



## THE ROLE OF A LOCAL PLAN AND A PROGRAM OF RURAL MANAGEMENT WORKS IN SPATIAL DEVELOPMENT OF A RURAL COMMUNE IN CONDITIONS OF SOUTH-EASTERN POLAND

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### Summary

Many rural communes are currently affected by the problem of unfavorable spatial and structural changes which manifests in chaotic building development and increase of unprofitable phenomena in agricultural productive space. The aim of the paper is to analyze spatial development of the chosen commune in conditions of south-eastern Poland and the way of its management in case of possession or lack of a local plan and a program of rural management works. The Subcarpathian Nozdrzec commune was used as a sample of the research.

Performed analyses show that the surveyed commune has got numerous problems in the range of building structure, agricultural productive space development and landscape changes. The significant result of the analyses establishes that part of local plans did not guarantee proper building development and did not include decisions concerning agricultural productive space development at all. The commune also did not execute programs of rural management works which enable solving numerous problems of structural and spatial character. These problems also make possible to carry out many goals, including the equalization of developmental chances of rural areas in regard to urban ones.

### Keywords

rural areas development • local plan of spatial development • program of rural management works • land development decision

### 1. Introduction

Spatial planning in rural areas, regulated by the Law on Spatial Planning and Development of 27 March 2003, concentrates in practice almost exclusively on built-up and protected areas [Pijanowski 2014, Ziobrowski and Pijanowski 2008]. An areas purpose should be established in the basic (as intended) planning document which should be prepared for every commune in Poland – *the local plan of spatial development* (miejscowy plan zagospodarowania przestrzennego, MPZP). However, rural communes in most cases do not prepare such plans but they usually carry out *the study*

*of conditions and directions of spatial development* (studium uwarunkowań i kierunków zagospodarowania przestrzennego, SUIKZP), that in general determine commune's spatial policies. When there is lack of MPZP, building development takes place on the basis of the land development decision (decyzja o warunkach zabudowy, WZ) (art. 59) given by a commune and the decision on the location of public investment (decyzja o ustaleniu lokalizacji inwestycji celu publicznego, ULI) (art. 50) [Ustawa... 2003]. As originally intended by the legislator, the WZ decisions were to be a support tool for building development used in case of lack of MPZP. However, these decisions came to be the basic instrument of spatial planning, which is a subject of general criticism as they intensify spatial chaos (uncontrolled buildings scattering and development of investments contrary to SUIKZP settlements follow as a result) [Pijanowski 2014, Ziobrowski and Pijanowski 2008].

However, even in case of having an MPZP by a commune, the building scattering problem still remains unsolved as new plans include too big areas where investment activities are allowed, in consequence resulting in the scattering of buildings. Moreover, MPZP does not solve wide problems of rural areas such as agrarian overpopulation, neglected agrarian infrastructure or the huge negligence in the range of farms spatial structures improvements or rural water resources management. In spatial planning, rural and forest productive space is not generally treated in the same way as built-up areas. Defects of proper spatial development of rural areas can be improved by programs of rural management works (program prac urządzeniowo-rolnych, PPUR) [Ziobrowski and Pijanowski 2008, Bielska and Kupidura 2013] which will be considered in the paper's continuation.

Rural areas in Poland are in a state of great retardation in relation to countries from the western European Union. In these countries, complex activities from the range of rural management works which join aspects of land consolidation, rural renovation and also rural water resources management are important for the proper spatial and structural development. Simultaneously, activities in favor of non-agricultural development allow obtaining a positive socio-economic effect. These activities are tightly coordinated with spatial planning instruments. In general, PPUR takes into consideration many significant activities in rural areas which are substantially extraneous to spatial planning – such as for instance improvement of agrarian structure and farms working, possibility to gain lands in order to increase farms area or building and modernization of rural transport roads [Pijanowski et al. 2012, Woch 2008, Noga 2001]. The above-mentioned statements indicate legitimacy of local planning and PPUR coordination. Rural areas need new approach which can significantly contribute to so-called integrated development of rural areas [Magel 2015, Pijanowski 2014, Sobolewska-Mikulska 2015].

