eISSN 2029-7092 / eISBN 978-609-476-044-0

Article ID: enviro.2017.199 DOI: https://doi.org/10.3846/enviro.2017.199

Regionalisation of Measures Shaping the Rural Space in Agricultural Producers' Opinions – a Case Study with Mazowieckie Voivodeship as an Example

Katarzyna Kocur-Bera

Department of Geoinformation Analysis and Cadastre, University of Warmia and Mazury in Olsztyn, Poland E-mail: katarzyna.kocur@uwm.edu.pl

Abstract. In recent years, the economic situation in rural areas has changed a lot. Poland's accession to the European Union opened up a lot of possibilities for agricultural farms. Thanks to the implemented Union projects such as the Rural Development Programme 2007–2013 (RDP 2007–2013), the Human Capital Operational Programme 2007–2013 (HCOP 2007–2013), and the Regional Operational Programme for Mazowieckie Voivodeship 2007–2013 (ROP 2007–2013), local authorities may apply for funding aimed at the improvement of life situation of the rural population. The aim of this paper was to provide an answer to the question: how is the influence of the RDP 2007–2013 and other Union programmes for furnishing agricultural activities perceived by owners of agricultural farms? For the analysis, statements of inhabitants of Krasne, Krzynowłoga Mała, Jednorożec and Czernice Borowe communes, obtained by direct interview using a questionnaire were chosen. The respondents unanimously stated that the Union funds obtained under the PROW 2007–2013 provided a lot of benefits. The financial support obtained for the implementation of furnishing of agricultural activities was assigned for the development of rural areas. Farmers obtained new prospects for development and modernisation of farms, which increased their competitiveness in the market. Today, the previously forgotten rural areas are developed, and ready for changes and new activities. Support for the agricultural sector is of fundamental significance to the economy of the entire country, as thanks to these investment projects Poland is competitive in the market, and the revitalised agricultural areas have become an attractive tourist destination.

Key words: regionalisation, rural areas, development, Union projects.

Conference topic: Technologies of Geodesy and Cadastre.

Introduction

Poland's accession to the European Union structures has changed the local community's perception of the development of a space (Kocur-Bera 2016). The greatest effect of the obtained funds on the quality of life and farming in rural areas can be noticed in the regional situation. A region defines a certain space in which relationships occur between social and cultural, geographical, economic, and historical spaces (Gajda 2005). This term should be understood broadly, without focusing entirely on a separate unit of administrative division (Sokołowicz 2008).

A region is closely linked to regional development which is associated with an improvement in the inhabitants' living standard, and with an increase in economic efficiency in a specific area (Wlaźlak 2010). The most important factors of regional development include (Korenik 2011): (1) communication infrastructure, (2) agglomeration factor, (3) improvement in the living standard and landscape values, (4) innovation potential of a region, and (5) human capital. Regionalisation is often referred to as a regional policy and a process of isolation of regions characterised by specified criteria. It is aimed at the elimination of all barriers which hinder cooperation within a region, arranging international organisations with regional significance, and acceptance of agreements (Sługocki 2004). Regionalisation is defined as a method for implementing and organising public tasks. However, it is worth noting that regionalisation does not focus solely on the possibility for dividing the State, as it also concerns the issues related to the management of these elements, granting autonomy to isolated units of the State, and striving for their independence.

Regionalism is a more and more deepening phenomenon, which is contributed to by political and economic integration taking place as a result of the European Union's activities. The range of regionalisation activity does not focus solely on substantial reforms leading to the establishment of a new regional level, but also seeks to adapt the existing system. In some ways, regionalisation may be considered as an antidote to the adverse effects of globalisation. It reflects the States aiming to look for efficient forms of economic activity. The main aim of this measure is to pursue to satisfy, in a rational manner, the needs associated with security, development, the position on the international arena, and sovereignty (Niedziółka 2011).

