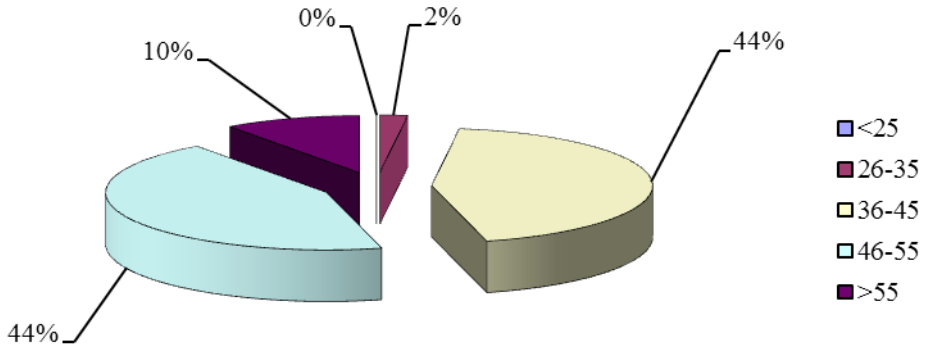

Fig. 2. Respondents' age

Source: own data.

Much greater variety was observed in the case of education. Every fifth respondent admitted to having only a primary education. Most of surveyed people (70%) graduated form secondary schools, including only 4% who majored in agriculture. The majority of them were graduates of various vocational schools (e.g. construction craft, railway, nursing, electric). 10% of the respondents received a higher education. Overall, it is important to note that the surveyed agritourism farm owners presented a much higher level of education than the average inhabitant of Polish rural areas.

According to the research, respondents became farm owners in various ways. The largest number of them (48%) inherited the holdings from their parents.

All of the surveyed farms are involved in organic food production. It is certainly due to the demands of tourists, who visit rural areas not only seeking peace but also to purchase healthy food products. The researched farms cover various areas, ranging from 1.2 to 26.1 ha, with arable land from 0.9 to 18.7 ha. No class I and II soils were found on the examined area; class IIIa and IIIb soils covered on an area of 0.4 ha, and class Iva and IVb soils – 1.4 ha. Grasslands ranged from 0.1 to 5.3 ha (see table 1), constituting only a small percentage of individual farms.

Table 1. The area of researched farms (ha)

Specification	min	max	X
Total	1.2	26.1	4.8
Arable land	0.9	18.7	3.1
class I-II	0.0	0.0	0.0
III a – b	0.4	0.4	0.4
IV a – b	0.1	11.6	1.4
V-VI	0.2	7.1	2.1
Grasslands	0.1	5.3	1.1

Source: own data.

As far as livestock production is concerned, the most common were sheep, poultry and bees, which certainly was caused by high demand. Many of the surveyed claimed that tourists were very willing to buy eggs, honey and wool products. Pork also proved to be very popular.

Cattle are kept mostly for milk and dairy products. Horses, however, are used as a tourist attraction, because horse-riding has become a more popular form of recreation (see Table 2).

Table 2. Livestock production in the respondents' holdings (amount)

Specification	min	max	X
Pigs	2.0	40.0	3.5
Cattle	1.0	3.0	1.4
Horses	1.0	4.0	1.3
Poultry	10.0	90.0	23.9
Sheep	12.0	30.0	21.0
Bees	10.0	10.0	10.0

Source: own data.

Crop production is dominated by cereals and legume crops. Respondents do not grow much forage and special crops, and frequently they are used as food for animals (see Table 3).

Table 3. Crop production in the respondents' holdings (ha)

Specification	min	max	X
Cereals	0.5	15.2	2.5
Potatoes	0.1	1.0	0.2
Sugar beet	0.0	0.0	0.0
Legume	0.5	2.0	0.8
Industrial	0.0	0.0	0.0
Forage	0.1	0.5	0.2
Special	0.1	2.0	0.9

Source: own data.

The research proved that the most frequently sold animals were lambs. Cattle, pigs and horses are sold rather sporadically, which may suggest that they are kept mostly for food and for tourist purposes (see Table 4).

Table 4. Sales of livestock a year (amount)

Specification	min	max	X
Cattle	1.0	35.0	18.0
Pigs	2.0	2.0	2.0
Lambs	30.0	30.0	30.0
Horses	1.0	1.0	1.0

Source: own data.

However, sales of animal products are on a much higher level. Especially popular among tourists are milk, eggs, honey and wool products. These products are also sold out of season. Their sale is an additional source of income when farmers are unable to earn money by offering tourist services (see Table 5).

Table 5. Sales of animal products a year

Specification	min	max	X
Milk (l)	1000.0	10000.0	3280.8
Eggs (pcs)	1000.0	4000.0	1971.3
Wool (kg)	150.0	150.0	150.0
Honey (kg)	200.0	200.0	200.0
Lambs (amount)	10.0	10.0	10.0

Source: own data.

Sales of plant-related products are dominated by cereals which are also used as animal feed. Any surplus in production is sold to tourists. Special crops constitute only a small percentage of the whole production and are almost entirely intended for sale (see Table 6).

Table 6. Sales of animal products a year

Specification	min	max	X
Cereals	5.0	5.0	5.0
Potatoes	2.0	2.0	2.0
Sugar beet	0.0	0.0	0.0
Legume	1.0	1.0	1.0
Industrial	0.0	0.0	0.0
Forage	0.0	0.0	0.0
Special	4.0	4.0	4.0

Source: own data.

The research demonstrated that a vast majority of plant and animal production (together with related products) is used in the agritourism business. This results from the owners' attitude, as they gain profits mainly from tourism services and sell only a small percentage of their surplus.

9.5. The Characteristics of Agritourism Activities

Agritourism farms selected for this research had existed for an average of six years. The first one was established in 1995 and the latest one in 2009. It can be noticed that the 'nature' municipalities of Podlaskie Voivodeship have undergone a kind of socio-economic revolution in the last fifteen years. Each year there are more and more farmers who try their luck with non-agricultural business. Gathered data proved that residents of rural areas took advantage of their location, as it is easier to start up a tourism enterprise in a 'nature' area than elsewhere.

All agritourism farms had been registered, which indicates that the owners meet the required conditions and have a licence to operate tourist services, such as agritourism and rural tourism. Registration provides owners with professional care and assistance on many issues, such as legislation, obtaining funds and even furnishing accommodations.

The first information concerning the establishment of agritourism farms came from various sources. Advisors from the Agricultural Advisory Centres in Szpietowo and Hajnówka proved to be the most helpful. Other places where respondents found useful information about the business were municipal offices, Polish Tourist and Sightseeing Society (PTTK), and municipal cultural centres.

A frequently mentioned reason for establishing agritourism farms was the desire to increase income (50% of respondents) and lack of employment (21%). It is interesting that among such a large amount of respondents who indicated unemployment as their reason, only one person showed the willingness to create a job opportunity for another person.

Other positions in the hierarchy of importance were occupied by landscape features and the use of living space - 13% and 15% of respondents respectively (Fig.3).

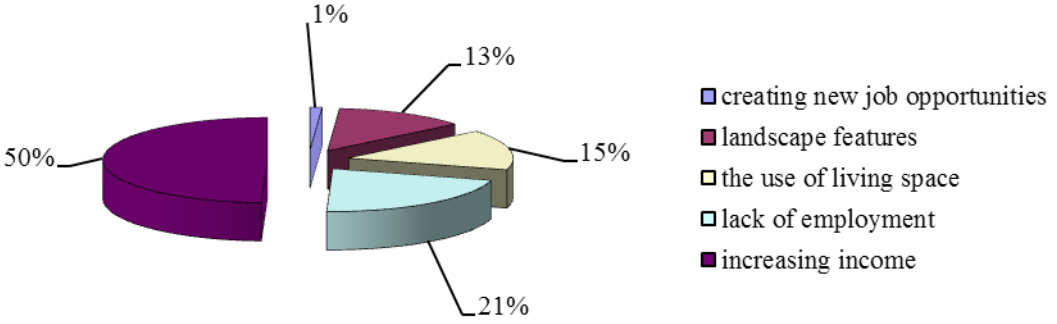

Fig. 3. The reasons for establishing business

Source: own data.

No respondents had major problems starting their agritourism projects. More than 40% of all respondents found their beginnings in agritourism rather difficult and 58% did not encounter any serious problems (Fig.4).

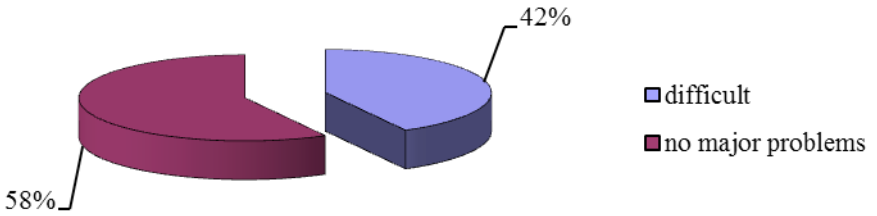

Fig. 4. The assessment of the beginnings in agritourism business

Source: own data.

Before starting their agritourism business all respondents decided to broaden their knowledge about the subject. Among all the sources of information, the most popular were special courses that the respondents attended. A large number of the surveyed people also received training on different agritourism farms. A very small percentage of them used professional journals and literature to learn more about the business (Fig.5).

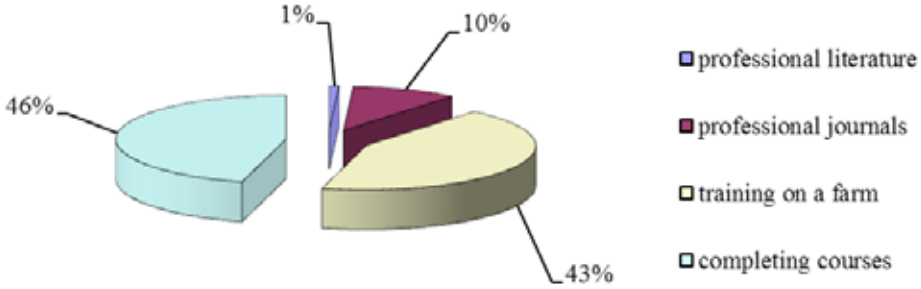

Fig. 5. Methods of education before starting the agritourism business

Source: own data.

The vast majority of agritourism farm owners (98%) still continue their education. Although only 2% of them attend courses related to their activities and the remaining 98% study on their own, it does not change the fact that they are all aware of the importance of education (Fig.6).

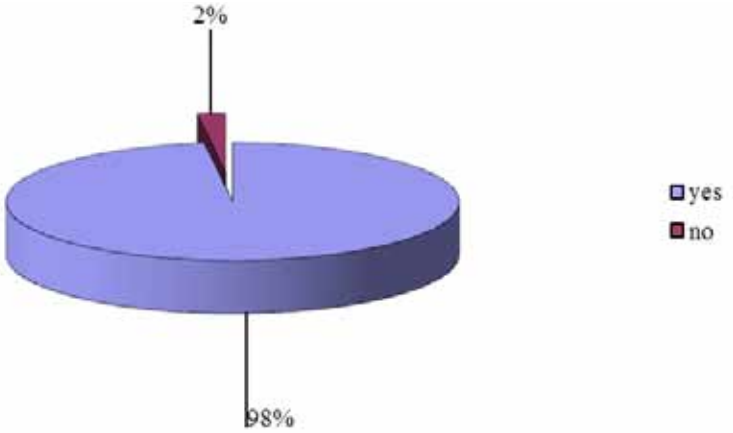

Fig. 6. Further training and education

Source: own data.

Very important sources of information and knowledge about the subject were agricultural advisory centres. The respondents obtained advice which was related to various topics ranging from assistance in obtaining loans to accommodation design. The surveyed stated that the advisory institutions were highly helpful and assisted in resolving initial problems, which at that time appeared to be insuperable obstacles. The most sought-after information concerned legal regulations - 56% of respondents looked for that kind of data.

Other important advice concerned promotion, marketing and the preparation of accommodations for guests. This implies that the respondents are perfectly aware of the important role that adequate advertising of rural tourism plays these days.

Less wanted, but not less important for the surveyed people, was information about agritourism trade fairs. Many respondents complained that too little space was devoted to the organization of national trade fairs where owners of agritourism farms could exchange experiences and present their businesses (Fig.7).

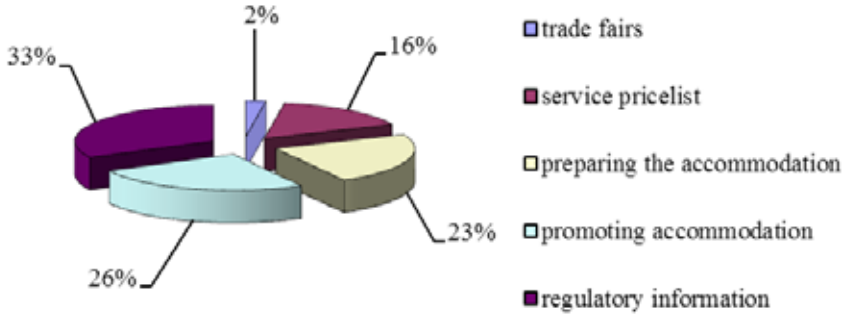

Fig. 7. Frequently sought-after information

Source: own data.

All the issues discussed above are somewhat a reflection of respondents' personality and character, and they proved to be very entrepreneurial. The surveyed owners claimed that entrepreneurship was primarily manifested in searching for new sources of income (22% of respondents; 9.2% of all responses), undertaking non-agricultural activities (24%; 10%), providing employment for themselves and others (32%; 13.3%), the appropriate use of their housing facilities (38%; 15.8%) and the ability to find the market for their offered services and products (46%; 19.2%).

It is noticeable that all the mentioned determinants of entrepreneurship are mainly associated with businesses they own. Qualities such as creativity or pugnacity were not mentioned, but according to the respondents they were not as important as the hard and tedious work they put in their agritourism business.

When asked for a self-assessment, they described themselves as entrepreneurs (76%). Respondents had to fight against unfavourable economic conditions that affected rural areas after the economic and political transformation. The vast majority of positive responses proves that the surveyed farmers are satisfied with their choice of non-agricultural project and that should be the primary determinant of their success.

When asked if they knew anyone who resigned from running their business, all respondents gave a negative answer. According to them, not everybody managed to develop their projects as much as they would like to but still did not succumb to the difficulties and tried to maintain the original level.

Agritourism farm owners treat their business very seriously, as it is often their only or main source of income. This is particularly noticeable when we consider that profits from agricultural products are insignificant when compared to the income brought in from the agritourism business. Only four respondents stated that their main source of income was livestock, milk, preserves, crafts, farming services and the sale of cereals.

Therefore, it is easy to see that the majority of the respondents live by providing tourist services, which used to be an alternative to the unprofitable farming, and today is the basis of their existence. The goods produced on the farms are sold mainly to tourists (54.7% of all responses) and to individual clients (34%). Very few of the researched subjects sell their products at the market (8%) or produce them strictly for own use (3%). Generally, it is clear that agricultural production is mainly dependant on the tourist business (see Fig. 8).

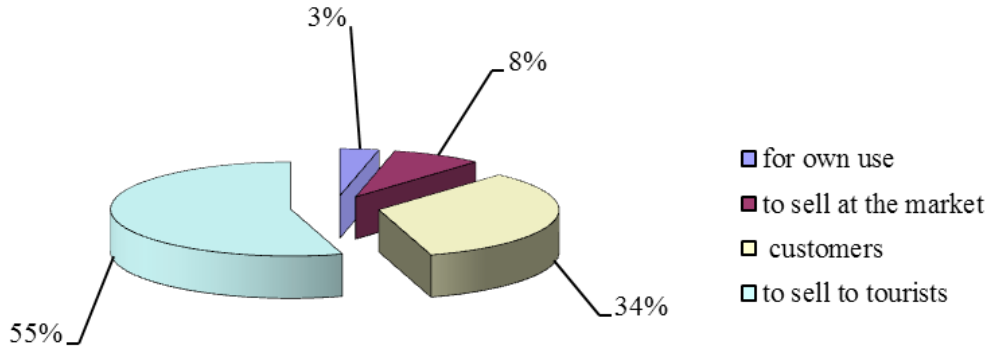

Fig. 8. Methods of disposing the products

Source: own data.

As agritourism farms owners use their resources mostly for tourism purposes, they are not particularly interested in processing them. The raw materials are meant for consumption as fresh and healthy food. Only individuals process cereals, vegetable, fruit and meat on their own. However, processing is additionally intended to meet the needs of tourist or to produce food for the animals, which are also kept with regard to the agritourism business. Thus, all the activities and efforts undertaken on all studied agritourism farms depend on the business. This way the owners are able to offer a complex tourist and gastronomic services.

All owners of the surveyed holdings have their own opinion on improving agritourism business. Their suggestions are due to experience as they faced many problems that hinder the development of entrepreneurship in rural areas. However, it may seem strange that only 1.3% of all responses were connected to low-interest loans, which may suggest that money is not the most important issue when starting an agritourism business. It may also be due to the fact that the majority of owners started their business using only their own financial resources. A much more important factor in streamlining their agritourism business is adequate promotion and advertising (12.7% of all responses).

Greater involvement of municipal governments and improvement of rural infrastructure are equally valued by the surveyed owners. This indicates that both the local administration and rural facilities are not adequately prepared for the new socio-economic conditions. According to the respondents, the change of infrastructure should primarily include the improvement of roads, sewage and water supply.

The most important factor which helps in streamlining the business is the efficiency of agritourism associations. As stated by the respondents, the role of such associations is basically to keep a register of agritourism farms. Far too little attention is paid to the new ways of obtaining funds or advertising, which could significantly contribute to an increase in the number of tourists (Fig. 9).

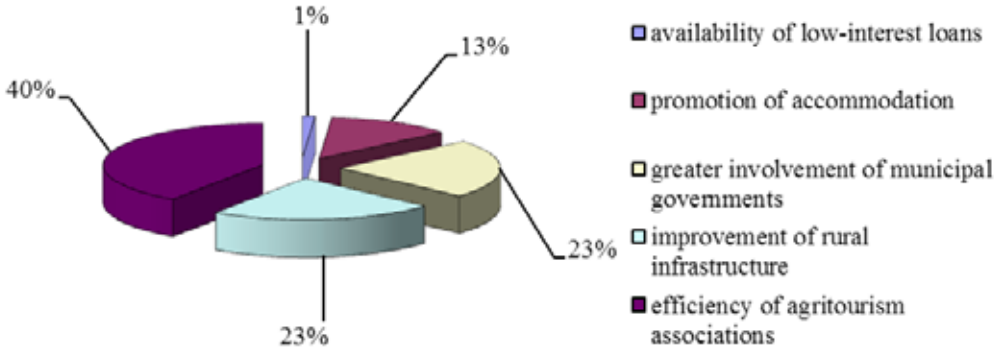

Fig. 9. Ways to streamline the agritourism business

Source: own data.

According to 34% of respondents, after they had started their business, the profitability of their holdings grew significantly, caused by combining the previous income with the one obtained from business. Respondents drew attention to the improvement of living conditions due to their tourism activities but also noted that costs depreciated too slowly (Fig.10).