## 2. Aim and methodology

The aim of the paper was to determine the influence of MPZP and PPUR on rural commune's development in south-eastern Poland conditions. The method of descriptive-logic analysis was used in the article. The starting point was the analysis of the

available research results and also the analysis chosen for the Nozdrzec commune research. Local plans from 2014 and also from 2002 and 1998 as well as WZ decisions published in years 2011–2014 were in particular used as basic documents. The web portal [www.gison.pl](http://www.gison.pl), from where the Nozdrzec commune's map showing the current state of local plans was obtained, turned out to be of great help. A lot of data of demographic character were gained from the Local Data Bank of the Main Statistical Office (Główny Urząd Statystyczny, GUS). The presented land and buildings evidence data were gathered from the District Authority Office in Brzozów.

### 3. General characteristics of the research area

The rural commune of Nozdrzec is one of the 160 communes of the Subcarpathian Voivodeship. It is located in the district of Brzozów and occupies the area of 121 km<sup>2</sup>. The villages: Hłudno, Huta Poręby, Izdebki, Nozdrzec, Siedliska, Wara, Wesola and Wołodź are included in its area (Fig. 1). The selected commune is situated in the Dynowskie Foothill grounds, being characterized by high landscape values. Hill relief areas at altitudes of 240.7 m (in the San River Valley) to 464 m above sea level dominate here [Ciupka 1999]. According to statistical data, the Nozdrzec commune is one of the most densely populated communes of the district of Brzozów. In 2013, the number of its inhabitants was 8.398 which constituted 12.7% of the district's population (GUS). Nevertheless, a decrease in population in the Nozdrzec commune (as in the whole district), which has been continuing since 2010, has been observed.



Source: author's study, Quantum GIS program

**Fig. 1.** Location and division of the commune of Nozdrzec against the background of the district of Brzozów and the Subcarpathian Voivodeship

Concerning land usage structure, the commune of Nozdrzec stands out within the district with great contribution of agricultural area (22.6%). As emerges from the land and buildings register data, agricultural area (użytki rolne, UR) occupies 7.462 ha, i.e. 61.8% of the commune's area. Arable lands (5.951 ha), permanent pastures (886 ha) and permanent meadows (315 ha) dominate here, whereas built-up arable lands occupy 278 ha. Forest lands as well as wooded and shrubby ones, built-up lands, grounds under

water, ecological grounds and wastelands compose: 33.0%, 3.5%, 1.3%, 0.1% and 0.3% of the general area of the commune, respectively.



Photo by E. Sobaś 2015

**Fig. 2.** The village of Nozdrzec panorama

Considerable UR acreages are not fully used by local population. The agriculture of the commune of Nozdrzec is characterized by the low efficiency including surplus of workforce per hectare. Cereals and root crops cultivation with prevailing potatoes are predominant. Cattle, pigs and poultry prevail in animals breeding. Most of farms produce agricultural products for own use. As a result of the low income gained, farmers are forced to look for other sources of livelihood – mainly in private firms and services. Pensions and annuities are sources of livelihood for many people. In 2013, the unemployment rate for the district of Brzozów came to 24.3% (GUS). Tourism and recreation, together with the services sector that is connected with the towns of Brzozów and Dynów, are supplemental functions of local economy [Studium 1999b]. The service network in the commune is poorly developed. Only Izdebki and Nozdrzec have got sales and service points. In view of the existing investments and utility infrastructure, the most favorable areas to be built-up are located along the main roads. The Nozdrzec commune is distinguished by a building development called the linear settlement (“ulicówka”) where farm buildings, gradually displaced by residential one-family buildings, are predominant.