Having examined other manifestations of regionalisation, it can be seen that it is a planned methodology of a country or an international organisation whose aim is the decentralisation and supporting territorial units which are economically and culturally uniform at the regional level. Therefore, regionalisation is a long-term measure whose

main task is to obtain skills necessary to undertake independent activities by a particular sphere. It is based on emphasising the specificity of the local identity, economic consolidation, and on expanding its potential. These measures may be based on the existing patterns, or may initiate newly established territorial organisations. As regards regionalisation, one may notice the pursuit of strengthening the subjectivity of regions, and of the independent functioning of authorities in the decision making process both at the local and national, European, or international level (Sługocki 2004).

Shaping the space of rural areas is a measure aimed at satisfying human needs, and at the use of land in a manner allowing most benefits to be gained (Zak 2006). This term is also understood as a set of technical, spatial, and organisational procedures taking into account economic, natural, social, and legal aspects. Their main aim is to achieve a reasonable organisation of the agricultural production space. The measures shaping the rural space include an extensive range of works, from land consolidation to the complete scope of measures which must be implemented in the area under study. These works should be carried out in stages, and in the correct order (Wertelecki 1998).

RDP 2007–2013 includes measures involving the planning of agricultural structure of farms, mainly through land consolidations, agricultural drainage, and rural regeneration. The activities carried out under these measures focus on the following: (1) changing the area and shape of parcels, (2) adapting the parcel boundaries to the running roads and utilities, and to anti-erosion treatments, (3) activities supporting the protection of the environment and landscape, (4) the performance of drainage and anti-erosion treatments, (5) rehabilitation of degraded and devastated areas, (6) adjustment of the transport system, (7) restoration of construction structures, and (8) arranging squares and centres of towns.

The main aim of this article is to examine opinions of respondents (farmers living and working in rural areas) in a selected area on the influence of Union funds on the development of agricultural farms and rural areas in the context of an improvement to farming conditions. In order to achieve the set aim, a questionnaire was drawn up which attempted to obtain answers to the following questions: were the directions of support correctly determined? did the implemented measures destroy characteristics of the natural environment? did local governments spend the funds earmarked for measures shaping the rural space optimally? The study enabled the indication of solutions implemented regionally.

Methods and research area

The study was carried out in Poland's rural areas in the years 2014–2015. 200 farmers, inhabitants of four communes of Mazowieckie Voivodeship (Czernice Borowe, Krzynowłoga Mała, Krasne, and Jednorożec), participated in the survey. Farmers living in the area under study play a special role in the domestic cultivation of cereals, vegetables, fruit, potatoes, and in the production of meat and milk. Data of the Central Statistical Office (GUS) reveal that agricultural land covers approx. 93% of the entire area under study. The level of the voivodeship development considerably varies, which is contributed to by social as well as economic situation of agricultural families, overpopulation, and aging of the community living in rural areas (GUS 2010). The area under study is distinguished by a specific agricultural landscape, and quite good conditions for recreational activities. Figure 1 presents the area of the communes under study in the form of a map. The choice of the area under study was determined by a similar nature of agricultural production.



Fig. 1. The area under study Source: own study

The survey questionnaire was comprised of 31 questions concerning, *inter alia*, the life in rural areas in the past and today, the influence of Union funds on rural areas, and an assessment of the effects resulting from the implemented measures shaping the rural space in the communes under study. The questionnaire used a combination of closed and semi-open questions with answers to choose from or spaces to be filled in, as well as open questions allowing complete freedom of expression. The collected data were analysed, and then presented in both the descriptive and graphical form

as charts, tables and photographs. Basic information on the respondents participating in the study is presented in Table 1.