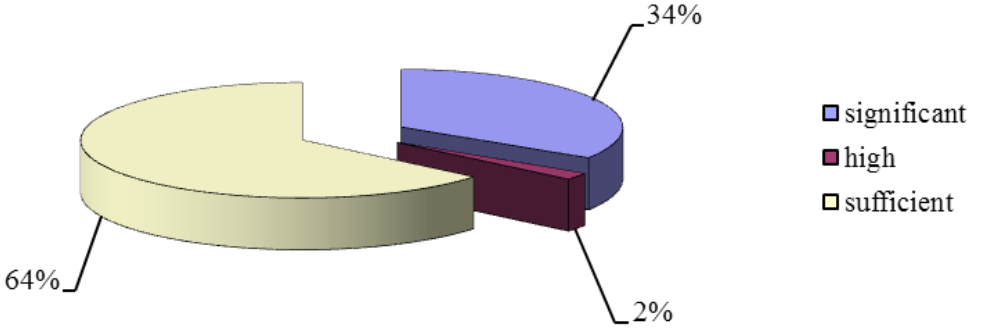

Fig. 10. The increase in profitability of the holding after establishing the agritourism farm

Source: own data.

The question about the need to increase the number of agritourism farms divided the respondents. The ones with the positive attitude claimed that it would facilitate the organisational activities and contribute to an increased number of tourists. On the other hand, negative respondents believed that more agritourism farms would not bring any benefits, just additional competition. According to them, the number of tourists was still too low and there was no need to develop rural tourism in that area.

All respondents, with no exceptions, were more or less satisfied with their business. They pointed mainly to the use of housing facilities, tourist and natural attractions, reduced unem-

ployment and improved living conditions. Seeing all the benefits from agritourism, all respondents plan to develop their businesses. Most surveyed owners (82%) chose machinery and equipment for the farm as their future purchases.

Some respondents also plan to expand their farms and build new accommodations, which would allow them to receive more tourists. The construction plans are connected not only to the creation of more living space but also to the adaptation of farm buildings to create stables, building shelters, parking places and others that would be useful for coming guests (Fig.11).

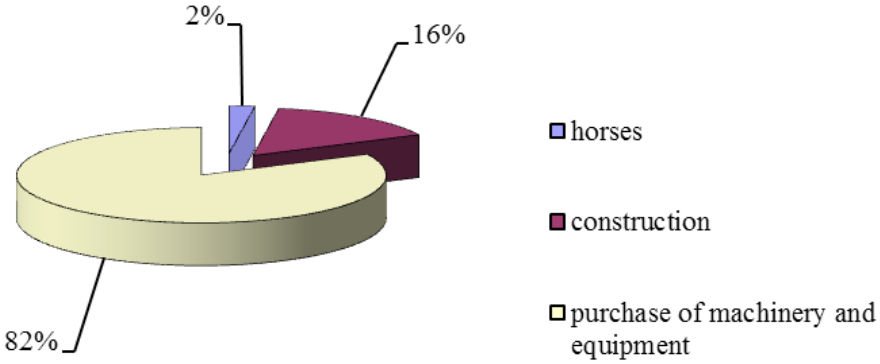

Fig. 11. Investment plans

Source: own data.

More than a half of all respondents plan to finance their projects using their own funds. This indicates great caution to taking a bank loan (see Table 7).

Table 7. Sources of financing the project

Specification	min	max	X
Equity	10.0	100.0	53.8
Credit/Loan	50.0	90.0	64.6

Source: own data.

An average of one person was employed in the surveyed holdings. To explain this low level of employment we need to take into consideration that also members of the owner's family work on their agritourism farm.

In 'nature' municipalities in the Podlaskie Voivodeship the length of the tourist season is determined by the organization of work in individual holdings or the number of tourists. The biggest tourist movement is observed in summer and autumn, lesser in winter and spring proved to be the least popular season. But this does not seem to be the rule, since many respondents indicated that the tourist season in their holdings lasts the whole year. It depends on the variety of offered services, their quality, and also regular customers who spend their free time on a favourite farm (Fig.12).

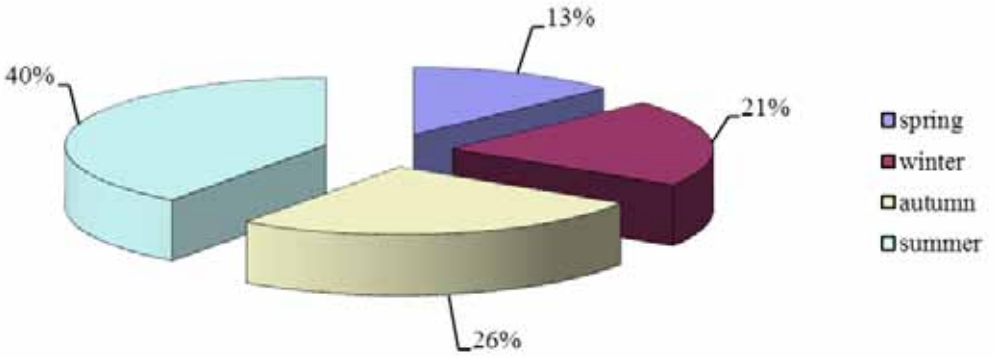

Fig. 12. Tourist season

Source: own data.

The length of the tourist season is determined, among other factors, by the respondents' accommodation base. Among the surveyed holdings, the average number of rooms to let was four and ranged from three to five. No respondents have high standard accommodation. The vast majority (86%) describe their room standard as medium. It should be noticed that the previously mentioned assessment might be too strict as the owners' expectations about their accommodations seem to be too high and unrealistic.

As mentioned before, the profits drawn from agritourism is the main source of income for the surveyed owners. It ranged from 20% to 80% (50% on average). According to the surveyed farmers, the most serious obstacle of running an agritourism business is a lack of continuity and long breaks between tourist seasons. It seems strange that 2% of all respondents claimed that the biggest problem they were facing was the lack of people to help. With such a high unemployment rate, this opinion seems unbelievable (Fig.13).

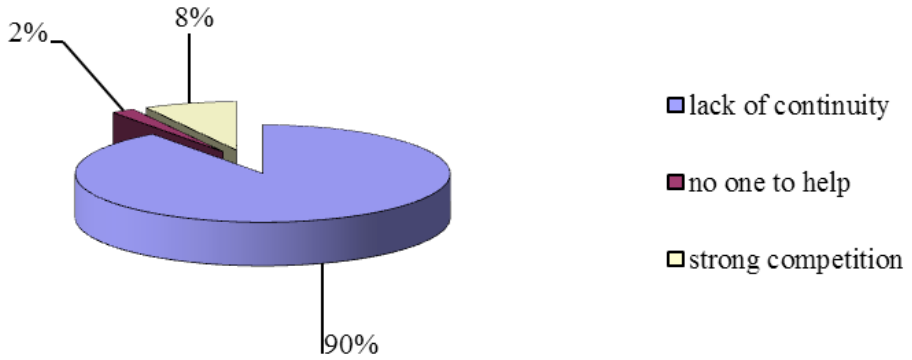

Fig. 13. The most serious obstacles in agritourism business

Source: own data.

Agritourism business in the researched area fills in the gap that was created after the collapse of an unprofitable system of typical agricultural production. The development of rural tourism helps to lessen unemployment and create new jobs, but above all it stimulates the activity and improves living conditions of people who live the rural area.

9.6. Summary

The need for a new role and importance of tourism, especially as far as the sustainable development is concerned, is currently indicated. Tourism contributes to the socio-economic development, as it creates new job opportunities and demand for goods and services. On the other hand, the activities connected with the development of tourism sector should not lead to environmental degradation. The tourist offer is frequently based on those tourist values. Tourism should promote the conservation of areas' versatility. Simultaneous development of such functions as production, service and protection should be possible. At the same time, one should strive to eliminate the disproportions in the development of social, economic and environmental functions. Tourism should also help in preventing the growing differences between urban and rural areas.

From the social and economic point of view the north-east area of Poland is problematic. No industry and mostly unfavourable conditions for agricultural production lead to the spread of poverty. On the other hand, it is a region of unique natural beauty, which confirms the strongly developed system of legally protected areas. Therefore, it is crucial to develop areas of business that will help increase the living standards of local communities without undue interference in the environment. One such area is rural tourism.

In conclusion, although, the development of sustainable tourism in 'nature' municipalities in the Green Lungs of Poland area may not be a solution to the shortcomings of the socio-economic development of this region, the importance of support and promotion of tourism should be emphasised. The positive impact will be associated with an increased accessibility of eastern Poland. It is difficult to talk about the sustainable development of tourism in places, where tourist attractions are difficult to reach (e.g. due to lack of proper roads), or where the number of people who can enjoy this place is limited. The attractiveness of historic city centres can be improved by introducing transit traffic in the downtown areas.

On the other hand, it must be noted that the economic development and growing prosperity of the population cannot obscure the risks associated with the development of tourism in these areas. Possible negative effects are obvious:

- the expansion of road infrastructure can cause the degradation of tourist attractions of some areas in the Green Lungs of Poland (especially those whose attractiveness is determined by natural and landscape),
- the expansion and modernisation of road infrastructure can increase tourist traffic so much that it will exceed the carrying capacity of the environment,
- the expansion and modernization of road infrastructure will foster the development o f mass tourism at the expense of quieter and more specialised forms of tourism (agri-tourism, nature and cultural tourism, hiking).

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PART 3
EUROPEAN UNION AND ITS IMPACT ON THE MULTIFUNCTIONAL DEVELOPMENT OF RURAL AREAS

10

THE ROLE OF THE RURAL DEVELOPMENT PROGRAMME 2007-2013 IN STIMULATING THE MULTIFUNCTIONAL DEVELOPMENT OF RURAL AREAS

Zbigniew Brodziński, Katarzyna Brodzińska

10.1. The Contribution of EU Funds to the Multifunctional Development of Rural Areas

The multifunctional development of rural areas is determined mainly by the growth of enterprise in the region. Local business ventures may be undertaken in the area of agriculture, such as small-scale food processing, sale, transport and storage of food products. Business initiatives are also launched outside the agricultural sector to include crafts, small-scale industrial production, services, tourism and recreation[118].

Poland's accession to the European Union created new opportunities not only for agriculture but also for the growth of enterprise in rural areas. The availability of EU funds encouraged entrepreneurship and the creation of new jobs in the countryside. The first enterprise development projects targeting rural areas in Poland were launched already in 2002 as part of the SAPARD pre-accession assistance program. The scheme led to the implementation of 4071 projects promoting alternative sources of income at the total cost of PLN 342.3 million. The highest number of projects was initiated with the aim of creating new jobs in rural regions (2154), mainly in the area of small-scale production, transport and tourist services. The program gave rise to a total of 1646 regular jobs. Somewhat fewer projects were launched with the objective of creating additional sources of income for farmers (1490) in the field of tourism, including agritourism, agricultural and transport services[119].

In 2004-2006, the multifunctional development of rural areas was further promoted by the following action of the Sectoral Operational Programme: "Diversification of agricultural and farm-related activities to promote the creation of additional sources of income". A total of 7170 applications were submitted, and 4286 contracts with the total value of PLN 310.5 million were concluded. The programme offered financial aid to projects in the area of services for the rural population (40.1%), services in agriculture and forestry (24.2%) and agritourism

[118] W. Szopiński [2004]: Działalność pozarolnicza wyrazem przedsiębiorczości na wsi [In:] S. Urban [Ed.] Agrobiznes Sytuacja agrobiznesu w Polsce po przystąpieniu do Unii Europejskiej. Wyd. AE, Wrocław: 312.

[119] L. Drożdziel [2007]: ARiMR – trzy lata po akcesji. Wyd. ARiMR Warszawa: 145.

(20.7%)[120]. A large group of beneficiaries (17%) had previously relied on the assistance of the SAPARD programme. According to Wyszkowska and Sztoldman[121] (2011), rural inhabitants' efforts to acquire EU financial aid differed across Polish regions. The highest funding for enterprises offering services for the local population was reported in the regions of Świętokrzyskie (644 projects), Wielkopolska (611), Podkarpacie (576), Mazowsze (558) and Małopolska (461). Agritourism and tourism development projects received the highest financial support in the regions of Podkarpacie (132), Wielkopolska (117) and Małopolska (104). The highest number of ventures in agriculture and forestry were undertaken in the regions of Lublin (234), Mazowsze (206), Łódź (202) and Świętokrzyskie (170). Agriculture and crafts attracted the greatest interest of entrepreneurs in Lublin region (407 projects). The majority of projects supporting small-scale processing of agricultural and forest produce were carried out in the regions of Śląsk (73), Mazowsze (62) and Małopolska (49). Farmers in Łódź (12) and Lublin (9) regions started the highest number of energy crop plantations and biomass processing plants.

In the current programming period of the Rural Development Programme 2007-2013, the multifunctional development of rural areas receives support as part of the following actions: "Agricultural diversification in support of non-farming activities" and "Microenterprise creation and development". The above schemes promote the generation of income from non-agricultural sources and the creation of new jobs in rural areas. Financial aid can be channeled to various types of ventures[122]. According to the Agency for the Restructuring and Modernization of Agriculture[123], a total of 29.000 applications had been submitted during four calls for proposals as part of "Agricultural diversification in support of non-farming activities", and 10.288 contracts have been concluded. Statistical data recorded in every call for proposals indicate that farmers show a growing interest in funding opportunities. The number of applications increased from 4050 in 2008 to 3838 in 2009, 8816 in 2010 and 12.297 in 2011, and the highest growth was noted in the regions of Wielkopolska and Mazowsze. The second action, "Microenterprise creation and development", also provoked higher interest among farmers who submitted 31.254 applications and concluded 6.212 contracts. The number of applications increased gradually in successive calls for proposals, from 4 983 in 2009 to 10.540 in 2010 and 15.731 in 2011. The highest number of applications for the second action were submitted in the regions of Wielkopolska, Mazowsze and Małopolska.

10.2. The Objectives and Organization of Surveys

Poland will allocate EUR 17.2 billion under the Rural Development Program 2007-2013, including EUR 13.2 billion from the EU budget and EUR 4 billion in domestic resources. The objective of the Rural Development Program 2007-2013 is to:

- build the competitiveness of agriculture and forestry through restructuring, development and innovation,

[120] L. Droździel , op cit.: 92.

[121] Z. Wyszkowska, M. Sztoldman [2011]: Wpływ funduszy unijnych na rozwój pozarolniczej działalności gospodarczej w Polsce. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu Vol. XIII, P. 1: 457-462.

[122] Those actions give support to the following categories of projects: services for agriculture and forestry, services for rural inhabitants, wholesale and retail sale, arts and crafts, construction and installation services, transport services, municipal services, processing of agricultural and forest produce, storage and warehousing, biomass processing plants, accounting services, consulting services, IT services.

[123] Data from the ARiMR Management Information System

- improve the condition of the natural environment and rural areas through support for land management practices,
- improve the standard of living in rural areas and support diversification of business activity[124].

The resources allocated as part of the program have to be used effectively to facilitate access for prospective beneficiaries. Many of them have acquired extensive knowledge and experience during projects implemented in previous programming periods. In the past, the access to financial aid was often fraught with problems, therefore, the barriers to the effective use of funds have to be identified in the current period.

An analysis of applications submitted in 2010 revealed that farmers prepared much more thoroughly for the process than in the previous years. Most of them attached the required documents and avoided the mistakes that had been frequently encountered in the previous calls for proposals[125].

The analyzed material comprised the results of surveys carried out in 2011 among farmers in the region of Warmia of Mazury. The surveyed respondents had previous experience with EU-funded projects. The study covered 92 farmers who were clients of the Agroplus consulting center of the Association of Rural Development Consultants in Olsztyn. The results of the survey were analyzed based on secondary information supplied by the Agency for the Restructuring and Modernization of Agriculture (ARiMR).

The main goal of this study was to determine factors that obstruct the acquisition of EU funds and to identify the needs of prospective beneficiaries.

10.3. Factors Determining the Farmers' Investment Activities

European Union grants attract growing interest among farmers and entrepreneurs who invest in rural areas. Prospective beneficiaries are increasingly active and proficient in their fundraising efforts. The results of our survey point to the presence of various barriers which constrain those efforts. According to 35.9% of the respondents, the most discouraging factor in the process of starting or developing a business was economic uncertainty in Poland. Due to those concerns, many farmers restricted their spending to the most dire investment projects. The strategies adopted by the prospective beneficiaries of the Rural Development Programme 2007-2013 indicate that their decisions to apply for EU financial aid will be determined by economic prospects and the investment climate in Poland (Fig. 1).

[124] Program Rozwoju Obszarów Wiejskich na lata 2007-2013. 2007. Wyd. Ministerstwo Rolnictwa i Rozwoju Wsi. Warszawa.

[125] http://www.arimr.gov.pl/index.php?id=1&zaj=1&kol=999, (retrieved on 16.01.2012)

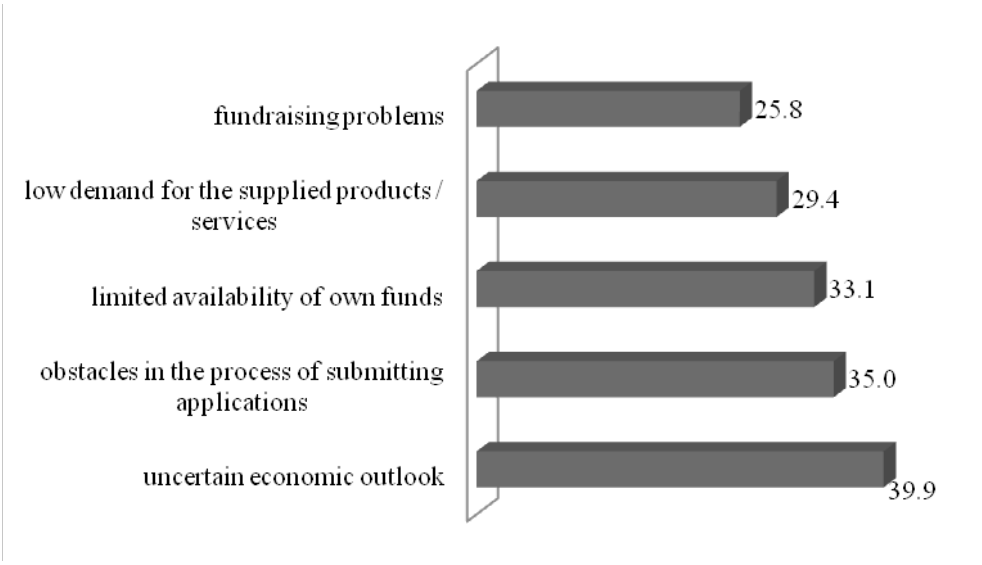

Fig. 1. Barriers to investment activities of rural enterprises (%)

Source: own study.

In addition to economic uncertainty, farmers also pointed to the problem of bureaucracy (complicated procedures, frequently changing requirements, and limited choice of possible actions). One of the cited examples to support the above claim was the regulation concerning the Rural Development Programme action "Microenterprise creation and development", which states that the value of the grant is not set in view of the specific character of the enterprise, but it accounts only for the number of created jobs. Institutional, legal and organizational barriers, including instability and inconsistency of legal provisions, discourage beneficiaries from planning long-term investments and obstruct investment decision-making.

As demonstrated by the results of the survey, 59.2% of respondents who relied on the services of professional consultants had previously acquired EU financial aid for their projects. Beneficiaries with that experience were more determined and eager to participate in new grant schemes initiated as part of the Rural Development Programme 2007-2013. Most of the surveyed subjects showed an interest in financing terms and the period of reimbursement of eligible costs. As shown by the study, 41.7% of respondents had no previous experience in EU-funded projects, and they were interested mostly in the general principles of funding.