The Nozdrzec commune inhabitants are well equipped with technical infrastructure. Only the sewage system stands out as a serious problem – in 2013 it included hardly 11.8% of the households. The remaining buildings have got septic tanks. For the local people the lack of water, i.a. due to insufficient water networks, is another nuisance. In 2013, 78.2% of the commune’s inhabitants used the water system (GUS). Relying on the factor of agricultural productive space valorization, which for the commune of Nozdrzec was 70.6 points – soils quality and agricultural utility (56.6 points), agroclimate (8.0 points), land relief (1.2 points) as well as water conditions (4.8 points) should be recognized as average. Because of their specific natural topographic features,



Photo by E. Sobaś 2015

**Fig. 3.** Example of a majority of the farm transport roads in a commune – here the villages of Izdebki and Wara



Photo by E. Sobaś 2015

**Fig. 4.** Example of the poor condition of irrigation ditches in the villages of Izdebki and Nozdrzec



Photo by E. Sobaś 2015

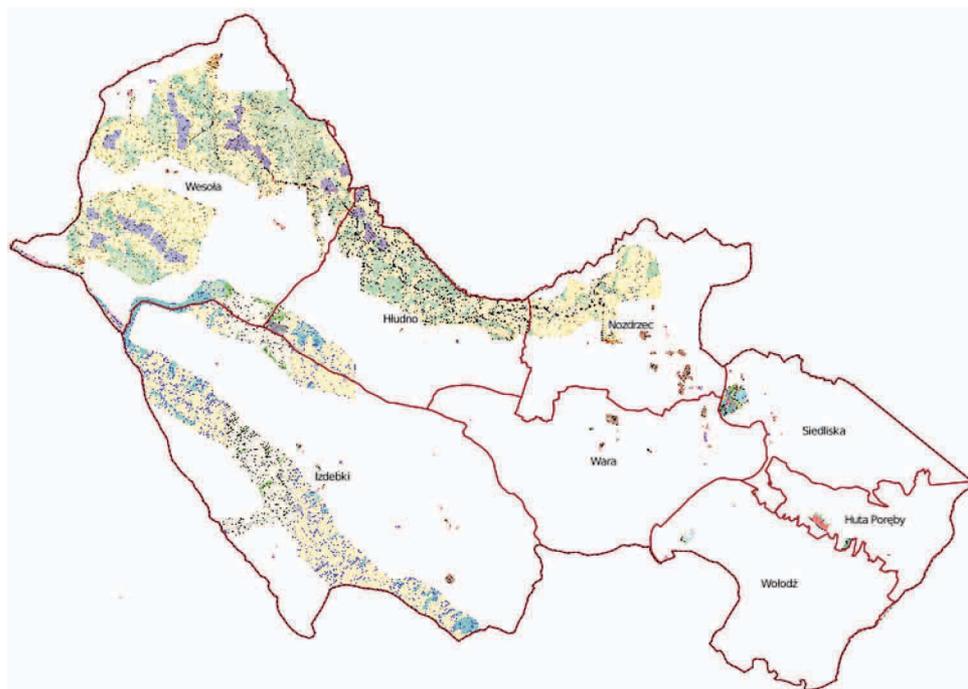
**Fig. 5.** Example of water erosion in the agricultural productive space of the village of Izdebki

two places called Izdebki and Wesoła were qualified to areas with unfavorable farming conditions (obszary o niekorzystnych warunkach gospodarowania, ONW). The problem of most farms is incorrect spatial fields arrangement (rozłóg) and their small area. Up to 93.4% of a commune's parcels are smaller than 0.50 ha.

Moreover, the arable lands of the commune of Nozdrzec are characterized by deficiencies in terms of the access of the roads to farmlands, whereas existing roads of agricultural transport are in a very bad condition. They are mainly unpaved, and unsuitable for the modern agricultural machinery transit (Fig. 3). Also the silted, overgrown and littered drainage ditches (Fig. 4) and water erosion (Fig. 5) constitute problems.