Table 1. Basic information on the respondents Source: own study

Basic information on the respondents				
sex				
male	90%			
female	10%			
age				
aged up to 30 years	16%			
aged 30-39 years	54%			
aged 40-54 years	18%			
aged over 54 years	12%			
educational level				
primary school	25%			
vocational school	60%			
higher education	15%			
Farm area				
6–15 ha	18%			
16–25 ha	36%			
26–50 ha	40%			
51–100 ha	4%			
over 100 ha	2%			

Results

The survey results indicated that before local governments and agricultural farm owners began obtaining funds for development from the European Union, agricultural farms had a small area and low development potential. Most respondents considered their farm as unprofitable and with no prospects in the commune of Krasne (28%) and in Jednorożec (26%). Most often, these were small units with no appropriate potential for yielding profits. In turn, in Czernice Borowe, 1/5 of respondents positively assessed their farms prior to Poland's accession to the EU. Most often, these were farmers of many generations, thriving from the post-World War 2 times, who have survived the period of transformations and political changes in Poland. A very important problem found in the areas is the fact that people engaged in agricultural activities do not develop additional sources of income, and only benefit from funds originating from their agricultural activities. Only approx. 4–8% of agricultural farms provide additional services supporting the economic budget of a farm (see: Fig. 2).

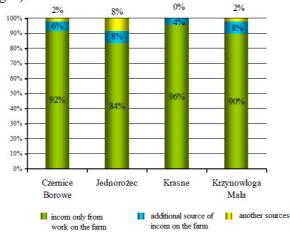


Fig. 2. Sources of income in particular agricultural farms under study Source: own study

In all communes, the basic source of income is the agricultural farm, which is confirmed by approx. 90% of respondents. Revenues from agriculture are used for current consumption, pleasures, and maintenance of the farm. Unfortunately, the amount of funds is only sufficient for current expenditures and small investments. Only a few people support agricultural activities with additional work or with funds from other sources such as support provided by a retired parent, agri-tourism, or seasonal work. Therefore, the need for additional financial support is crucial for farmers

to be able to expand their economic activities, and to keep up with the changing reality of the world. Not only financial resources but also location conditions affect the development potential of rural farms, e.g. topography, soil quality, agricultural structure, water network, or the arrangement of transport network. Respondents assessed the above determinants in their farms in the context of their agricultural activities, which is presented in Figure 3.

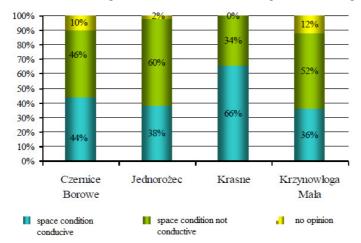


Fig. 3. Opinions on spatial determinants favourable to the development of an agricultural farm Source: own study

Opinions on the location conditions in particular territorial units vary. In Czernice Borowe, almost half (46%) of respondents believe that the determinants in the commune are favourable to pursuing agricultural activities, while a similar percentage have a completely different opinion. In the commune of Krasne, as many as 33 people negatively assessed the development potential of agriculture. In turn, both in Jednorożec and Krzynowłoga Mała, approx. 20 respondents positively assess location conditions. Such different answers result from the fact that local governments have been introducing measures shaping the rural space, which are aimed at an improvement in farmers' working conditions, for only a couple of years.

Another issue was related to obtaining Union funds in agricultural farms. The study reveals that respondents have eagerly benefited from such funds for the last 10 years. More than 90% of respondents in each commune decided to benefit from a support partially financed by the European Union under the Rural Development Programme (RDP) in the years 2007–2013 (see. Figure 4).

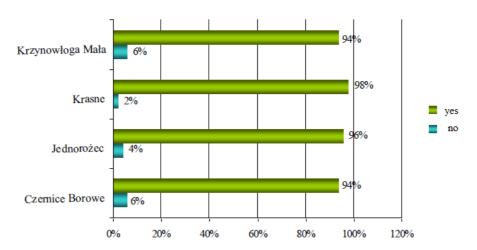


Fig. 4. Percentage of agricultural producers who benefited from Union funds under the RDP 2007–2013 Source: own study

Poland's accession to the European Union involved numerous transformations aimed at adjusting Polish economy to European standards. These changes also concerned the agricultural sector, where the offered products had to be of the highest standards in order to reach the European market. The adaptation process included many-years', costly modernisations to eliminate losses and neglect resulting from the previous years. Figure 5 presents statements of agricultural farm owners as regards spending the obtained funds.