One of the key factors motivating the respondents to seek the advice of consulting agencies was the exchange of experience with persons who had successfully applied for EU grants in the past. By exchanging such information, the applicants would be able to avoid the mistakes that had been made by beneficiaries in the previous financial perspectives.

When asked to list the factors that limit access to EU funds, most farmers pointed to a high level of bureaucratization in the process of submitting grant applications. The list of obstacles also included incompetent office workers who were unable to dispense correct information about the type of documents that should to be attached to the request. Some beneficiaries encountered problems when applying for excerpts from land and mortgage registers because the procedure can last up to several weeks (Fig. 2). In the process of preparing their applications, farmers have to compile large numbers of documents, and according to many respondents,

the period between the announcement of a call for proposals and the deadline for submitting the application to ARiMR was too short[126]. In the process of solving procedural problems, filling out the application and compiling the required documents, farmers turn for assistance to Regional Agricultural Advisory Centers and private consulting firms, many of which assume full responsibility for filling out the application and gathering documents. Such services imply additional costs, however. According to the respondents, the short period allowed for procuring the necessary documentation and relatively high costs of developing an application and a business plan were also significant obstacles. In line with the respective legal regulations, in the majority of Rural Development Programme actions, the application process begins 14 calendar days after the President of the Agency for the Restructuring and Modernization of Agriculture announces a call for proposals. For many beneficiaries, the above period is too short, and it does not enable them to collect a complete set of documents. To address those problems, the Ministry of Agriculture and Rural Development issued an amendment to the above regulation in the light of which a call for proposals is announced not later than 14 days before the beginning of the submission process.

Other problems signaled by the respondents included long proposal evaluation times and changes in foreign exchange rates during that period. Farmers who had submitted their applications in a call for proposals announced in November 2007 as part of the "Modernization of farm estates" action were dissatisfied with the fact that the evaluation process in the ARiMR began only in September 2008. Due to the above delay, many farmers had underestimated the value of farm equipment they planned to purchase. On 15 November 2007, the EUR/PLN selling exchange rate quoted by the National Bank of Poland was 3.6769, whereas in the spring of 2009 (after 15 January 2009), when farmers bought their equipment, it increased to 4.2203[127]. The same problem was reported in other actions initiated as part of the discussed program.

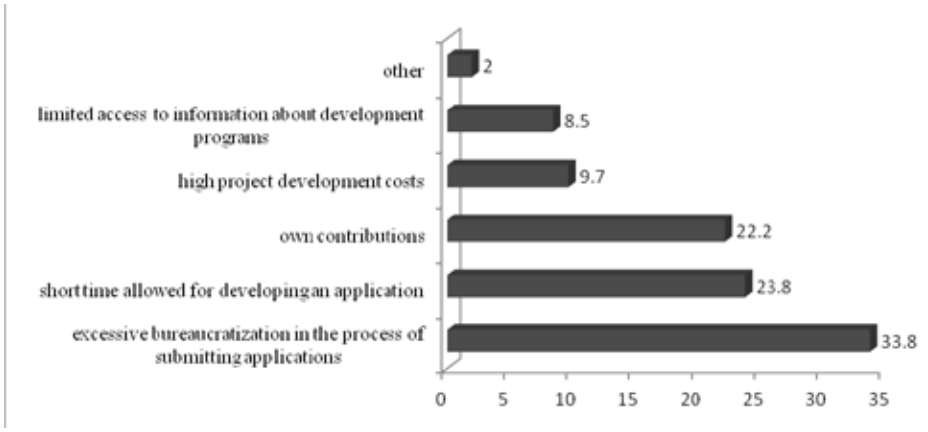

Fig. 2. Factors that obstruct farm modernization projects financed by the Rural Development Programme (%)

Source: own study.

According to the respondents, other factors limiting access to EU financial aid included the requirement to provide own contribution and limited access to information about the actions available under the Rural Development Programme 2007-2013 (Fig. 2). In line with the

[126] W. Czubak [2008]: Znaczenie czynników wpływających na korzystanie z funduszy rolnych UE. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu Vol. X, P. 3: 97-102.

[127] National Bank of Poland, as at 30.01.2010

applicable regulation, the grant is paid after the investment has been completed. In order to implement the project, farmers have to raise additional funds, often which the involvement of bank loans which pose an additional burden on the household budget. In view of the above, Poland had applied with the European Commission for an advance payment to back investment projects. The request was granted in December 2009, and as of 2010, farmers are entitled to receive advance payments for future projects.

The surveyed farmers had previously relied on financial assistance granted under the Rural Development Program, and most of them have developed strategies for running their farm enterprises. The lack of a clear business development concept can often be a serious limiting factor. The external environment plays an important role in this process, such as the local demand for a given group of products. Farmers are often concerned about the shortage of funds to pay off bank loans or begin production[128].

10.4. The Efforts Made by the Beneficiaries to Acquire Knowledge and Information

Farmers need knowledge and access to information in order to run a farm or a rural business. The availability of such information contributes to the entrepreneur's competitive edge on the market. Information comprises data that have been transformed, interpreted, categorized and classified[129]. Sources of information may include documents, individuals, organizations, training courses and institutions.

The results of our survey indicate that farmers were most willing to obtain the necessary information from public organizations. The broad network of Regional Agricultural Advisory Centers (RAAC) enjoys very high popularity. Those units employ experienced personnel who are qualified to resolve most issues relating to the Rural Development Programme. Farmers often contact ARiMR centers responsible for implementing the program in the 2007-2013 perspective to discuss the funding options for their projects. The advice dispensed by ARiMR and RAAC units is free of charge. Some farmers turn for assistance to Agroplus, a private consultancy, because the offered services are much more comprehensive than those provided by public institutions.

As demonstrated by the results of the survey, information is disseminated in various ways, including through communication with neighbors and acquaintances (Fig. 3). During that process, farmers exchange their views and opinions about farming and rural areas. The most productive form of communication, however, are meetings which provide a platform for the exchange of experiences and knowledge. Beneficiaries who had been awarded EU grants in the past are the most valuable source of information. They can provide candidates with important tips that will increase their chances of success in the fundraising process.

The results of our study suggest that the information supplied by consulting firms is the least popular, albeit an increasingly available, source of knowledge (Fig. 3). Many respondents recognized the comprehensive nature of such information; nonetheless, they were discouraged from contacting private consultancies due to the commercial nature of such undertakings.

Under the Rural Development Programme covering 2007-2013 and previous financial perspectives, beneficiaries have to invest own resources and apply for the reimbursement of

[128] M. Błażejowska [2006]: Uwarunkowania absorpcji środków unijnych na obszarach wiejskich. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu Vol. VIII, P. 4: 51-53.

[129] W. Kujawiński [2008]: Podstawy teoretyczne działalności informacyjnej publicznych rolniczych organizacji doradczych. Wyd. CDR w Brwinowie, Poznań.

eligible costs at a later date. Most farmers are in the possession of limited funds, and they are unable to provide full financial security for their investments. In this situation, many beneficiaries are forced to apply for bank loans.

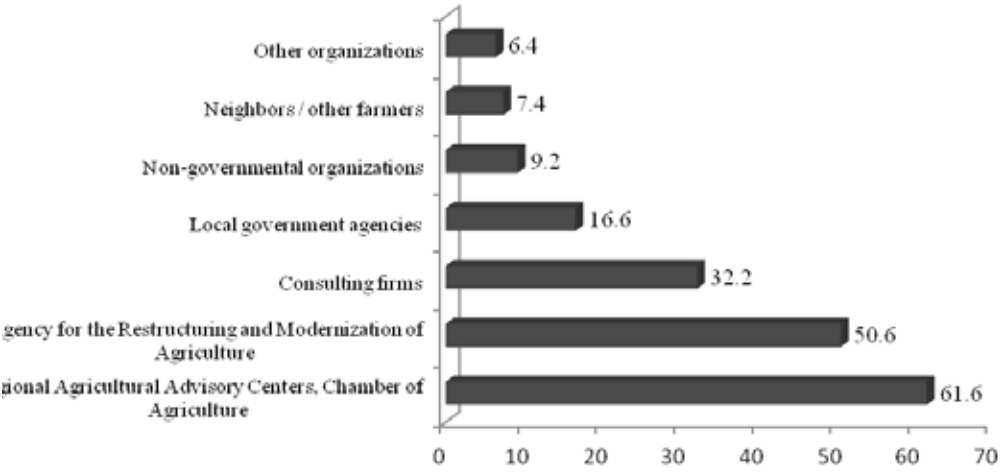

Fig. 3. Sources of information about financial aid opportunities (%)

Source: own study.

Training courses to improve EU fundraising skills were regarded as the most valuable source of information. Farmers were aware that the funds appropriated under the Rural Development Programme 2007-2013 would not cover all beneficiaries. Respondents who had an interest in EU grants eagerly participated in such seminars. Training courses disseminated information about program actions, formal requirements and practical tips for applicants planning to participate in EU calls for proposals.

10.5. Investment Opportunities Created by the Rural Development Programme 2007-2013

A total of 39.5% respondents, prospective beneficiaries of the Rural Development Programme 2007-2013, were involved in running an investment project at the time of this study. They initiated such undertakings without EU financial aid in fear that they would be unable to acquire such assistance. Farmers were also reluctant to take out bank loans due to concerns of economic instability.

Around 40% of the surveyed subjects who had an interest in funding opportunities provided by Rural Development Programme 2007-2013 were planning to launch investment projects in the near future. The above could be attributed to the fact that only two calls for proposals had been announced for programme actions before the period of this study: „Modernization of farm estates" in 2007 and „Agricultural diversification in support of non-farming activities" in 2008. A call for proposals for the "Microenterprise creation and development" action was announced only after this study had been completed.

The majority of respondents relied on their own resources to invest in new projects, and their budgets ranged from PLN 5000 to PLN 50,000. 29% of the surveyed subjects took out bank loans, whereas only 8.3% of farmers leased their means of production (Table 4).

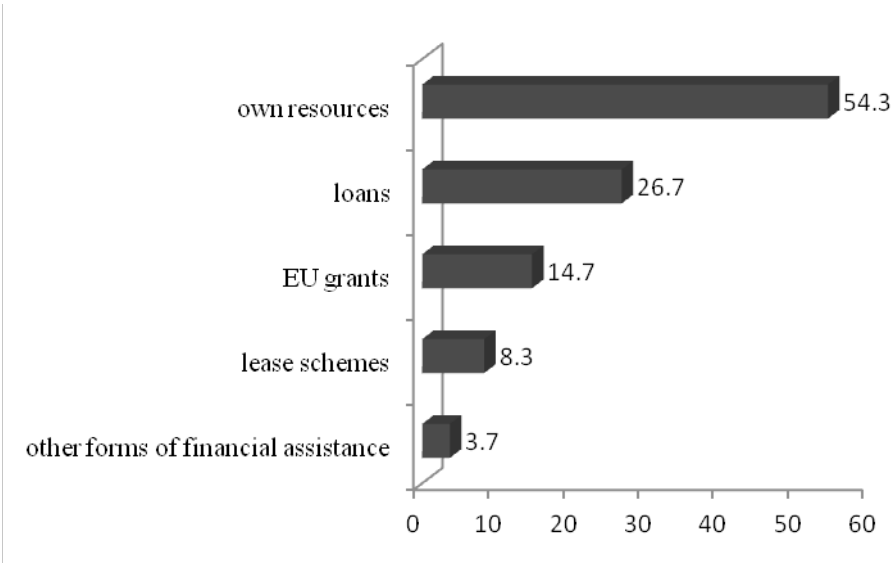

Fig. 4. Sources of financing for investment projects launched in 2006-2009 (%)
Source: own study.

10.6. Expectations Set for the Rural Development Programme 2007-2013

Social and economic development in rural areas of Poland is largely determined by the absorption of European Union funds. The raised funds have to be effectively allocated to promote deep structural changes in rural areas.[130] Farmers and economists have high expectations of the Rural Development Programme 2007-2013. The analyzed scheme contributes to an improvement in rural livelihoods by supporting the restructuring and modernization of Polish agriculture and promoting enterprise growth in rural regions. To achieve that goal, optimized efforts are needed to spread awareness about the program among rural inhabitants and eliminate the barriers to fundraising success.

Despite growing concerns of economic instability and financial risk, the surveyed farmers were eager to embark on new investments, provided that they had access to affordable forms of financial assistance. In their efforts to apply for EU grants, the respondents were most limited by excessive bureaucracy which forced many beneficiaries to seek the support of professional consultants. The ambiguity of legal regulations also poses a significant problem because unclear provisions are often interpreted to the applicant's disadvantage.

There is no doubt that the implementation of the Rural Development Programme 2007-2013 is a potent stimulant that promotes agribusiness growth. Despite the above, prospective beneficiaries still encounter many difficulties in the process of applying for grants. According to the respondents who had previously relied on EU financial aid, the most significant impediments include the complex process of assembling the required documentation, delayed imple-

[130] M. Biczkowski [2009]: Wpływ środków unijnych na przeobrażenia i rozwój obszarów wiejskich. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu Vol. XI, P. 4: 25-31.

mentation of program actions and a short period of time between the publication of a call for proposals and submission deadlines.

Despite the problems and obstacles encountered in the process of applying for EU financial aid, the Rural Development Programme 2007-2013 significantly contributes to the development of agriculture and rural areas by promoting the restructuring and modernization of farms and stimulating the growth of rural enterprise.

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11

FUNDING ALLOCATED TO RURAL DEVELOPMENT IN THE FINANCIAL FRAMEWORKS OF THE EUROPEAN UNION

Anna Łapińska

11.1. Financial Budget of the European Union

The aim of this study was to overview the appropriations made for rural development as part of the EU's policy of preservation and management of natural resources, and to discuss the proposed Common Agricultural Policy for the 2014-2020 financial framework. This paper relies on current data supplied by scientific publications, regulations of the European Parliament, Council of the European Union and the European Commission, implemented budgets of the European Union and the planned financial framework.

The Common Agricultural Policy (CAP), the first truly common social and economic policy of the European Communities, was created in 1957 by the then members of the European Economic Community (EEC). Its principles were laid down and enforced in the primary document establishing the European Community – the Treaty of Rome, Title II: Agriculture (art. 38-47)[131]. To date, the CAP remains is the only EU policy with a common EU framework.

The establishment of the European Communities necessitated the creation of a fund for financing joint expenditures. This task entailed the development of tools for accumulating and spending common resources. This process gave rise to the budget of the European Communities and, subsequently, the budget of the European Union. From the legal point of view, the resources contributed by the Member States to the EU budget constitute the European Union's own resources.

At present, the budget of the European Union is financed by four sources of revenue. The first are custom duties on imports from Third Countries, agricultural duties and sugar levies. In 2011, the above resources had a 15% share of budget revenues. The second are VAT own resources which reached 11% of total revenue. Resources based on the Gross National Income (GNI) of each Member State account for the largest portion of the budget at 73%. The remaining 1% revenue items include taxes on EU staff salaries, fines on companies for breaching competition laws, etc. Revenue is currently capped at 1.24% of GNI for the EU as a whole.

More prosperous countries make much larger contributions to the EU budget than poorer Member States. Poland pays around EUR 3 billion in annual contributions, but it receives EUR 8 billion from the EU budget each year. According to estimates, Poland's receipts from the EU budget will amount to around EUR 67 billion in the 2007-2013 financial framework.

The European Union's budget covers a period of one calendar year, but it is planned in

[131] The Treaty of Rome, 1957.

advance for a period of many years, i.e. the Multiannual Financial Framework. The current Financial Framework covers 2007-2013, and the European Commission has already proposed the draft Financial Framework for 2014-2020. The multiannual financial framework constitutes a political agreement between all EU Member States concerning the EU's spending priorities. It lays down maximum amounts (ceilings) for every category of expenditure which are binding for the annual budget. In the present financial framework, a portion of resources allocated to the preservation and management of natural resources will support rural development[132].

As part of the Common Agricultural Policy, the European Union manages the common resources allocated to agriculture. There are no restrictions on trade in agricultural products between the Member States. Exports to global markets receive identical support in every country. Various measures are undertaken to create a fair, sustainable and green future for the CAP.

In the process of planning the Financial Framework for 2014-2020, the European Union sets the priorities and goals for its activities. The main objectives of EU policies are regional competitiveness and employment, social cohesion and territorial cooperation. The key priority of the new financial framework is also to keep EU expenditures under control. The structure of appropriations in every financial framework reflects strategic political and economic goals that were taken into account in the planning process.

The Common Agricultural Policy and rural development play a crucial role in EU policy, in particular after the last enlargement. Agriculture continues to be the predominant form of land use in rural areas, it determines the quality of rural areas and the natural environment. The European model of agriculture represents the multifunctional role played by agriculture in promoting the richness and diversity of landscape, regional food products, cultural and natural heritage.

The European Union's strategic guidelines facilitate the identification of areas where programs supporting rural development create the highest added value in all of the EU and guarantee cross-compliance with other policies, in particular in the area of cohesion and the natural environment.

11.2. Rural Areas in the European Union

Rural areas in the European Union are characterized by significant diversity, from those that are gradually depopulated, deteriorating, remote and peripheral to areas that are situated outside large municipal centers and subjected to growing urban pressure.

According to the OECD's definition, rural areas account for 92% of the European Union's territory in terms of population density. 19% of the EU's residents inhabit regions with a high share of rural areas, and 37% live in predominantly rural regions. Those regions produce 45% of gross value added in the EU, and they give employment to 53% of the local labor force. Rural areas lag behind urban centers in terms of social and economic progress. Rural residents earn around one-third less than city dwellers, rural women are less professionally active, the service sector is less developed and education standards are lower. Due to their remote and peripheral location, rural areas suffer from a lack of roads, and the existing infrastructure is often of poor quality.

Agriculture and forestry represent 77% of land use in the European Union. The implementation of the Natura 2000 program significantly contributed to the protection of biological

[132] A. Łapińska [2011]: Rolnictwo w budżecie Unii Europejskiej. Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu Vol. XIII, P. 1., Warszawa – Poznań – Wrocław: 199-203.

diversity. The program covers 12-13% of farmed acreage and forests. Agricultural systems of high environmental value play an important role in the preservation of biological diversity, protection of natural habitats, landscape and soil quality. The abandonment of farming activity in those areas could have damaging effects on the environment.

Economic growth, employment and sustainable development pose significant challenges for rural areas. Only selected regions can pursue new avenues for growth as tourist centers, recreational sites, places of work and residence, deposits of natural resources or places of great scenic value.

Although the countryside has been traditionally associated with farming, the development of contemporary rural areas is not harmonized with agricultural progress. In the past centuries, farmers accounted for the largest social group inhabiting the countryside, and agriculture was the predominant area of rural economy[133]. Today, rural inhabitants are unable to derive satisfactory livelihoods from agriculture alone.

11.3. Portrayal of the Polish Countryside in the Agricultural Census of 2010

The Polish countryside has undergone significant changes in the last decades. More than 60% of rural inhabitants are not involved in agricultural production. Farming is the sole source of income for less than 10% of the rural population. Market pressure and competition force farmers to specialize and intensify their production to cut costs and maximize their incomes. Many Polish farms have an outdated structure which requires high labor inputs.

The most recent Agricultural Census of 2010 revealed that although the number of farms had decreased by 22.4% from 2002, there are still 2.278 million farm estates in Poland, which is the second highest number of farms in Europe after Romania. Although 17% of those estates are not involved in agricultural production, 1.891 million farms conduct agricultural activity. The structure of farms improved in the discussed period. The highest decrease was noted in the group of smallest farms with the area of up to 1 ha and 1-5 ha whose number fell by 26.8% and 24.8%, respectively. The number of larger estates with the area of 5-20 ha was marked by a 17% drop. The number of farms spanning 20-50 ha remained fairly constant with only a minor increase of 0.8%. A steep increase of 34.4% was reported in the number of farms with the area of 50 ha and larger[134].

Family farms were the only or the main place of employment for 2.216 million people (1.945 million worked exclusively in farms, whereas agriculture was the predominant source of income for 271,000 people) who accounted for 39.4% of the farm residents aged 15 and older. The above data relate to all private farms conducting agricultural activity regardless of acreage or the type of production.

According to the findings of the Agricultural Census of 2010, 4.449 million members of farm families were involved in agricultural work in their estates, and when regular hired labor was taken into account, the overall number of farm workers increased to 4,495. The total labor force in privately-owned farms was estimated at 4.537 million. The number of farm users and their spouses involved in agricultural production decreased from 2002 due to a drop in the overall number of farms in the analyzed period. At the same time, the number of family members actively working on the farm increased. A significant increase in the size of this popula-

[133] J.Wilkin [2011]: Wielofunkcyjność wsi i rolnictwa a rozwój zrównoważony. Wieś i Rolnictwo 4 (153): 27-39.

[134] Central Statistical Office [2011]: Raport z wyników. Powszechny Spis Rolny 2010. GUS, Warszawa.

tion group was observed between 2002 and 2010. A higher number of regular hired workers was also noted in private farms. The last Agricultural Census revealed positive changes in the number and size of private farms, but it also demonstrated that the Polish agricultural sector continues to be plagued by an employment surplus.

From the beginning of political and market reforms in Poland, agriculture has accumulated excess labor that was not involved in other areas of production. Surplus labor in agricultural production is one of the key obstacles to rural development. It delays improvements in agrarian structure, management effectiveness and technological process which prevents farmers from generating higher incomes and strengthening their competitive advantage. This is additionally aggravated by deteriorating relations between the prices of agricultural and industrial products.

Political transformations in Poland initiated slow but steady changes in rural management methods in line with the concept of multifunctional development. The future growth of rural areas should rely on the principles of sustainability and protection of natural resources. The promotion of sustainable growth is the goal of every development strategy implemented in rural areas. The funds allocated to farm development under the Common Agricultural Policy create unprecedented opportunities for rural growth.

The European Union's policy continues to evolve, and greater emphasis is placed on the multifunctional and sustainable development of agriculture and rural areas. This change process sets new prospects for growth, and it is welcomed by most experts as well as the public[135].

The migration of the rural population to urban areas is limited due to the scarcity of jobs in the city. The movement of rural job seekers into the cities is also restricted by weakly developed transport infrastructure and low availability of housing in urban areas.

Non-farm activities should provide an alternative source of income for people employed in agriculture. Alternative forms of professional activity are still weakly developed in the Polish countryside, mostly due to an absence of financial support and low levels of social activity. As an additional obstacle, most enterprises in predominantly rural areas receive the same treatment regardless of their size, location or unemployment levels in a given region.

The European Union supports rural development and devotes vast amounts of financial resources to promote this goal. EU financial aid provides rural inhabitants with unprecedented opportunities for developing agricultural production as well as non-farm activities to supplement their incomes. The volume of expenditures dedicated to rural development best illustrates the EU's dedication to the issue.

11.4. Expenditures on Agriculture and Rural Development in the Present Financial Framework

The categories of expenditure in the 2007-2013 Financial Framework have been given new headings. The previous heading of "Agriculture" has been relocated to the "Preservation and Management of Natural Resources". The appropriations made in this category have a 44.6-40.2% share of the EU budget, with an average of 42.4% in the 2007-2013 financial framework. The spending priority in the EU's budget is "sustainable growth" to which 44.8% of overall funding was dedicated. This heading is further subdivided into two components of "competitiveness" and cohesion".

[135] J.Wilkin [2011]: Wielofunkcyjność wsi i rolnictwa a rozwój zrównoważony. Wieś i Rolnictwo 4 (153): 27-39.

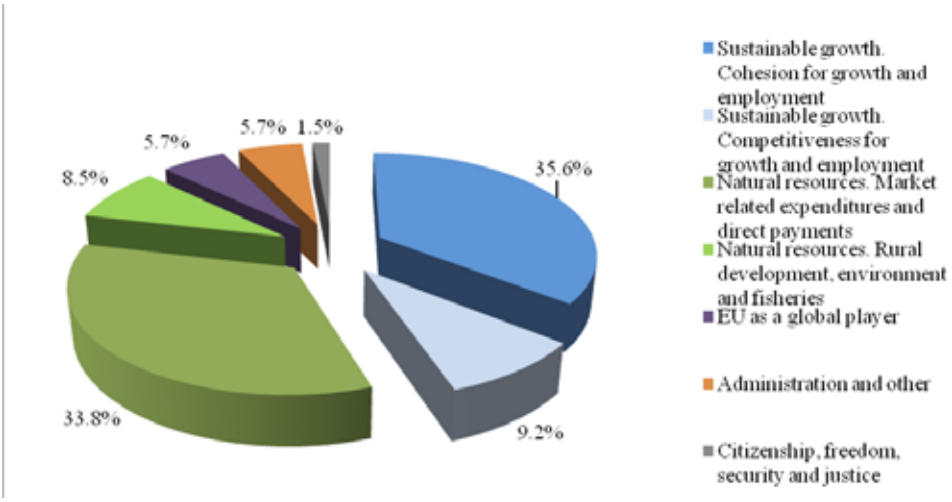

Fig. 1. Categories of expenditure in the 2007-2013 financial framework

Source: The multi-annual financial framework of the European Union.

The data shown in Figure 1 indicate that sustainable growth took a lion's share of the common funds in the current financial framework with its two components of "cohesion for growth and employment" (35.6%) and "competitiveness for growth and employment" (9.2%). The "EU as a global partner" and administrative costs to all EU institutions corresponded to 5.7% each of the total commitments. Around 1.5% of the budget was allocated to expenditures in the area of citizenship, freedom, security and justice. More than 87% of the total EU budget in the current financial framework was thus dedicated to the first two headings of "Sustainable Growth" and "Preservation and Management of Natural Resources".

The exact value of revenues and expenditures is not specified in successive financial frameworks because the economic situation changes in the multi-annual perspective. The purpose of the financial framework is to identify spending priorities for a period of 7 years and to determine the maximum amounts (ceilings) for all headings.

Detailed information about revenues and expenditures is presented in the annual budget of the European Union. In the total commitment appropriations of EUR 141.5 billion for 2010, EUR 59.5 billion was allocated to heading 2: "Preservation and Management of Natural Resources" which had a 42% share of the total budget. The above heading was further subdivided into marked related expenditures and direct payments which attracted EUR 43.8 billion (31%) and rural development to which EUR 14.4 billion was channeled (10.2%). As part of the Convergence Objective financed by Structural Funds and the Cohesion Fund, less developed European regions were eligible to receive EUR 49.4 billion for modernizing and developing their infrastructure and production plants. [136]

[136] Komisja Europejska [2010]: Budżet ogólny Unii Europejskiej na rok finansowy 2010. Bruksela-Luksemburg, January.

Table 1. Appropriations for the preservation and management of natural resources in the 2007-2013 financial perspective, in 2011 prices (in EUR million)

Specification	2007	2008	2009	2010	2011	2012	2013	Total 2007-2013
Total commitment appropriations	124 457	132 797	134 722	140 978	142 965	147 546	152 312	975 777
as a percentage of GNI	1.02	1.08	1.16	1.18	1.16	1.15	1.14	1.13
Total payment appropriations	122 190	129 681	120 445	134 280	134 280	141 360	143 331	925 576
as a percentage of GNI	1.0	1.05	1.01	1.10	1.06	1.10	1.06	1.07
Preservation and management of natural resources	55 143	59 193	56 333	59 955	60 338	60 810	61 289	413 061
as a percentage of total commitment appropriations	44.3	44.6	41.8	42.5	42.2	41.2	40.2	42.3
Market related expenditures and direct payments	45 759	46 217	46 679	47 146	47 617	48 093	48 574	330 085
as a percentage of total commitment appropriations	36.8	34.8	34.6	33.4	33.3	32.6	31.9	33.8

Source: own elaboration based on the 2007-2013 Financial Framework http://polskawue.gov.pl/Perspektywa.finansowa.na.lata.2007-2013.231print.html Retrieved on 01.02.2011

Table 1 presents the value of commitment and payment appropriations which had an average 1.13% of the Gross National Income of all EU Member States in the 2007-2013 financial framework. The own resources ceiling, set at 1.24% of the GNI, was not exceeded. The financial perspective for 2007-2013 implemented the proposal made by the European Commissioner for Agriculture Franz Fischler in 2002. Fischler suggested that direct payments should be decoupled from production and tied with food quality and environmental protection instead. In the current financial framework, market related expenditures and direct payments form a separate category of funds. This component of heading 2 accounts for 33.8% of budget funds, and it is the second highest expenditure item after "cohesion for growth and employment".

In the coming 7 years, the funds appropriated to the preservation and management of natu-

ral resources will grow from EUR 55.1 billion to EUR 61.3 billion in terms of absolute values. Their share in the structure of commitment appropriations continues to decrease from 44.3% to 40.2% (Table 1).

Table 2. EU funds appropriated to the preservation and management of natural resources (in EUR billion)

Commitment appropriations	2007		2008		2009		2010		2011		2012	
	Bn	%	bn	%	bn	%	bn	%	bn	%	bn	%
Preservation and management of natural resources	56.3	100	55.0	100	56.1	100	59.5	100	61.7	100	60.1	100
Market related expenditures and direct payments	42.7	75.8	40.9	74.3	41.1	73.3	43.8	73.6	47.6	77.1	44.1	73.4
Rural development	12.4	22.0	12.9	23.5	13.7	24.3	14.4	24.2	12.7	20.6	14.6	24.3
Maritime affairs and fisheries	0.9	1.4	0.9	1.6	0.9	1.7	0.9	1.5	1.0	1.6	1.0	1.6
Environmental protection and other	0.3	0.5	0.3	0.5	0.4	0.5	0.4	0.7	0.4	0.7	0.4	0.7

Source: European Union budgets in 2007-2012.

The above tables shows a minor increase of about 1% in appropriations made to the preservation and management of natural resources in annual budgets. Market related expenditures and direct payments have the highest share of funds allocated under heading 2 at around 74%. A steady increase in appropriations for rural development is also observed, and they presently account for 24% of heading 2 expenditures. Around 1.5% of the budget for heading 2 is spent on maritime affairs and fisheries, while environmental protection and other expenditures have a 0.5% share of this budgetary item. In the current financial framework, the Common Agricultural Policy budget has been clearly divided into two pillars. As part of the first pillar, financial support for production and land management is provided through direct payments and market related expenditures. In the current programming perspective, the first pillar has an estimated 75% share of CAP funds. The second pillar supports the development of rural areas. The relevant funds account for 25% the CAP budget, and the main goals of this form of assistance include the protection of the natural environment and local cultural resources, diversification of agricultural production, implementation of high production standards and improving the quality of life in rural areas.

The European Union's rural development policy is focused on four priority axes: 1 – improving the competitiveness of the agricultural and forestry sector, 2 – improving the environment and the countryside, 3 – improving the quality of life in rural areas and encouraging diversification of the rural economy, and 4 – the Leader approach.

Axis 1 involves measures aimed at improving human and physical potential in agriculture, food production and forestry, including transfers of knowledge, innovations and implementation of high production standards. Axis 2 provides funding for the protection and stabilization of natural resources, preservation of farming and forestry systems of high natural value and the protection of traditional rural landscape. Axis 3 supports the development of local infrastructure and human capital to boost enterprise growth, employment and diversification of the local

economy. Axis 4 draws upon the experiences of the Leader program, and it supports innovative management practices which mobilize the rural community (bottom-up approach) and create local action groups.

11.5. Financial Framework 2014-2020

The draft budget for the 2014-2020 financial framework, presented by the European Commission on 29 June 2011, proposes to support the growth of a stable and competitive agricultural sector while significantly simplifying the direct payments scheme.[137]

The proposed budget will prioritize expenditures that support economic growth and the creation of new jobs. The majority of appropriations will support the above priorities and the goals of the Europe 2020 strategy. The EU's financial policy will focus on recovery from the global crisis and putting Europe on a path towards stable growth. The budget for the 2014-2020 programming period amounts to EUR 972.2 billion in payment appropriations (marking an increase from EUR 925.6 billion in the 2007-2013 perspective) and EUR 1025 billion in commitments (compared with EUR 975.8 billion in 2007-2013). The nominal value of the proposed budget is around 5% higher in comparison with the budget set for the 2007-2013 financial framework. In terms of the European Union's total GNI, payment appropriations will be reduced from 1.07% to 1.00% and commitment appropriations – from 1.13% to 1.05%. The new budget is 2.5% higher than the current financial framework which amounts to EUR 1000 billion in 2011 prices.[138]

The Common Agricultural Policy budget will be decreased from EUR 413 billion to EUR 383 billion, of which EUR 282 billion will be allocated to direct payments. A similar balance between pillar I and pillar II appropriations will be maintained. The new budget will provide for a more equitable distribution of direct income support, but Poland's postulate to eliminate differences in the value of direct payments between richer and poorer countries has not been taken into account. According to estimates, the value of direct payments to Polish farmers will increase from EUR 196 per hectare in 2013 to EUR 224 per hectare in 2020, but direct income support will still be fixed based on historical production, therefore, its nominal value will decrease. Poland has pointed out that the policy of appropriating the highest payments to the most intensive agricultural producers poses a threat to the Common Agricultural Policy from both the economic and environmental perspective.

The resources allocated from the EU budget to agriculture and rural development will mobilize the growth and modernization of farming production to cater to Europe's growing demand for food and strengthen its competitive edge on the global market.

All measures aiming to intensify agricultural production and improve farmer livelihoods should be implemented in accordance with the principle of sustainable growth. In the coming financial framework, the European Union's main focus will be to reconcile the improvement in quality of rural life with environmental protection and sustainable development.

[137] Wspólna polityka rolna (WPR) – w stronę 2020 r.: sprostać wyzwaniom przyszłości związanym z żywnością, zasobami naturalnymi oraz aspektami terytorialnymi" z 18 listopada 2010 r.

[138] J. Kwieciński [2011]: Nowy budżet UE na lata 2014-2020. VA BANQUE 05.07.20011 r.

References:

GUS [2011]: *Raport z wyników. Powszechny Spis Rolny 2010.* GUS, Warszawa.

Komisja Europejska [2010]: *Budżet ogólny Unii Europejskiej na rok finansowy 2010.* Bruksela- Luksemburg, styczeń.

Kwieciński J. [2011]: *Nowy budżet UE na lata 2014-2020*. VA BANQUE 05.07.20011 r.

Łapińska A. [2011]: *Rolnictwo w budżecie Unii Europejskiej.* Roczniki Naukowe Stowarzyszenia Ekonomistów Rolnictwa i Agrobiznesu. T. XIII, Z. 1., Warszawa – Poznań – Wrocław.

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Traktaty Rzymskie 1957.

Wilkin J. [2011]: *Wielofunkcyjność wsi i rolnictwa a rozwój zrównoważony.* Wieś i Rolnictwo Nr 4 (153).

Wspólna polityka rolna (WPR) – *w stronę 2020 r.: sprostać wyzwaniom przyszłości związanym z żywnością, zasobami naturalnymi oraz aspektami terytorialnymi* z dnia 18 listopada 2010 r.

12

ALTERNATIVE EMPLOYMENT AND RURAL DEVELOPMENT WITHIN EUROPEAN UNION

Paweł Niewiadomski

12.1. Development Problems of European Union

Increasing income of rural inhabitants is one of the most important goals and actual conditions of rural development. One of the main ways to achieve this goal, is to go by part of rural inhabitants from agriculture and looking for another source of income. At the same time countryside could become increasingly provider of services, leisure and entertainment, as well as the place of production of various kinds of goods. This requires a willingness to take risks to start non-agricultural activities, gain knowledge and skills on how to set up a company, ability to use conditions offered by the region and holding but also will to get new jobs - and sometimes do not require long-term learning, but giving skills far from a typical image of rural inhabitant.

Currently, with over 56% of the population in the 27 EU Member States living in rural areas, which cover c.a. Nearly 91% of the territory of EU, rural development is a vitally EU important policy area. Farming remains crucial for land use and the management of natural resources in the EU's rural areas, and as a platform for economic diversification in rural communities. The strengthening of EU rural development policy is, no doubt, an overall EU priority at this moment[139].

The European Union has an active rural development policy because this helps us to achieve valuable goals for our countryside and for the people who live and work there. The EU's rural areas are a vital part of its physical make-up and its identity. Furthermore, the EU's fantastic range of striking and beautiful landscapes are among the things that give it its character – from mountains to sea, from great forests to rolling green fields.

Many of our rural areas face significant challenges. Some of our farming businesses still need to build their competitiveness and looping new possibilities. More generally, average income per head is lower in rural regions than in our towns and cities, while the skills base is narrower and the service sector is less developed. Also, caring for the rural environment often carries a financial cost. On the other hand, the European countryside has a great deal to offer. It gives us essential raw materials. Its value as a place of beauty, rest and recreation – when we look after it – is self-evident. It acts as our lungs, and is therefore a battleground for the fight against climate change[140].

[139] http://ec.europa.eu/agriculture/rurdev/index_en.htm
[140] http://ec.europa.eu/agriculture/rurdev/index_en.htm

Europe's rural areas are diverse in terms of population, demography, labor markets, economic and social structures. There is no doubt, that it is this diversity that is part of their richness. Nevertheless, many of Europe's rural areas still face a common challenge – their capacity to create high-quality, innovative, sustainable jobs is falling behind urban areas[141].

At this moment two large scale processes of demographic change are taking place in Europe: a long established "urbanisation" trend drawing population and economic activity out of remote rural areas into urban and accessible rural areas, and a more recent "counter-urbanisation" flow out of urban areas into accessible rural areas made possible by new transport and ICT and communication infrastructure[142].

The service sector is the biggest employer in Europe's rural areas but is smaller compared to urban areas and tends to be dominated by the public sector. This is due to the underdevelopment of private services which remain largely urban, and is reflected in the slower shift to activities centered in the knowledge-based economy.

Deficit of skills and human capital in rural areas compared with urban areas has been observed. Adult population with tertiary education is only around 15%[143] and the situation of women and young people remains precarious often resulting in the out-migration of females and youngsters in economically active age groups[144].

Europe's rural areas are diverse and include many leading regions. However, some rural areas, and in particular those which are most remote, depopulated or dependent on agriculture will face particular challenges as regards growth, jobs and sustainability in the coming years. These include lower levels of income, an unfavorable demographic situation, lower employment rates and higher unemployment rates, a slower development of the tertiary sector, weaknesses in skills and human capital, a lack of opportunities for women and young people.

Rural development measures should be fully exploited for employment and growth, and job creation and maintenance should be strongly encouraged. New working places and better working conditions can be created if measures such as farm investments, training, promotion adaptation and development of rural areas, farm tourism, environmental and village renewal, landscape preservation, cultural heritage, etc. are implemented. Innovative start-ups can further contribute to employment in rural areas and boost their development and diversification, and in particular by focusing at young people and women.