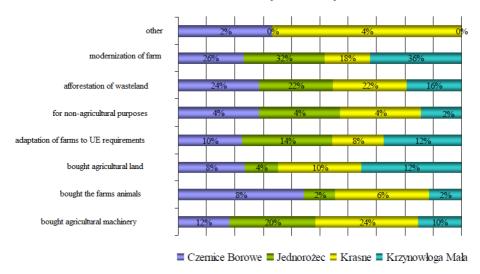


Fig. 5. Destinations of funds obtained under RDP 2007–2013 Source: own study

In all communities, grants associated with agricultural farm modernisation, afforestation of wasteland, and purchased of new machinery aroused great interest. Only a few respondents, approx. 4 or 5 people in each commune, decided to benefit from financial support and assign it on non-agricultural activities or purchase of additional agricultural land and farm animals. In turn, 7 respondents in the commune of Jednorożec, 6 in Krzynowłoga Mała, 5 in Czernice Borowe, and 4 in Krasne decided to specifically adjust the farm to EU's requirements. In principle, all these activities were aimed at improving standards and quality; however, the wide range of the areas of support allowed farmers to adjust it precisely to their own needs.

Union grants do not only apply to agricultural farms but also to their environment which has a significant impact on agriculture. Respondents noticed the effects of the influence of Union funds on both the farms and the entire commune area, and on the standard of living in rural areas, which is presented in Figure 6.

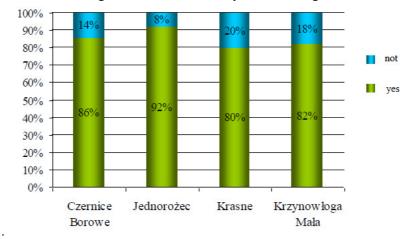


Fig. 6. The influence of RDP 2007–2013 on the living standard and pursuing agricultural activities in communes Source: own study

Most people – as many as 46 respondents in the commune of Jednorożec – noticed a direct and indirect influence of Union funds on the standard of living in rural areas and on pursuing agricultural activities. In Czernice Borowe, Krasne, and Krzynowłoga Mała, approx. 80% of respondents believe that Union funds affect the environment in which they live. 1/5 of respondents from the commune of Krasne notice no changes in their commune, as in their opinion, life in rural areas is in principle the same, and small transformations result from evolutionary changes.

At the next stage, respondents were asked which measures shaping the rural space have, in their opinion, been most frequently implemented since Poland's accession to the EU. Survey results are presented in Table 2.

In respondents' opinions, agricultural drainage, afforestation, and measures aimed at modernisation of agricultural farms were the measures most frequently implemented. The measures implemented least frequently were those related to combating water and wind erosion, forest renewal, and easier access to educational and health care institutions. In respondents' opinions, in the next forecasting periods these measures should be implemented most frequently.

Table 2. Results of the survey on the implemented measures after Poland's accession to the European Union structures
Source: own study

Activities of shaping the	Numer of responses divided on the investigated municipalities					
rural area in the munici- pality	Czernice Borowe	Jednorożec	Krasne	Krzynowloga Mała	Average	
Drainage water	50	38	15	23	31.50	
Modernization of local roads	10	14	25	18	16.75	
Afforestation of westland	22	17	24	30	23.25	
Preventing erosion	6	6	12	7	7.25	
Improvement info-sytems of plots	10	15	17	20	15.50	
Modernization of farms	15	31	26	20	23.00	
Restor forest	2	7	11	9	7.25	
Easier access to educational and health intitutions	6	10	4	5	6.25	

In the communes under study, farmers eagerly used the possibility for afforestation of poor quality agricultural land, as fallows brought no benefits to them. What is more, the presence of forests serves numerous functions which are useful for both the environment and the public. In particular communes, significant changes also took place as regards road improvement, modernisation of agricultural farms, and the improvement of agricultural systems.