Multi-sectoral, area-based approaches (for example Leader) based on a partnership approach should be encouraged. In the light of these future challenges, an integrated approach of Community and Member State policies combined with a strong focus on human capital and skills will be key elements in exploiting the opportunities for growth and employment that exist in rural areas.

12.2. Development of Employment Policy and Rural Areas in the European Union

At its meeting in Lisbon in 2000, under the European employment strategy launched in 1997, the European Council set the goal of full employment and, as a medium-term target, an

[141] Communication from the Commision to the Council and the European Parliament - Employment in rural areas: closing the jobs gap {SEC(2006)1772}

[142] The EU's Common Agricultural Policy (CAP): one the move in a changing world – How the EU's agriculture and development policy fit together, European Comission: 8.

[143] Study on Employment in Rural Areas (SERA) Europena Comission: 133.

[144] The Agricultural Situation in the EU, European Comission: 37.

employment rate of 70% by 2010. As part of this process, the Agricultural Council of July 2003 agreed conclusions on "Employment in rural areas under the European Employment Strategy". The Agriculture Council identified several challenges for the future of rural employment such as the ageing of the farming population, the participation of young people and women in the rural economy, the enlargement of the European Union and the switch from product to producer support under the revised CAP. It called on the Commission to carry out an in-depth assessment of employment prospects in rural areas and to initiate the discussion on the creation of statistical tools for rural areas[145].

On 2nd February 2005, the European Commission proposed a new start for the Lisbon Strategy focusing on two principal tasks – delivering stronger, lasting growth and creating more and better jobs[146]. Under the European Employment Strategy there were need to improve the adaptability of workers and enterprises and to increase investment in human capital through better education and skills. The guiding principles for the contribution of the CAP – markets and rural development – to the Lisbon Strategy were set by the European Council in Göteborg in 2001 and confirmed in the Lisbon Strategy Conclusions in Thessaloniki in June 2003 – Strong economic performance must go hand in hand with the sustainable use of natural resources. This was reaffirmed in the renewed EU Sustainable Development Strategy adopted by the European Council on 16 June 2006. The new CAP is based on a market policy where intervention is a safety net, income stabilization is delivered through decoupled aids subject to cross-compliance, and on a reinforced rural development policy focused on jobs, growth and sustainability. The Community strategic guidelines for rural development identify the areas key to the realization of EU priorities for the period 2007–2013, in relation to the New EU - Europe 2020 Strategy, especially for growth and jobs[147].

12.3. The Characteristics of Rural Areas in European Union

Based on population density, rural areas represent 93% of the territory in EU-27. Only 20% of the population live in predominantly rural areas and 38% live in significantly rural areas[148]. Rural areas generate 45% of gross value added in EU-27 and 53% of the employment, but tend to lag compared to predominantly urban areas. In EU-27 the income per capita of predominantly urban areas is almost double that of predominantly rural areas[149]. Unfortunately, low levels of income make it harder to retain and attract skilled individuals.

The proportion of the rural population in EU total population has remained fairly constant in recent decades. This relative stability at an aggregate level, however, masks significant variations between and within individual Member States and hides important population developments over the last 15 years at regional level.

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145 The Common Agricultural Policy Explained, European Commission: 1.

146 com(2005) 24

147 Communication from the Commision to the Council and the European Parliament - Employment in rural areas: closing the jobs gap {SEC(2006)1772}

148 This definition of rural areas has been adopted in the context of Council Decision of 20 February 2006 on Community strategic guidelines for rural development (programming period 2007 to 2013) (2006/144/EC). The OECD defines areas as predominantly rural, significantly rural or predominantly urban according to population density and is based on the share of population living in rural communes (i.e. with less than 150 inhabitants per km²) in a given NUTS II or III region. See Extended Impact Assessment SEC(2004) 931 and SEC(2005) 914. The 1284 NUTS 3 regions of the EU-27 are broadly evenly divided between the three rural-urban categories. The Commission is currently undertaking work on alternative definitions that better reflect the diversity of significantly rural areas, including peri-urban areas.

149 Agriculrural statistics – Main results – 2008/2009. Eurostat: 65.

As a result, accessible parts of significantly rural areas represent a zone of growth, with an economic structure increasingly similar to that of urban areas. In contrast, predominantly rural areas, especially in the more remote parts of the EU are still being depleted of population and economic activity[150]. In terms of age structure, Southern Member States exhibit the greatest signs of demographic ageing in their rural areas. As regards gender, the most important trend is a "masculinisation" of sparsely populated Nordic rural areas and less developer rural areas of the New Member States, due to the out-migration of younger women[151].

Across the EU-25, in the period 1996–2001, employment has increased fastest in urban areas. The employment rate has increased by 3.6% in predominantly Urban areas compared to 1.9% in predominantly rural areas. This suggests a widening urban-rural employment rate gap[152]. In 2004 employment rates in EU-27 were almost 5% higher in predominantly urban (64.7%) than predominantly rural areas (60.1%). However, the diversity of rural regions should be stressed. Some rural regions, in particular in peri-urban areas have experienced high rates of employment growth, in line with a general trend in OECD countries[153]. At a sub-regional level, trends can be very different compared to those at a regional level, notably where labor moving out of agriculture in the countryside has been absorbed in market towns and large villages. Unemployment rates are generally significantly higher in rural than in urban areas. Urban-rural differences are particularly pronounced in countries characterized by high unemployment rates. Long-term unemployment is relatively high only in significantly rural areas, which could indicate growing exclusion of low-income groups. It is estimated that "hidden unemployment" (involving underemployed farmers and farm workers) probably accounts for around 5 million people in rural areas[154].

The service sector is the biggest employer in Europe's rural areas but is smaller compared to urban areas and tends to be dominated by the public sector. This is due to the underdevelopment of private services which remain largely urban. In 2002 it accounted for 57% and 65% of employment respectively in predominantly and intermediate rural areas, compared with 75% in predominantly urban areas. This is reflected in the slower shift to activities centred in the knowledge-based economy.

Skills and human capital are generally lower in rural areas than in urban areas. In many Member States education beyond primary or lower secondary education is more generalized in urban areas. In urban areas almost 20% of the adult population has tertiary education, while in rural areas the proportion is only around 15%[155]. Tertiary education can often lead to outmigration of skilled individuals from rural to urban areas, who stay on after their studies due to better employment opportunities.

The situation of women and young people in rural areas remains precarious of ten resulting in the out-migration of females and youngsters in economically active age groups. In some rural areas, the lack of training infrastructure and appropriate childcare facilities prevent entry or upskilling in the labor market. Female and youth unemployment rates tend to be relatively high in rural areas. For women the rates for rural areas were 10.6% but male rates were relatively lower at 7.9%. In urban areas female (6.8%) and male rates (6.2%) were more similar. Youth unemployment was significantly higher in both predominantly and significantly rural areas, 17.6% and 16% respectively, compared with 11% in urban areas[156].

[150] Study on Employment in Rural Areas (SERA): 214.
[151] Study on Employment in Rural Areas (SERA): 34.
[152] Study on Employment in Rural Areas (SERA): 44.
[153] OECD 2006. Rural Policy Reviews. The New Rural Paradigm. Policies and Governance: 27.
[154] EU's Agricultural Policy after 2013. Office of the Committee for European Integration: 64.
[155] Study on Employment in Rural Areas (SERA): 133.
[156] Study on Employment in Rural Areas (SERA): 47-48.

12.4. The Characteristics of Rural Areas in Poland

Rural areas in the Republic of Poland cover 93.2% of the country, and are extremely important from the economic, social and environmental point of view. The rural areas in the Republic of Poland are defined as those situated out of the cities' administrative boundaries which means that they are rural gminas or parts of urban-rural gminas[157]. The separation of a part of urban-rural gminas, i.e. a city and a rural area, which have different territorial identifiers, allows collecting and presenting statistical data broken down into city and rural areas. The definition of rural areas may in justified cases be extended to small urban localities with close functional links to rural areas[158].

The population of the Republic of Poland is 38,200 thousand persons, i.e. 7.6% of the total population of the European Union (EU - 27)[159]. The rural areas are inhabited by 39 % of the total population, i.e. 14,903 thousand people, out of which 7,413 thousand are male and 7,489 thousand are female[160]. It is worth emphasizing that Poland is of a high population potential, being the sixth biggest country in EU in terms of population. Rural localities are highly diversified in terms of the size of the population:

- 15% of all localities are inhabited by less than 100 people;
- 66% of localities are inhabited by 100 - 500 people;
- 13% of localities are inhabited by 500 - 1000 people;
- only 6% of localities are inhabited by over 1000 people.

The Republic of Poland witnesses migration, which has significant impact on the situation of rural areas. Greater influx of people from the cities to the rural areas than migration from the rural areas to towns has been noted since 2000. The phenomenon was especially noticeable in 2002. According to CSO estimations this tendency will remain within the next few years (the share of rural residents, in 2002 amounting to 38.3%, may increase to as many as 42.6% persons in 2030)[161].

The phenomenon results from numerous factors, including city dwellers settling down in rural areas, a decrease in the number of people migrating to cities for work, return to the countryside of persons who lost their jobs, change of the status of towns/villages.

It may be noted that a new category of persons living in the rural areas appeared, i.e. those who become residents or rural entrepreneurs. They represent the affluent group of the population. Most often they settle around large urban areas and along main communication routes. They bring the new anonymous (city) type of human relationships. The arrival of new rural residents is often a factor, which significantly changes the structure and interrelations of the typical rural communities[162].

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[157] The selection criterion has been elaborated on the grounds of territorial division in accordance with TERYT register (National Official Register of the Territorial Division of the Country).

[158] Rural Development Programme for 2007-2013 [2007]: Ministry of Agriculture and Rural Development: 8.

[159] European Union Statistic Office - Eurostat - Demographic balance and crude rates in 2011 in the European Union http://epp.eurostat.ec.europa.eu/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tps00001&language=en

[160] Demographic Yearbook of Poland [2011]: Central Statistic Office:34.

[161] LEADER + initiative in Poland [2005]: Research ordered by the Office of the Committee for European Integration, Warsaw.

[162] Rural Development Programme for 2007-2013 [2007]: Ministry of Agriculture and Rural Development: 11.

In 2005 the number of persons employed on farms amounted to 5,111.5 thousand[163]. Due to the large variation of the time spent by respective family members on work in their own holding, the number of the employed expressed in full-time equivalents was lower and reached 2,291.9 thousand persons[164], including about 5.7% of hi red employees. It is estimated that within the next few years the employment in agriculture will decrease, which to a large extent will be related to changes in the area structure and the modernization of agricultural activity, and at the same time the abandonment of agricultural activity by the population will be faster than the improvement of area structure and methods of production. The pace of changes in agriculture and the scale of the decrease in the number of persons employed at individual holdings will be influenced also by the increasing migration of the Polish population. Considering the structural changes in agriculture to date and those expected it is estimated that by 2015 the number of people employed full-time in agriculture will decrease by about 35% and will amount to 1,490 thousand persons. In addition, according to the assumptions of the National Development Strategy, the percentage of people employed in the agricultural sector will decrease in 2015 from the current rate of 17.4% to around 11% of the total number of the employed.

Taking into account the above changes in rural areas, ensuring the employment and income through development of non-agricultural activities, including supporting initiatives of agricultural producers and rural inhabitants, is a very important part of programming under the Structural Funds as well as the Rural Development Programme[165].

12.5. The Place of Agriculture in Europe

In most rural areas the primary sector accounts for less than 10% of Total employment. In a third of rural areas its share is less than 5% (around the EU-25 average). However, in some rural areas – particularly in the East and South of the EU – its share is above 25%. Moreover, agricultural productivity is far lower in most predominantly rural areas[166].

The integration of the agricultural sector of the New Member States into the CAP has taken place in a generally smooth and positive manner, particular as regards incomes. But successful agricultural adjustment, as in other parts of the EU, will be key to improving the competitiveness and environmental sustainability of the agricultural sector and boosting jobs and growth in related areas of the economy. At present less than 10% of farm holders in EU-25 are younger than 35 and more than 24% are over 65 years old. Over the period 2000–2005, EU-25 agriculture has shed labor mainly in the prime-age group (25–54), followed by younger workers (15–24) and only then by older workers (55–64). The decreasing number of young people in the agricultural sector in can create specific difficulties for generational renewal. Farmers' training levels are highly variable between Member States. Many farmers do not have the skills necessary to take advantage of the potential of the new environment for innovation, provision of environmental services, diversification, and development of local services and bioenergy production. The Agricultural Council has highlighted the need to promote research and development, vocational training, advisory services and innovation, and human capital[167].

[163] The group included all persons aged 15 and over, contributing to individual holdings and persons employed in holdings periodically and those having an employment contract.

[164] Work input expressed in AWU (Annual Work Unit).

[165] Rural Development Programme for 2007-2013 [2007]: Ministry of Agriculture and Rural Development: 22.

[166] Rural Development in the European Union [2006]: Statistical and Economic Information – Report, http://ec.europa.eu/agriculture/rurdev/index_fr.htm.

[167] Informal Agricultural Council [2006]: Krems.

12.6. The Impact of Common Agriculture Programme Reform and Rural Development Policies

The main determinants of labor adjustment in the farm sector are technological change, returns on capital and the relative remuneration of agricultural Labor compared to other sectors. Through successive reforms of the Common Agricultural Policy over the past twenty years, labor outflows from the agricultural sector have been broadly constant at around 2-3% per year. The introduction of direct aids as compensation for price support reductions over this period ensured that this restructuring process has taken place in a socially acceptable manner. Without Direct aids many rural areas of Europe would have faced major economic, social and environmental problems. Rural development has played an important role in preventing depopulation and land abandonment in many rural areas[168].

Evidence suggests that adjustments that took place in the agricultural sector and their impact upon employment have in part been absorbed through the creation of new employment opportunities on the farm or the combination of part time farm employment with off-farm employment. Rural development measures have been instrumental in accompanying and supporting this process, leading to the creation or the maintenance of a significant number of jobs.

Evaluations suggest that on-farm investment, training, forestry measures, and measures promoting the adaptation and development of rural areas are generally considered to have had been effective in creating employment. On-farm investment contributed on the whole to securing employment through improved productivity while economic diversification measures contributed more to new employment creation.

Although few quantitative estimates are available at EU level, it has been suggested that in the course of the LEADER II initiative up to 100 000 jobs were created or maintained in Europe's rural areas (in social and health care services, landscape preservation and cultural heritage). Half of the jobs concerned women[169]. Rural diversification measures helped to safeguard many agricultural jobs and at the same time temporary jobs were created in environmental and village renewal activities.

12.7. The Challenges Facing Rural Areas in European Union

Europe's rural areas are diverse and include many leading regions. However, some rural areas, and in particular those which are most remote, depopulated or dependent on agriculture face particular challenges as regards growth, jobs and sustainability in the coming years. These include:

– lower levels of income,
– an unfavorable demographic situation,
– lower employment rates and higher unemployment rates,
– a slower development of the tertiary sector,
– weaknesses in skills and human capital,
– a lack of opportunities for women and young people,
– a lack of necessary skills in parts of the agricultural sector and food processing industry.

Furthermore, the continued restructuring and modernization of Europe's agriculture will place a heavy burden on many rural areas. On the basis of current trends it is to be expected that

[168] Communication from the Commission to the Council and the European Parliament [2006]: Employment in rural areas: closing the jobs gap (SEC/1772)

[169] Common Agriculture Policy reform [2008]: Office of the Committee for European Integration: 32.

in EU-15 some 2 million workers on a full time basis will leave the sector by 2014. In addition, 1-2 million full-time workers may potentially leave the sector within the ten New Member States, and 1-2 million workers in Bulgaria and Romania[170]. To this must be added around 5 million hidden unemployed persons on farms. These changes will touch most rural areas. In significantly rural areas, the challenge will be to avoid the risk of exclusion associated with lack of skills and low incomes. In remote areas with higher levels of agricultural employment, the management of the restructuring process will play a significant role in the broader rural economy.

But rural areas offer real opportunities in terms of their potential for growth in new sectors, the provision of rural amenities and tourism, their attractiveness as a place to live and work, and their role as a reservoir of natural resources and highly valued landscapes. Europe's agriculture offers many high quality products. The agricultural and food sectors must seize the opportunities offered by new approaches, technologies and innovation to meet evolving market demand both in Europe and globally. This will require the development of new skills, entrepreneurship and the capacity to adapt to delivering new types of service[171].

In short, Europe's rural areas must exploit their potential or risk falling further behind urban areas in meeting the Lisbon targets, particularly in the remotest and most agricultural areas.

12.8. The Main Conclusion- Closing the Jobs Gap

There are significant challenges for employment in rural areas in Europe. At the same time there are a broad range of instruments at European and national level that can be used to close the jobs divide between rural and urban areas. Multi-sectoral, area-based approaches based on a partnership approach going beyond agriculture, the agri-food industry and farm tourism should be encouraged. In particular, rural development measures should be fully exploited for employment and growth.

In the light of these future challenges, an integrated approach of Community and Member State policies combined with a strong focus on human capital and skills will be key elements in exploiting the opportunities for growth and employment that exist in rural areas. The European Commission therefore recommends that:

– the process of CAP reform, with increased market orientation and income stabilization through direct aids, should be maintained and consolidated;
– Member States should use existing opportunities to encourage and support the cultivation of energy crops and the development of renewable energy enterprises, which can help stabilize employment in rural areas and greatly contribute to promote sustainable development;
– given the special challenges confronting many of their rural areas, the integration of the new Member States and the restructuring of their agriculture will remain a priority over the coming years;
– in line with the Community Strategic Guidelines for rural development, Member States should use their rural development programmes to deliver the priorities of knowledge transfer, modernization, innovation and quality in the food chain, investment in human capital and the overarching priority of the creation of employment opportunities and conditions for growth;
– as rural development can only play a part in closing the jobs gap, the full range of Com-

[170] Study on Employment in Rural Areas (SERA): 84.
[171] Study on Employment in Rural Areas (SERA): 86.

munity instruments should be used to promote and growth employment in rural areas. Member States should ensure that the synergy between structural, employment and rural development policies is maximized[172].

Examples of job creation under the European Agricultural Fund for Rural Development[173]:

– tourism, crafts and the provision of rural amenities are growth sectors in many regions and offer opportunities both for on-farm diversification outside agriculture and the development of microbusinesses in the broader rural economy;
– local initiatives to develop childcare facilities can facilitate access to the labor market. This can include the development of childcare infrastructure, potentially in combination with initiatives to encourage the creation of small businesses related to rural activities and local services;
– integrated initiatives combining diversification, business creation, investment in cultural heritage, infrastructure for local services and renovation can contribute to improving both economic prospects and quality of life;
– developing micro-business and crafts, which can build on traditional skills or introduce New competencies;
– training young people in skills needed for the diversification of the local economy
– encouraging the take-up and diffusion of ICT developing the provision and innovative use of renewable energy sources;
– small-scale local infrastructure, supported within rural development programmes, can play a vital role in connecting major structural fund investments to local strategies for the diversification and development of agricultural and food-sector potential.

Examples of support from the European Regional Development Fund and European Social Fund for the diversification of rural areas[174]:

– the provision of a minimum level of access to services of general economic interest;
– support for an integrated approach to tourism;
– encouragement for process and product innovation in existing economic activities;
– investment in development poles in rural areas and by developing economic clusters based on local assets.
– actions in these fields of human development should be implemented in full compliance with the objectives of the European Employment Strategy, as set out in the Integrated Guidelines for Growth and Jobs. All Member States should promote the anticipation of change within the agricultural sector in the context of restructuring, and develop a proactive approach to training and retraining of farmers, particularly as regards transferable skills.

The European Commission will reinforce the use of statistical instruments in assessing the employment effects of rural development policies in the context of the Common Monitoring and Evaluation Framework for Rural Development.

[172] Key actions identified under Council Decision [2006]:/144/EC of 20 February 2006 on Community strategic guidelines for rural development (programming period [2007 to 2013]: Section 3.6.
[173] Key actions identified under Council Decision [2006]::/144/EC of 20 February 2006 on Community strategic guidelines for rural development (programming period [2007 to 2013]: (OJ L 55, 25.2.2006): 20.
[174] Council Decision [2006]: /702/EC of 6 October 2006 on Community strategic guidelines on cohesion (OJ L 291, 21.10.2006: 11) Annex, Section 2.2.

Rural Development Programme for 2007-2013 - opportunity for a new jobs in Poland

Improvement of the quality of life in rural areas is an objective that is connected both with basic economic and social development trends of agricultural holdings by means of strengthening the economic potential, restructuring and modernization, as well as with good living conditions in terms of quality of environment and landscape, and with social and technical infrastructure.

Encouraging economic activity in rural areas will indirectly influence also the possibility to concentrate agricultural production and the transfer of population involved in agriculture to other sectors of economy, which in turn will help to provide conditions favorable for transformations within agricultural sector, including in particular the reduction of hidden unemployment, enlargement of farm size, modernization of farms, improvement of competitiveness and market orientation of production[175].

The first group of measures concerns diversification of economic activities. In Poland, such measures provide a great chance for rural population, mostly due to large human resource base and high level of unemployment. The most important tasks include an increase in the added value of products e.g. by conditioning, stimulation of the market in local and regional products, tourism, trade, advisory and other services. In this context the priority is to ensure the employment and income through development of non-agricultural activities. The low income resulting from insufficient use of labor resources of rural families is a key social and economic problem[176].

Agriculture will absorb increasingly less labor resources while the strategic vision assumes that the rural areas will maintain the active character. Therefore, rural labor resources should be increasingly employed in non-agricultural activities. In view of the above, it is especially important to provide a wide support for the process of creating non-agricultural jobs in rural areas and for facilitating the employment or rural population in local towns.

It is the towns that have to play a particular role in the process of rural development as they are the places where rural population may find jobs and increase their levels of education and skills, as well as satisfy their health needs and cultural aspirations. It is therefore especially important to support the development of those functions of small towns and selected gminas, directly connected with restructuring processes in rural areas, including in particular health services, secondary level education, development of small enterprises in non-agricultural sectors, tourism and Spa functions.

The second group includes the instruments aimed at improving the quality of life. They concern rural renewal, and improvement of cultural and natural heritage. They take fully into account important social and cultural functions which will undoubtedly contribute to improvement of the quality of life and may be an additional factor, governing structural transformations and counteracting depopulation, a factor that may create even stronger feeling of identification of rural population with their region, with all its traditions and values[177].

Examples of support from Rural Development Programme for 2007-2013. Aid is granted to entities starting or developing activity related to[178]:

[175] Rural Development Programme for 2007-2013 [2007]: Ministry of Agriculture and Rural Development: 157.
[176] Ibid.: 158.
[177] Ibid.: 158.
[178] Rural Development Programme for 2007-2013 [2007]: Ministry of Agriculture and Rural Development: 263.

1) services for agricultural holdings or forestry;
2) services for the population;
3) wholesale and retail;
4) craft and handicraft;
5) construction and installation works and services;
6) services for tourists and connected with sports and leisure;
7) transport services;
8) public utility services;
9) processing of agricultural products and edible forest products;
10) warehousing and storage of products;
11) production of the energy products from biomass;
12) accounting, consulting or IT services.

Form and amount of aid in Diversification into non-agricultural activities[179]

The aid has the form of reimbursement of the part of eligible costs of the project. Maximum amount of aid granted to a single beneficiary in an agricultural holding within the period of implementation of the Programme cannot exceed PLN 100 thousand (EUR 25,616.1). The EUR equivalent is of indicative nature.
Form and amount of aid Establishment and development of micro-enterprises[180]

Aid has the form of reimbursement of part of eligible costs. The amount of aid granted for the operation implementation cannot exceed:
1) PLN 100,000 (EUR 25,616.1) – if the business plan provides for the establishment of 1 to 2 jobs (expressed in full-time annual average employment), which is justified by the material scope of the operation;
2) PLN 200,000 (EUR 51,232.1) – if the business plan provides for the establishment of more than 2 and less than 5 jobs (expressed in full-time annual average employment), which is justified by the material scope of the operation;
3) PLN 300,000 (EUR 76,848.2) – if the business plan provides for the establishment of at least 5 jobs (expressed in full-time annual average employment), which is justified by the material scope of the operation.
Maximum amount of aid granted to a single beneficiary cannot exceed PLN 300,000 (EUR 76,848.2) within the Programme implementation period. In the case of agricultural products (included in the Annex 1 of the EC Treaty) and edible forest products processing, the maximum amount of aid granted to a single beneficiary cannot exceed PLN 100,000 (EUR 25,616.1) during the Programme implementation period.

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[179] Ibid.: 264.
[180] Ibid.: 270.

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13

THE EFFICIENCY OF EUROPEAN UNION FUNDING BASED ON THE EXAMPLE OF FARMS FROM KURPIOWSKI REGION

Mariusz Brzeziński, Piotr Jesiotr, Ireneusz Żuchowski

13.1. Common Agricultural Policy and EU Programmes

Poland has been a member of the European Union since 2004. This membership enables it to take part in different support programs directed to rural areas. It has been generally assumed that the main purpose is to decrease developmental differences between the EU regions. Polish farmers could take part in these support programs (SAPARD) just before the accession, thus after the accession the Common Agricultural Policy (CAP) covers Polish farmers. As a result, the opportunities to gain financial means increased. In the years 2004-2006 farmers had been using the financial means within the Common Agricultural Policy and Structural Policy (programs: Sectoral Operational Programme and Rural Development Programme). In the years 2007 – 2013 Polish agriculture and rural areas had significantly greater financial support within European Agricultural Fund for Rural Development (EAFRD) which was established under Council Regulation law 1290/2005 on the financing of Common Agricultural Policy.

Since the day of the establishment the basic purpose of the Common Agricultural Policy is to protect income of one of the weakest groups of population - farmers. It has been reformed in different ways in order to adapt it to the changes which takes place in Europe and in the world. Some countries themselves introduced rural and environmental activities[181]. Both beneficial and non beneficial changes have appeared after the Common Agricultural Policy (CAP) was introduced. As for the beneficial changes, they are the following: an increase in farmers' income, an increase in work and production efficiency, availability of food in the EU. The non beneficial effect are a significant financial burden of the EU budget, an increase in the differences of income between different regions, an increase in production price, appearance of a surplus in agricultural production[182], negative impact of agricultural production on the environment[183].

From year to year Polish farmers are more willing to gain the European funds. This situation leads to the necessity to raise the question concerning the purpose of the funds, the ways of using them and the efficiency of their allocation to farms.

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[181] B. Lubińska-Kasprzak [2005]: Prośrodowiskowe instrumenty Wspólnej Polityki Rolnej Unii Europejskiej. Ekologia i Technika Vol. XIII, No 5: 205 - 208.

[182] E. Szot [2003]: Unia Europejska i jej polityka rolna. Polskie rolnictwo w Unii Europejskiej. Fundacja Fundusz Współpracy, Warszawa: 11.

[183] Fundacja Batorego. Rolnicy. Na czym polega Wspólna Polityka Rolna. Fundacja im. Stefana Batorego. Fundacja Wspomagania Wsi: 1 – 2.

The purpose of the research was to answer these questions and to define the efficiency of EU funding use based on the example of farms from Kurpiowski Region.

13.2. The Profile of the Researched Area–Kurpiowski Region

The Green Dense Forest has been formed by Nowogrodzki, Szkwański, Ostrołęcki, Myszyniecki i Różański dense forests. They were pine and spruce forests and they were connected with the forests situated on the banks of the river Bug from Pułtusk to the towns Różan, Ostrowia, Wyszków and Brok. These forests are called White Dense Forest.

The river Narew flows through Green Dense Forest and Pisa, Szkwa, Rozoga, Omulew, Orzyc are its tributaries. The dense forest is located around the following towns: Kolno, Myszyniec, Kadziło, Łyse, Chorzele, Przasnysz, Ostrołęka, Nowogród[184].

Both dense forests were inhabited by the people called Puszczaki. They used to wear shoes made of lime bats, so called Kurpsie, which gave the name to Kurp. The people used to be peasants who ran away from feudal service. Mazowiecka nobility and the inhabitants of towns also lived there[185].

The landscape of Kurpie is picturesque, but sandy earth is mixed with swamps, bog peats as well as a number of forests which enabled to develop agriculture there. As a result, the basic source of a living was a dense forest. The people used to go fishing, hunting, bee-keeping, producing amber jewellery, weaving and working with wood. They also used to be pitch burners and raftsmen.

Kurpie people had always had the feeling of their separation for a long time. They demonstrated it in different ways, for instance, in the way of building and decorating houses, separate clothes and fabric, separate folk art and rituals. Up to now you can meet a lot of folk artists who are continuing the Kurpie traditions in many aspects of life in this area. The examples of folk art can be seen in craft and art; the dialect and music in folk music and dance. The rich Kurpiowski culture is developing in Ostrołęka, Kadzidło, Myszyniec, Czarnia and Łyse[186].

At the end of the XIXth century the localization of military garrison and the building of railway lines had a great impact on an economic boom in Ostrołęka and its surroundings. Saw mills and amber workshops appeared[187].

When in the 1950s the deficiency of paper products deepened in Poland, the Paper Cellulose Factory and Energy Power Plant were built in Ostrołęka to meet the needs of the town and

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184 A. Chętnik [1924]: Kurpie. Polska, ziemia i człowiek. Geographical Library „Orbis". Series III, vol 4. Nakładem Księgarni Geograficznej "Orbis", Kraków – Dębniki.
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185 A. Stawarz [1996]: Kultura ludowa Mazowsza i Podlasia, Studia i materiały. Vol. 1. Polskie Towarzystwo Ludoznawcze, Ludowe Towarzystwo Naukowo – Kulturalne, Warszawa.
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186 A. Chętnik [1924]: Kurpie. Polska, ziemia i człowiek. Biblioteczka geograficzna „Orbis". Series III, Vol.4. Nakładem Księgarni Geograficznej „Orbis", Kraków – Dębniki.
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B.A. Węgiełek [1998]: Kurpiowska Puszcza Zielona. W obiektywie Gabora Lörinczego. [Ed.] W. Mierzejewski. Agencja Fotograficzno – Wydawnicza "WIT", Olsztyn.

187 A. Dobroński [2004]: Narew (środkowa) w życiu społeczności lokalnej na przełomie XIX i XX wieku. Narew w dziejach i współczesności Mazowsza i Podlasia. Łomża.

the whole north-eastern region of Poland in electrical and thermal energy. In the succeeding years the Power Station ‘’B”, meat factories, powdered milk factories, OWT Board Plant, State Fruit Farm, Brick Plant appeared. Almost 5 000 people, so called population with two occupations (a peasant/ a worker) who had additional income apart from agriculture, from Ostrołęka and Kurpiowki Region, were employed there[188].

The next plant, which appeared in the region in 1992, is JBB Meat Plant in Łysy. At first the company employed only 16 people, but in several years the plant entered new markets and increased employment. In the year 2000 the plant produced 100 tons of meat products per day and the revenues reached 100 mln PLN per year. JBB Meat Plant has been extended and the production has been adapted to European standards. The number of employees has been constantly increasing, giving the job to the people from Kurpiowski Region.

Kurpiowski Region did not possess and does not possess any mineral raw materials which can contribute to economic development of the area, but at the same time natural environment and human potential are great advantages of this region[189].

The route to the Mazury Lake District goes through Kurpiowski Dense Forest. Local population has an opportunity to start agritourism farms which can be popular due to diversity and cleanliness of the environment (large areas of forests, a lot of rivers and steams, dunes, bog peats and swaps), fauna and a rich culture of the region. One can try regional cuisine -traditional and organic - on agritourism farms. The owners offer self-made milk products, honey, organic vegetables.

Agriculture is an essential element of the life for the vast majority of people here (about 71%). Agricultural areas and grasslands account for 60% of the region area. Mazowiecki Voivodship has the biggest stock cattle and the largest milk production. Ostrołęka Dairy Plant, ‘’Kurpie’’ Dairy Plant, ‘’Hochland” Dairy Plant in Baranowo, Danone Dairy Plant in Ostrovia, Piątnica Dairy Plant, Mrągowo Dairy Plant, Polindus Gąsewo or milk production plants in the region[190].

The research has been conducted in the period from 1st April to 30th May 2010 in Kurpiowski Region. The method of a structural direct interview has been applied. A questionnaire survey was the research instrument. It consists of 22 questions.

The following detailed research purposes were formulated:

- identification of the programs used by farmers most often,
- identification of the advantages resulted from the EU funds support defined by farmers,
- recognition of the purposes to gain the EU funds within individual programs.

The sample consisted from 250 farms from Kurpiowski Region which have been researched. The selection of the test was made with the method of purpose selection. The criterion of a geographical location of a farm has been applied (all the farms are located in Kurpiowski Region).

188 J. Kijowski [2002]: Dzieje Ostrołęki 1944 – 2000. Ostrołęka.

189 J. Kijowski, B. Kielak [2010]: Atuty Regionu Kurpiowskiego. Innowacyjność a kultura w gospodarce opartej na wiedzy. [Ed.] K.K. Parszewski, I. Żuchowski. Wyd. WSES w Ostrołęce, Ostrołęka.

190 I. Żuchowski, W. Żebrowska [2010]: Konsument w regionie bogatym w tradycję i kulturę [In:] K.K. Parszewski, I. Żuchowski [Ed.] Innowacyjność a kultura w gospodarce opartej na wiedzy Wyd. WSES w Ostrołęce, Ostrołęka, Ostrołęckie Towarzystwo Naukowe im. Adama Chętnika w Ostrołęce.

13.3. Respondents Profile

During the survey 250 farms have been researched. The farms differed in size, the type of production, animal breeding trend and the size of financial means within different programs use.

The sample was represented by 51 women (20.4%) and 199 men (79.6%) who have been interviewed. As for the age, the age groups from 30 to 39 years old and from 40 to 49 years old were the biggest ones (Fig. 1). These groups account for respectively 34.8% and 33.6%. There were 41 people in the age group under 29 years old (16.4 %). There were 35 people (14%) in the next age group from 50 to 59. The age group 60 years old and older was the smallest one. There were only 3 people in it (1.2%).

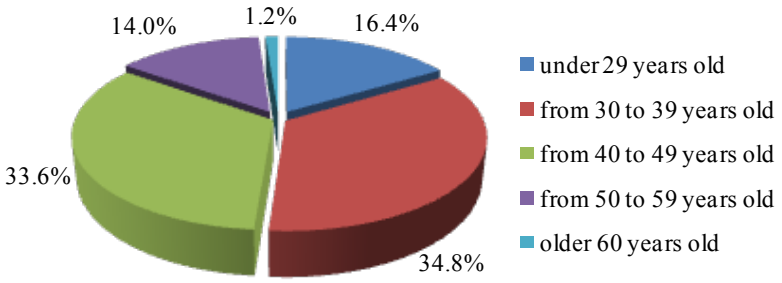

Fig. 1. The age of respondents

Source: own study.

Education of respondents was taken into account. There were four categories. Only 29 people had university degree – (11.6%) and basic education – 44 people (17.6%). These were the smallest groups. Respectively 85 and 92 people had technical education and education at secondary school level (Fig. 2).

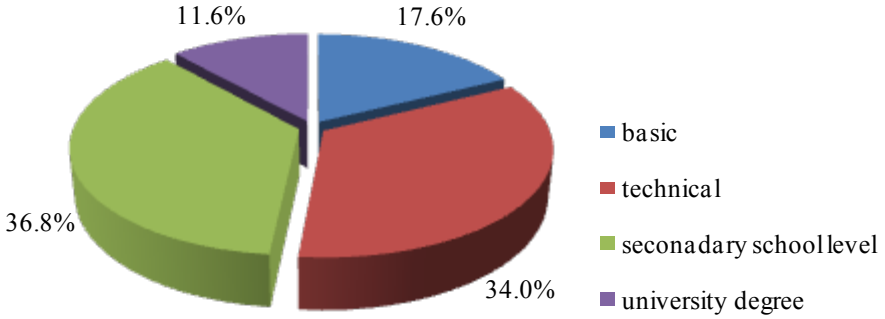

Fig. 2. Education of respondents

Source: own study.

As for the area, the farms have been divided into six groups: from 1 to 5 ha, from 5,01 to 10 ha, from 10,1 to 30 ha, from 30,01 to 50 ha, from 50,01 to 100 ha and more than 100 ha. The most farms were in the third group. There were 106 farms in it (42.4%). The fourth group was on the second place (20.4%) and 51 farms. The second and the fifth groups were on the same level respectively 12.8% (32 farms) and 14% (35 farms). The shares of the rest of the groups (the first and the sixth) are the same and account for 5.2% (Fig. 3).

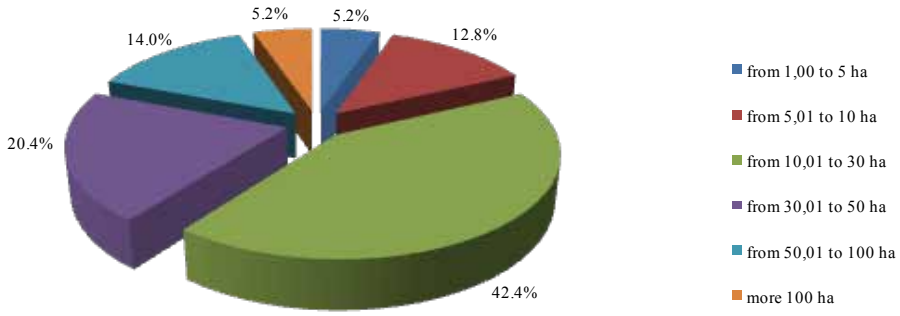

Fig. 3. Farm area

Source: own study.

Figure 4 shows the prevailing production level trend on the researched farms.

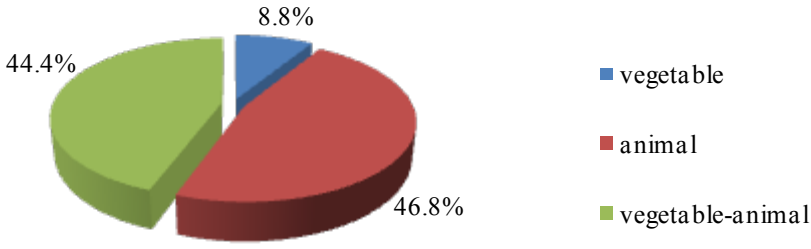

Fig. 4. The prevailing production in the researched farms

Source: own study.

Nearly 76% of respondents, who bred cattle, had milk cattle (197 farms), 13.5% had beef cattle (35 farms). The part of the farmers (23 people) breeds pigs – 8.9%. And only 5 respondents (1.9%) have other animal production (Fig. 5).