Generally, rural inhabitants are satisfied with the measures taken by local governments as regard obtaining Union grants, which is presented in Figure 7.

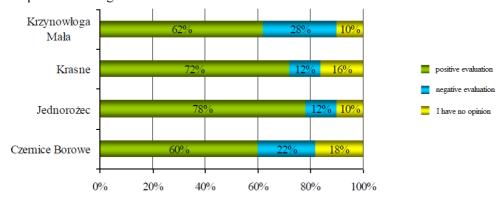


Fig. 7. Assessment of measures taken by local governments as regards obtaining Union grants Source: own study

In the general opinions of respondents, for the last 10 years the standard of living in rural areas has been significantly transformed, which is presented in Figure 8. Approx. 90% of respondents in particular communes are satisfied with the transformations which have taken place. In these respondents' opinions, the level of quality of living has considerably increased, functioning in rural areas is definitely more pleasurable than it used to be several years ago, and the financial situation allows farmers to satisfy the needs of current consumption as well as pleasures. Only single persons expressed opposing opinions or expressed no opinion on this topic.

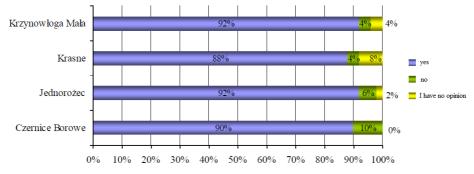


Fig. 8. Assessment of the improvement in the quality of life in rural areas following the accession to the European Union Source: own study

The communes under study: Krasne, Krzynowłoga Mała, Jednorożec and Czernice Borowe are neighbouring, small territorial units. They are characterised by similar environmental, economic and cultural conditions. These are typically agricultural areas with dominant crop and animal production (mainly dairy cattle breeding). Having examined the taken measures shaping the rural space in each community, it can be concluded that they were, to a large extent, implemented regionally. A large part of tasks were performed jointly by the units under study, e.g. the construction of domestic wastewater treatment plants, development of the public space, or road upgrading. Figure 9 presents measures implemented regionally in the communes under study.

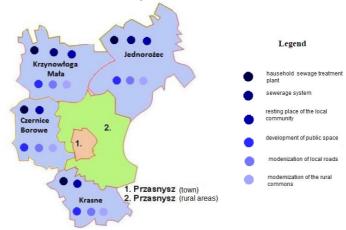


Fig. 9. A list of RDP 2007–2013 measures implemented regionally in the communes under study Source: own study

Conclusions

The financial support obtained under the Rural Development Programme 2007–2013 (RDP 2007–2013), the Human Capital Operational Programme 2007–2013 (HCOP 2007–2013), and the Regional Operational Programme for Mazowieckie Voivodeship 2007-2013 (ROP 2007-2013) was mainly assigned for measures shaping the rural space in terms of the improvement to the living standard of rural population, and the development of agricultural sector. Local governments have implemented numerous projects related to modernisation of rural areas, agricultural drainage, afforestation of wasteland, and an improvement to agricultural structure of farms as well as to transport routes. With an example of the investigated communes Krasne, Krzynowłoga Mała, Jednorożec, and Czernice Borowe, it can be concluded that supporting the agricultural sector is of considerable importance to the development of entire economy of our country. Due to supporting rural areas Poland is becoming a competitive country with a natural rural landscape and large resources of organic foods. Generally, the farmers' perception of local governments in terms of obtaining EU funds is also positive. After Poland's accession to the EU, the situation of agricultural farms has considerably improved; however, this does not mean that the agricultural sector requires no further funding. Poland, in order to have a good position in the European market, needs to take all possible measures to enable continuous development of rural areas. As a country, we have both the potential and large ploughland resources, which enables us to produce large amounts of organic foods. It is important that local governments take right decisions which enable the enhancement of competitiveness of Polish agricultural farms.

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