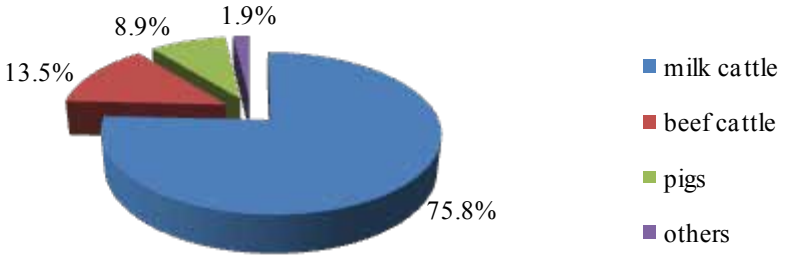

Fig. 5. Animal production trend

Source: own study

13.4. Utilization of Support Programmes by Farmers

The vast majority of the farmers are planning further development of their farms – 201 respondents (80.4%). The rest of them (19.6%) are not planning further development. The respondents were asked to which extend they are planning to develop their farms. Some respondents (32.9%) are planning to increase machine station while 28.3% of them are planning to develop farm area. Every fifth farmer (20.6%) is going to rebuild farm premises or extend them. The increase of herd breeding was declared (Fig. 6).

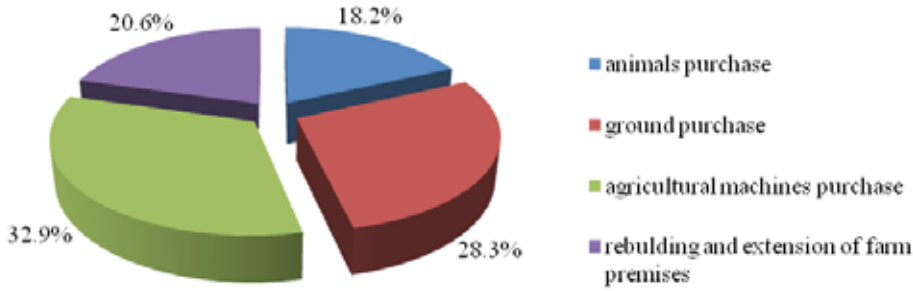

Fig. 6. Declared trend of farm development

Source: own study.

The respondents were asked whether they had heard of the programs to support farmers in Poland. Almost everyone (247 among 250 respondents) had heard of them (98.8%). Only 1.2% (3 people) gave a negative answer (Fig. 7).

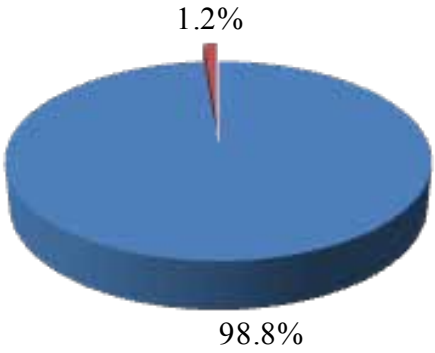

Fig. 7. Familiarity with support programmes

Source: own study.

The farmers get the information about available programs from different sources. The biggest group (35.1%) mentioned Agency for Restructuring and Modernisation of Agriculture as the main source of information. Television was mentioned by 28.8% of respondents. Only 15.4% of respondents mentioned the Internet. Acquaintances are a source of information for 17.9% of the farmers. Others (2.8%) get the information from newspapers, agricultural magazines, training courses, and meeting (Fig. 8).

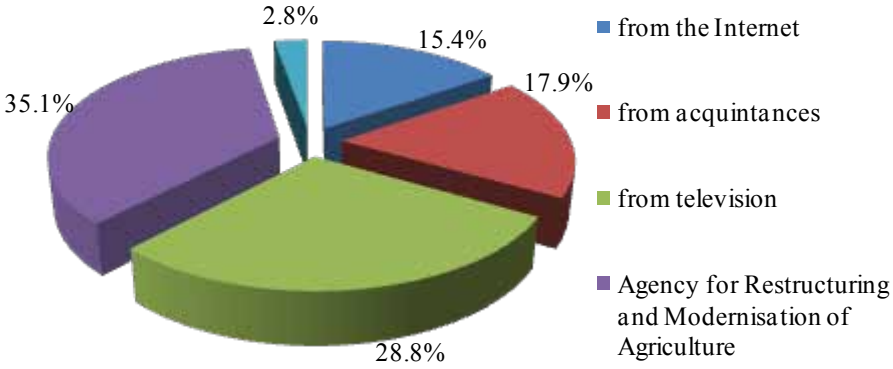

Fig. 8. Sources of information about European programmes mentioned by the farmers
Source: own study.

For more than 10 years farmers have been taking part in some programs. Some farmers have already got the advantages of them. Direct farming subsidies have been the most popular among 58.9% of respondents. The actions activated by the Common Agricultural Policy (CAP) were popular among 21.4% of the farmers while 10.6% of respondents received financial help within Special Accession Program SAPARD before the year 2006. Sectoral Operational Programme was mentioned only by 6.3% of the farmers, structural pension - 2.6% of the farmers and agricltural and agri-environmental programme or starting ecofarms - 0.2% of respondents (Fig. 9).

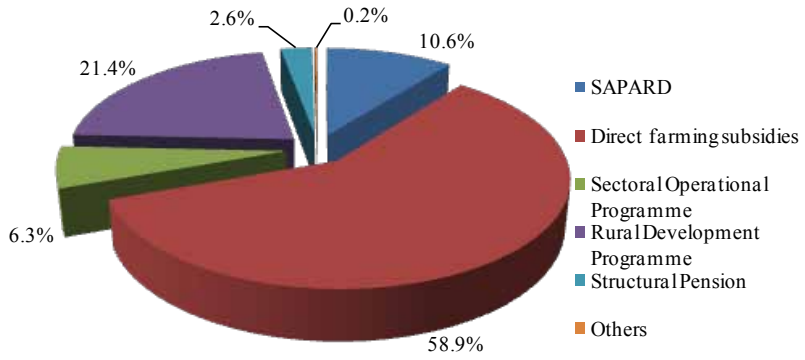

Fig. 9. The EU programmes used by the farmers

Source: own study.

The interest rate of the programs in individual years is presented in the figure 10. Special Accession Programme SAPARD was the most popular in the year 2004 (91.5%) when Poland became a member of the EU. Later in the year 2006 this interest fell down dramatically up to 6.4%, and in the year 2007 up to 2.1%. On the comparative level in the years 2004 – 2006 the interest rate of Sector Operating Program was keeping on the level of 27.3% in the year 2004 and 30.3% and in the years 2005 and 2006. A year later in 2007 fewer farmers used this program (12.1%). The interest rate of Rural Development Programme, which appeared in 2004, was rather low, only 1,03%. But in the succeeding years the farmers were more willing to take part in this program. In the year 2005 (14.4%) of the farmers took part in this program, and a year later this number doubled (35.1%). In the years 2007 and 2008 the interest rate decreased respectively 26.8% and 22.7% of respondents.

Since the year 2006 the interest rate of structural pension had been increasing. It resulted into the resignation from farming and passing farms to descendants or the third person. In the year 2006 only 10.0% of respondents received structural pension. In the succeeding years 2007 and 2008 it rose three times (30.0%) and six times (60.0%) more in comparison to the year 2006 (Fig. 10).

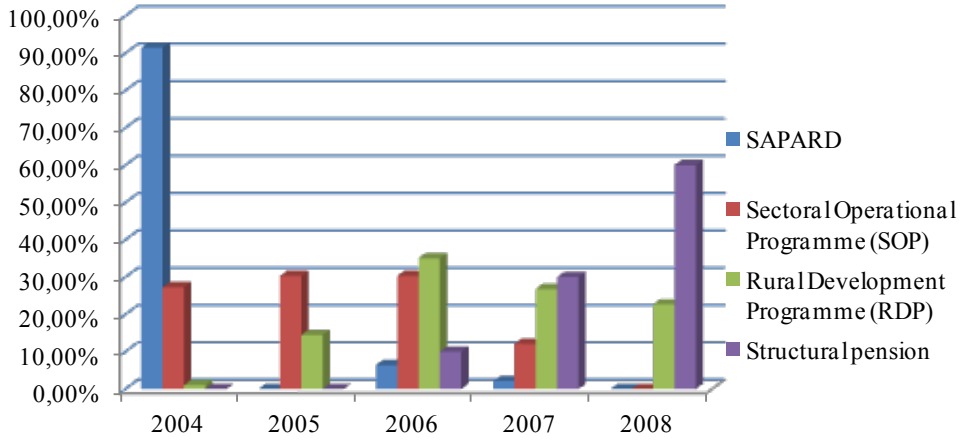

Fig. 10. The farmers' interest rate of the programmes in the years 2004 – 2008

Source: own study.

Figure 11 shows within which programme and in which year the farmers allocated the received financial support in farms investment. In the year 2004 the vast majority of respondents (81.6%) allocated money for farms investment within Special Accession Programme SAPARD. In the succeeding years the interest rate of Rural Development Programme had been increasing (2005 year – 56.5%, 2006 year – 72.9%, 2007 year– 84.4%, 2008 year – 95.5%) while the interest rate of Sectoral Operational Programme had been decreasing (2005 year – 43.5%, 2006 year – 22.9%, 2007 year– 12.5%, 2008 year – 4.6%).

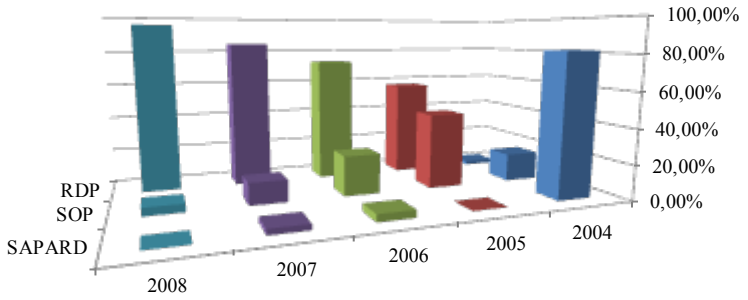

Fig. 11. The use of financial means from the EU programmes by the farmers in the years 2004 – 2008

Source: own study.

The respondents allocated the financial help within SAPARD programme for machinery purchase in 2004 (75.0%). The part of the farmers invested in farm modernization (17.5%), cereals combine purchase (5.0%) as well as ground purchase (2.5%). In the years 2006 – 2007 the farmers allocated the financial means exclusively for an increase of machinery (Fig. 12).

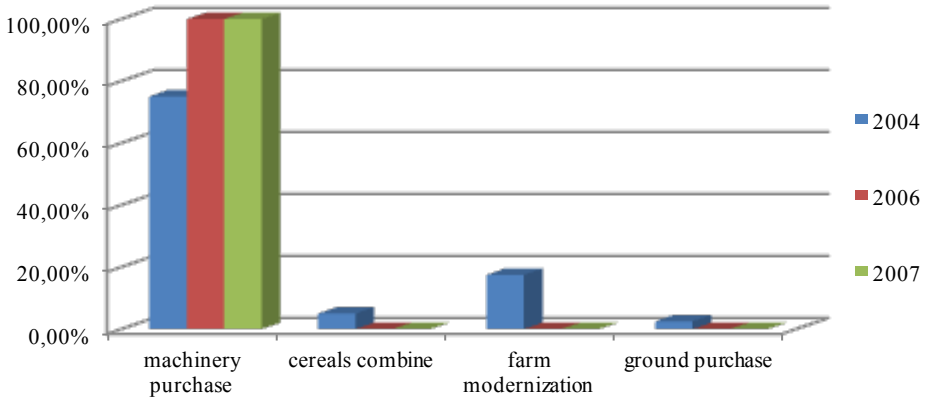

Fig. 12. Allocation of the financial means within SAPARD Programme

Source: own study.

The farmers purchased ground, modernized farms and purchased agricultural machinery from the financial means within Sectoral Operational Programme. Machinery purchase was very popular like in the case of SAPARD Program.
In the year 2004 – 87.5% of the farmers purchased machinery for their farms, 12.5% of them increased ground acreage. None of them allocated the means for modernization. However, in 2005 - 30.0% of the farmers allocated the means for this purpose, 10.0% of them purchased ground, and 60.0% of them purchased agricultural machinery. The year 2006 was the same as the year 2005 as for ground purchase (9.1%).The interest of machinery purchase increased from 60.0% in 2004 to 72.3% in 2006 while investment in modernization fell down to 18.2%. In the year 2007 the farmers allocated the means for machinery purchase (50.0%) and ground purchase (50.0%) (Fig. 13).

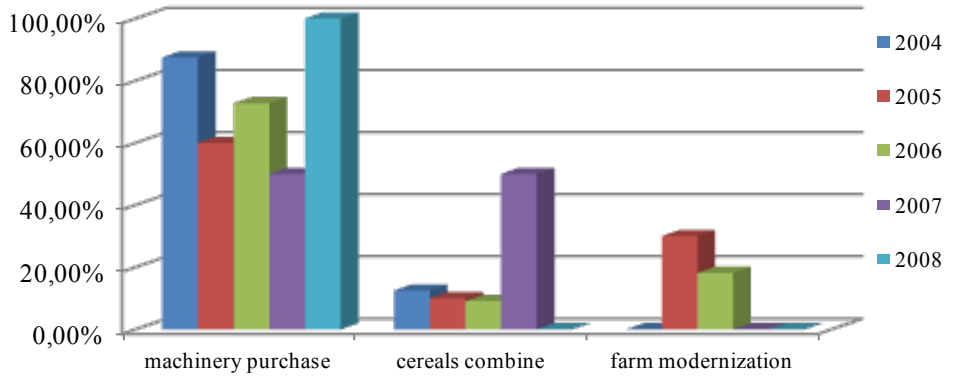

Fig. 13. Allocation of the means within Sectoral Operational Programme
Source: own study.

The farmers purchased only machinery for their farms within Rural Development Programme in the 2004 (100%). In the succeeding 2005 they invested the means in agricultural machines purchase (38.5%) and building manure boards (46.2%) as well as ground purchase (7.7%) and farms modernization (7.7%).

In the year 2006 the farmers allocated the financial means for building manure boards with a container (45.7%), agricultural machines purchase (40.0%), and farm modernization (5.7%). Rabbits purchase, ground purchase and cereals combine purchase were on the same level of 2.9%. The means allocated for manure board and agricultural machines purchase in 2007 were on the same level of 48.2%. Only a few respondents (3.7%) invested in ground increasing their acreage.

In the year 2008 agricultural machines purchase was the most popular (85.7%) while building manure boards with a container (9.5%) and fertilizers purchase (4.8%) were less popular (Fig. 14).

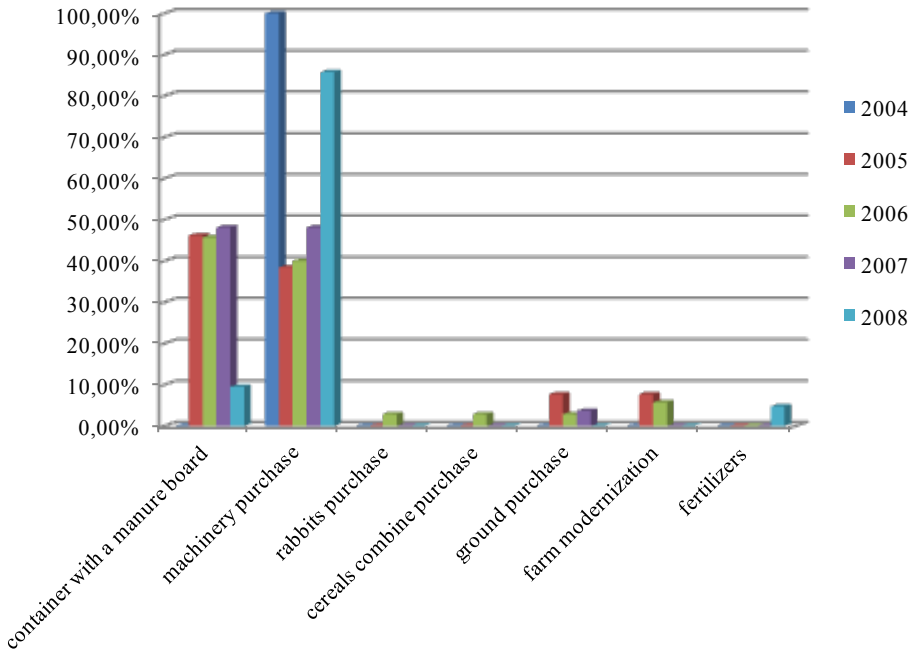

Fig. 14. Allocation of the means within Rural Development Programme

Source: own study.

The farmers were asked about the financial means. The five groups were chosen: under 5 000 PLN, from 6 000 to 10 000 PLN, from 11 000 to 16 000 PLN, from 17 000 to 20 000 PLN and more than 21 000 PLN.

The farmers from the third (24.8%) and the fifth (29.6%) groups received the most financial means (Fig. 15). The results in the second and the fourth groups were almost the same respectively 18.8% and 18.4%. The first group was the smallest one (8.4%).

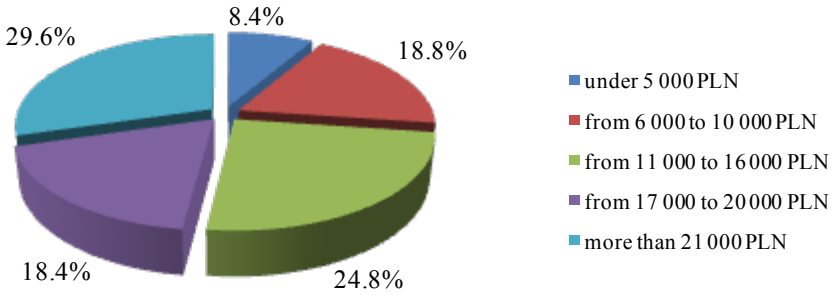

Fig. 15. The size of direct farming subsidies

Source: own study.

In the years 2004 – 2008 direct farming subsidies were invested in farm development and purchase of agricultural machines, ground, farm animals, fertilizers, petrol, manure lift and many others. The farmers invested in rebuilding and updating machinery. A lot of farmers (27) changed a tractor or purchased another one in 2004. In the year 2008 the number of the farmers who purchased tractors was significantly lower in comparison with the year 2004. Only 8 farmers bought a tractor. In the years 2004 – 2008 the following agricultural machines became popular: a meadow soil plough was bought by 11 people (5 farmers in 2004), a wire-wrap tool was bought by 10 farmers (6 people in 2006), and a rotation mower was bought by 16 people (5 farmers in 2005). Other machines were less popular. To sum up, in the years 2004 – 2008, 244 farmers bought agricultural machinery (Table 1).

Table 1. Investment and purchase from direct farming subsidies in the researched farms in the years 2004 – 2008

Type of investment		**2004**	**2005**	**2006**	**2007**	**2008**
	Number of farmers					
Agricultural machines	Bale machine	14	10	8	12	7
	Conveying machine	-	-	-	2	1
	Silage band saw	-	-	-	-	1
	Tractor	27	11	13	18	8
	Spreader	-	2	-	1	3
	Neadow soil plough	5	2	1	1	2
	Rotary cultivator	1	-	1	-	1
	Tractor	1	-	3	2	-
	Cultivation unit	-	-	4	1	2
	Harrows	-	1	1	3	2
	Wire-wrap tool	1	1	6	-	2
	Balot catcher	-	-	-	-	1
	Slurry mixer	-	-	-	-	1
	Sprayer	2	2	2	-	-
	Fertilizer spreader	1	-	1	-	-
	Feed wagon	-	-	1	1	-
	Trailer	1	4	2	-	-
	Drill	1	1	2	-	2
	Combaine	1	-	-	2	-
	Rotation mower	1	5	3	4	3
	Autocollecting trailer	-	2	3	-	-
	Corn silage cutter	1	1	1	1	-
	Press	1	-	-	-	-
	Feed container	-	-	-	-	1
	Watercart	2	2	2	-	-
	Electricity producing aggregate	-	-	-	-	1
	Altogether	60	44	54	48	38

Source: own survey.

The farmers purchased ground in order to increase their acreage. The most farmers bought ground in the years 2004 – 2008 (the area of 2 ha and 1 ha) respectively 27 and 19. The vast majority bought 3ha of ground (6 farmers), 4 ha (8 farmers), 5ha (7 farmers), 10ha (12 farmers) and 20ha (6 farmers). Two farmers bought a lot of ground in 2005 (one of them 50 ha, another 100 ha) (Table 2).

Table 2. Investments in ground and animals (number of farms)

Type of investment		2004	2005	2006	2007	2008
Ground	2 ha	8	10	1	6	2
	100 ha	-	1	-	-	-
	50 ha	-	1	-	-	-
	3 ha	1	1	1	3	-
	3,5 ha	1	2	1	-	-
	8 ha	-	2	-	3	-
	7 ha	-	2	1	1	-
	4 ha	2	1	1	1	3
	30 ha	-	-	-	-	1
	20 ha	3	1	1	1	-
	5 ha	2	2	3	-	-
	10 ha	4	3	2	1	2
	14 ha	1	2	-	-	-
	1,5 ha	-	1	1	-	-
	12 ha	-	1	-	-	-
	6 ha	-	1	-	-	-
	Altogether	**24**	**35**	**18**	**17**	**14**
Animals	Heifer	11	19	11	18	7
	Milk cow	18	10	15	10	12
	Calves	-	1	2	1	-
	Piglets	2	1	-	2	2
	She-swines	1	-	-	-	-
	Beef cattle	-	2	1	1	2
	Horses	1	-	2	2	1
	Rabbits	-	-	-	1	-
	Bulls	-	1	1	-	-
	Goats	1	-	-	-	-
	Altogether	**34**	**34**	**32**	**35**	**24**

Source: own survey.

The farmers invested not only in machines, ground and animals. The vast majority of them invested subsidies in pesticides and animal feed, grass seeds and cow house modernization.

In 2004 – 2008 farmers bought fertilizers four times more than petrol and eight times more than pesticides (Table 3).

Table 3. Other kinds of investments (number of farms)

Type of investment		2004	2005	2006	2007	2008
Others	Fertilizers	89	96	110	108	124
	Grass seeds	3	1	2	1	1
	Cow house modernization	1	2	4	6	6
	Manure lift	-	-	-	1	-
	Milker	-	-	-	1	-
	Installment payment for a cow house	2	-	2	3	4
	Pesticides	12	13	12	13	15
	Petrol	22	18	25	26	28
	Feed	3	4	8	11	8
	Seeds purchase	-	-	1	1	-
	Corn seeds	-	-	2	2	-
	Payment on an account	2	1	1	1	1
	Farms rebuilding	1	2	1	-	1
	Car	-	-	3	1	-
	House redecoration	-	-	-	1	-
	Sheet purchase	1	1	-	-	-
	Manure board	-	-	1	2	-
	Furniture purchase	-	-	2	-	-
	Tractor repair	-	-	-	-	2
	Milk container	-	-	2	1	-
	Means of agricultural production	-	1	-	-	1
	Altogether	**136**	**139**	**176**	**180**	**191**

Source: own study.

The farmers were asked whether direct subsidies resulted in farm income. Most respondents 74.8% answered positively while 25.2% of them had not noticed an increase (Fig. 16).

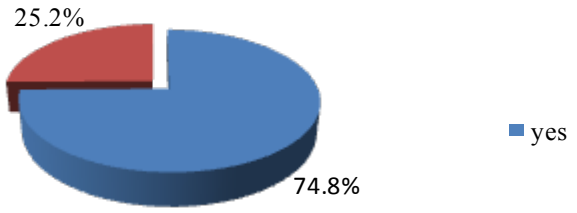

Fig. 16. Farm income after direct subsidies- farmers' declaration

Source: own study.

The next answers concerning the purpose of spending subsides confirmed that the farmers invested in agricultural machinery, equipment, tools (166 farmers what accounts for 55.7%). They also invested in farm modernization, for example, building, rebuilding, premises redecoration (57 respondents what accounts for 19.1%). Almost the same number invested in land development (11.1%) and house modernization (10.4%). Only 3.7% of respondents bought hardware and software which enabled them to start non agricultural business (Fig. 17).

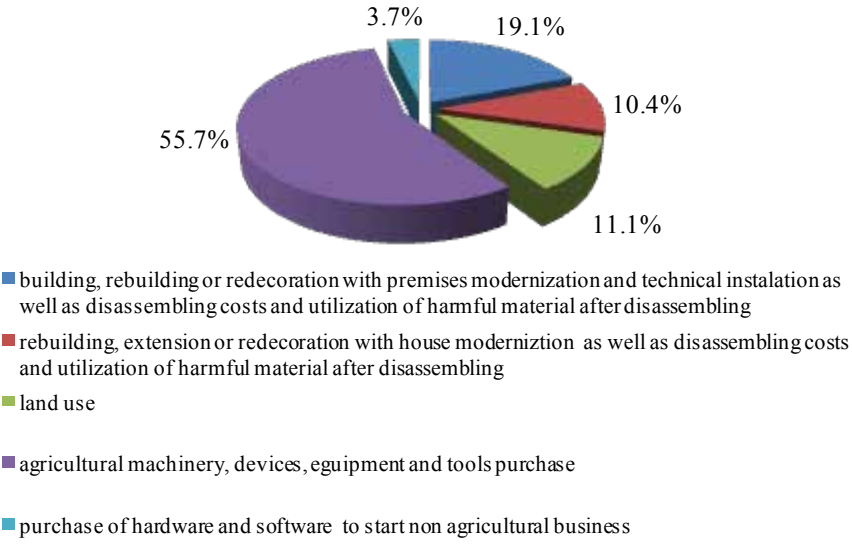

Fig. 17. Respondents' opinions about kinds of investments of subsidies
Source: own study.

Farm investment concerns farm development and life improvement. The respondents were asked whether the investment had changed anything on the farm. Half of respondents (50.5%) succeeded in adapting farms to the standards. Almost 29.4% of respondents had an increase in benefits which enabled them to pay loans and current bills (0.9%). About 20% of respondents claimed that they had not noticed any changes after the investment (Fig. 18).

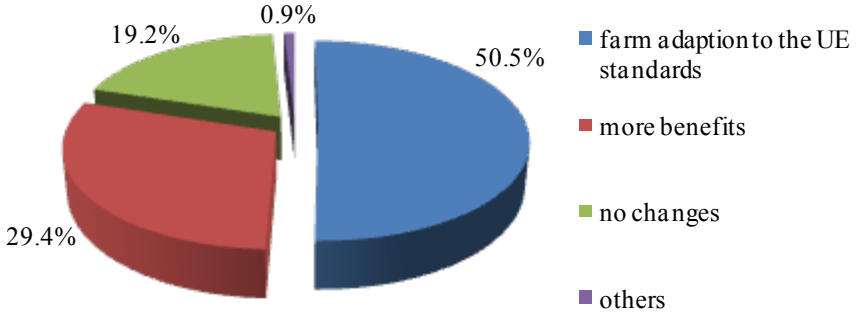

Fig. 18. The effects of the farmers' investment after the year 2004
Source: own study.

In the years 2010 – 2013 some respondents are planning to spend the EU subsidies. They are going to invest the money. Most respondents (38.4%) are going to invest direct farming subsidies while 32.4% of them - RDP. Only a few farmers are going to invest the financial means from structural pension (Fig. 19).

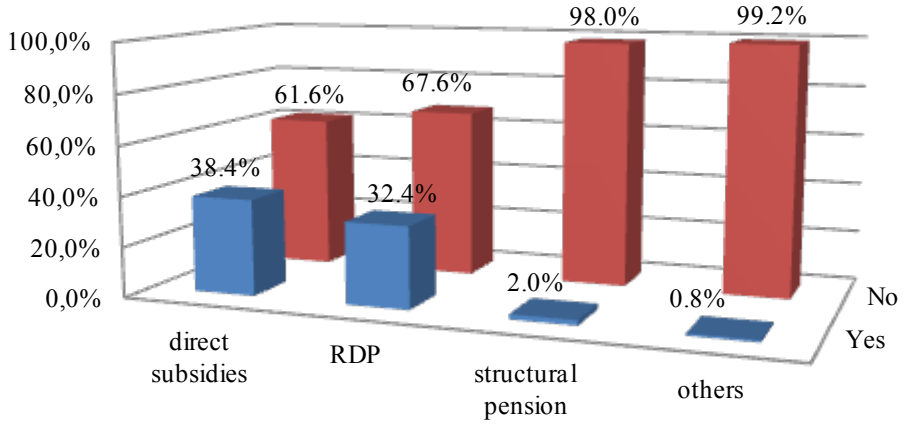

Fig. 19. The percentage of the farmers who are going to invest the EU subsidies in the years 2010 – 2013

Source: own study.

One of the questions of the survey concerned the effects of the investment of financial means from the EU funds after the year 2004. More than a half of farmers (52.4%) declared that they had an animal increase. 1/3 of the farms had a plant production increase (30.8%). The same level has been noticed in income increase (Fig. 20).

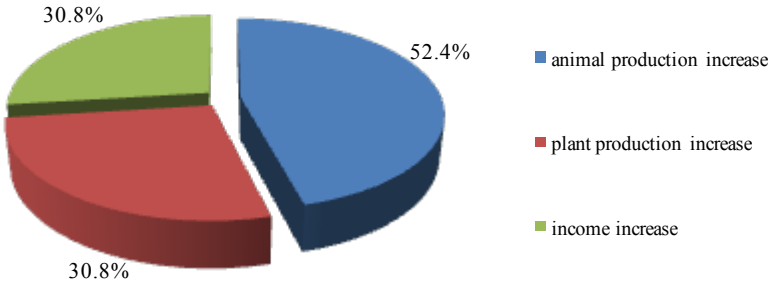

Fig. 20. The effects of the investment of financial means from the EU funds
Source: own study

The biggest percentage were the farms where animal production increased by 10% (38 farms) what accounts for 15.2% of all respondents. There were also many farms having 20%, 30%, 40% and 50% increase in production accounted for 8.8%, 5.6%, 4.0% and 6.4% of all

the farms. The largest increase in animal production - 100.0% - was observed only in 8 farms. The three farms reported a slight increase in production (5.0%).

As for plant production, we can see that its growth was recorded in a much smaller number of the farms. The highest one was recorded in two farms and the lowest in 12 ones, respectively, 100.0% and 5.0%.

An increase in income on the farms was at various levels. The largest increase (100%) was reached only by two farms, representing 0.8% of the respondents. In the largest group there were the farms which reached 10% (22 farms) and 20.0% (21 farms) increase in income. A significant proportion of farmers pledged revenue growth among 25% to 60% (17 households). The smallest increase of 1% was observed only in one farm (Table 4).

Table 4. Plant and animal production increase and income increase on the farms

Increase %	Animal production increase		Plant production increase		Income increase	
	Number of the farms/%					
	N	%	N	%	N	%
1	-	-	-	-	1	0.4
5	3	1.2	12	4.8	3	1.2
7	-	-	1	0.4	1	0.4
9	1	0.4	1	0.4	2	0.8
10	38	15.2	24	9.6	22	8.8
15	5	2.0	3	1.2	6	2.4
17	1	0.4	1	0.4	1	0.4
20	22	8.8	14	5.6	21	8.4
25	7	2.8	1	0.4	1	0.4
30	14	5.6	9	3.6	8	3.2
40	10	4.0	1	0.4	3	1.2
50	16	6.4	6	2.4	4	1.6
60	2	0.8	1	0.4	1	0.4
70	2	0.8	1	0.4	-	-
80	2	0.8	-	-	1	0.4
100	8	3.2	2	0.8	-	-
200	-	-	-	-	2	0.8
Altogether	**131**	**52.4**	**77**	**30.8**	**77**	**30.8**

Source: own study.

Most of the farms that are planning investments in the years 2010 - 2013 plan to finance them with direct subsidies. Most farms (36), as in the case of the Rural Development Programme (RDP) (48 farms), are going to buy agricultural machinery. Secondly, the modernization of farms is very popular. Moreover, 55 farms are going to modernize their farms, 25 of them will fund it with direct subsidies, and the remaining 30 farms with RDP. In addition to that, 11 farmers are interested in farm expansion and 18 of them are going to buy the land, increasing the acreage of farmland. Only 3 farmers are going to build manure board with a liquid manure tank.

Some farmers (5) want to enlarge the cast of animals reared on the farm; single farms are going to allocate direct subsidies for fertilizers, plant protection, and afforestation. Financing of planned investments in structural pension received is interested only six farmers. In plans the of 2 farms there is an investment in support of subsistence, firstly, the leasing of agricultural land, secondly, heifers purchase heifers (Table 5).

Table 5. Planning investment withing the selected programs in the years 2010 – 2013

Planning investmet	**Direct subsidies**	**RDP**	**Structural pension**	**Others ***
	Number of the farms			
Building of a manure board with a manure container	3	-	-	-
Manure lift	1	-	-	-
Agricultural machines purchase	7	48	-	-
Afforestation	1	-	-	-
Agricultural machines purchase	29	1	1	-
Farm extension	11	-	-	-
Farm modernization	25	30	-	-
Fertilizers	1	-	-	-
Ground purchase	18	2	-	-
Production means	3	-	-	-
Animals purchase	5	3	3	-
Pesticides	1	-	-	-
House redecoration	-	-	1	-
Farm lads leasing	-	-	-	1
Heifers purchase	-	-	-	1

** Support of low-production farms according to the commitment in the years 2004 – 2006 (RDP 2007 – 2013).*
Source: own study.

Respondents were asked whether the fulfillment of requirements connected with obtaining financing for the selected programme was difficult for farmers. More than three-quarters of farmers (77.2% - 193 farmers) claimed that the requirements to be met in order to obtain the grant were difficult for them. Other farmers 22.8% (57 people) stated they had no problems with their fulfillment (Fig. 21).

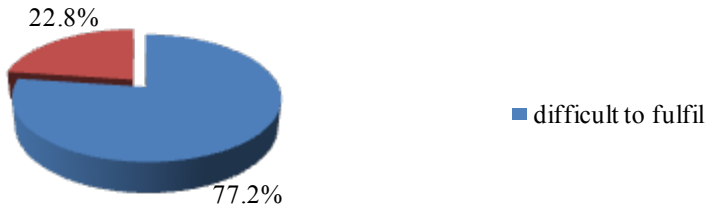

Fig. 21.The farmers' opinion as for the fulfillment of requirements connected with the procedure of gaining financial means from the EU

Source: own study.

Farmers had problems connected with the requirements to adjust their farm, which in turn was associated with the receipt or absence of the grant from the EU the biggest problem. Filling in application forms to gain caused the biggest problem (36.9%) while 27.3% of respondents had problems with adjustment farm premises. Introduction and maintenance of animal welfare was also a problem for 15.2% while improvement of sanitary conditions for 12.6%. Farmers had the least problems with the maintenance of soil culture (6.3%). Another problem that was mentioned by respondents was waiting for funding, often prolonged, which prevented the timely adjustment of farms to EU requirements (Fig. 22).

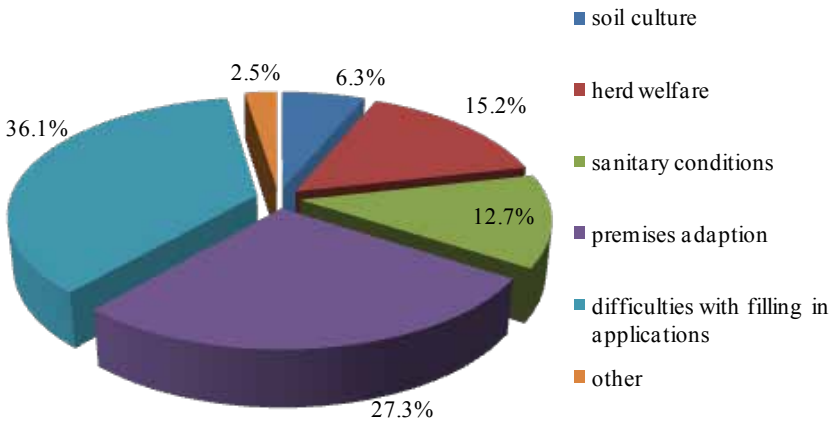

Fig. 22. The requirements with fulfillment causing farmer's problems

Source: own study

Respondents gave an affirmative answer to the question concerning the usage of assistance in completing applications. The help of Centers of the Agricultural Consulting and private companies were the most popular. Less popular was Borough Council and other institutions involved in filling in applications. Most respondents (69.2%) have filled in applications for structural pension with the help of Centre of the Agricultural Consulting. The support from private companies in this field has been used by 23%, and only a small group of the farmers (7.7%) have filled applications by themselves.

As far as SAPARD programme is concerned, 52.2% of the farmers have benefited from Centers of the Agricultural Consulting assistance in completing applications. Slightly fewer farmers benefited from the assistance of private companies (37.0%), and 10.9% in Borough Council.

The proposals under a grant from the RDP, once again the largest number of farmers signed up to the Centre of the Agricultural Consulting (55.2%). Some farmers (34.4%) went to private companies and 4.2% of people filled the application by themselves. Besides the institutions mentioned in the survey, the respondents also benefited from Agency for Restructuring and Modernization of Agriculture assistance (3.1% of the farmers). The same percentage of the farmers was consulted in Borough Council.

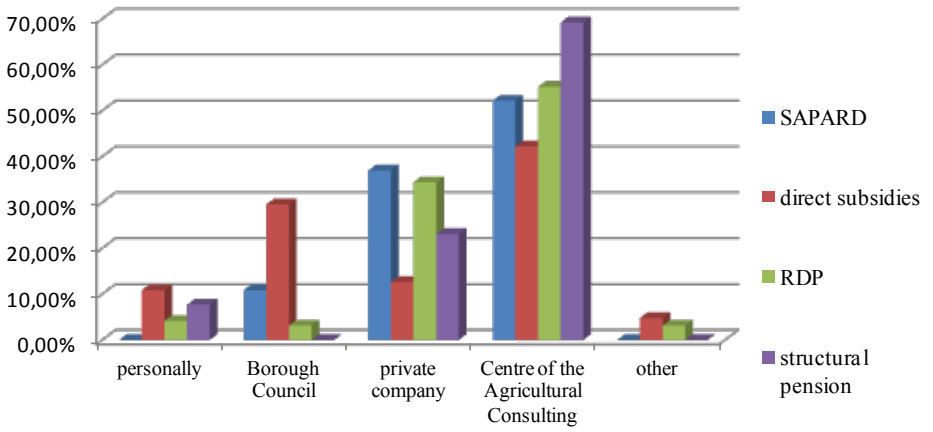

Fig. 23. The institutions which help the farmers in completing applications

Source: own study.

The most applications for direct payments were also filled in Centre of the Agricultural Consulting (42.2%). Many more respondents in comparison with RDP, SAPARD and structural pension, went with their application to the Borough Council (29.6%). At level there were individuals who went to private companies and completed structural pension applications by themselves respectively 12.6% and 10.9% (Fig. 23).

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