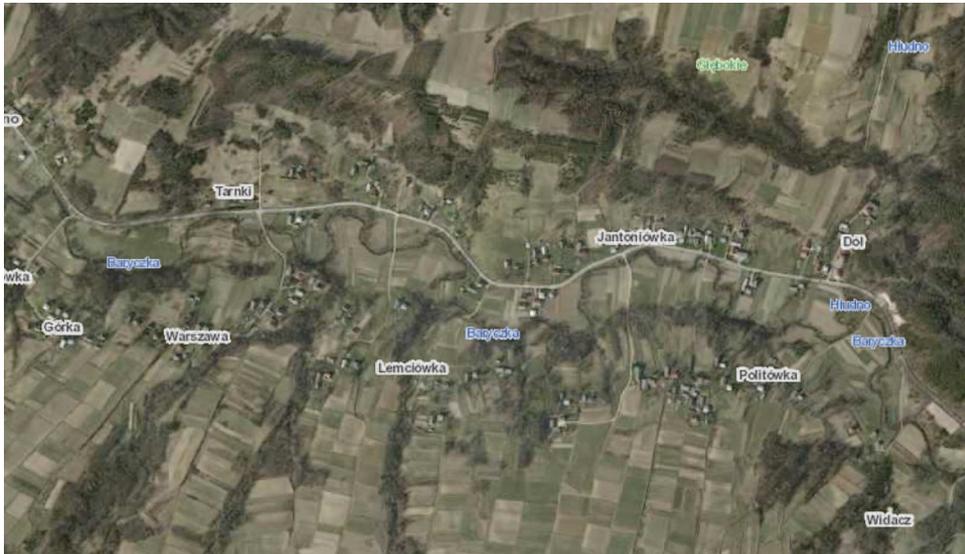
#### 4. Spatial development and local planning

SUiKZP, accepted in 1999, is the basic realization instrument of spatial policies in the commune's area [Studium 1999a, 1999b]. Moreover, the commune has got MPZPs. 77 smaller areas included in local plans were pointed in the Commune Council's Resolution from 2010 [Uchwała 2010]. From 2011, further MPZPs were enacted and the existing plans were modified. The report prepared by the Nozdrzec Commune Office according to the state from December 2014 demonstrates 940 ha of area covered by local plans which is only about 8.0% of the total commune's area (Fig. 6).



Source: <http://www.portal.gison.pl/nozdrzec>

**Fig. 6.** Areas of Nozdrzec commune included in local plans of spatial development



Source: Geoportal

**Fig. 7.** Hłudno's space included partly in MPZP

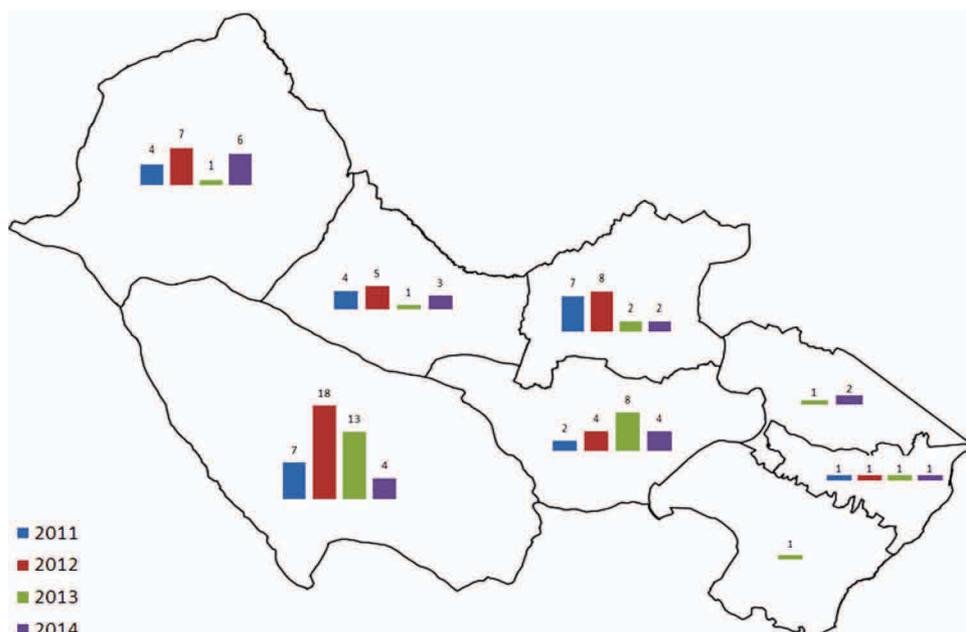


Source: Geoportal

**Fig. 8.** Wara's space where the building development takes place on the basis of WZ decision

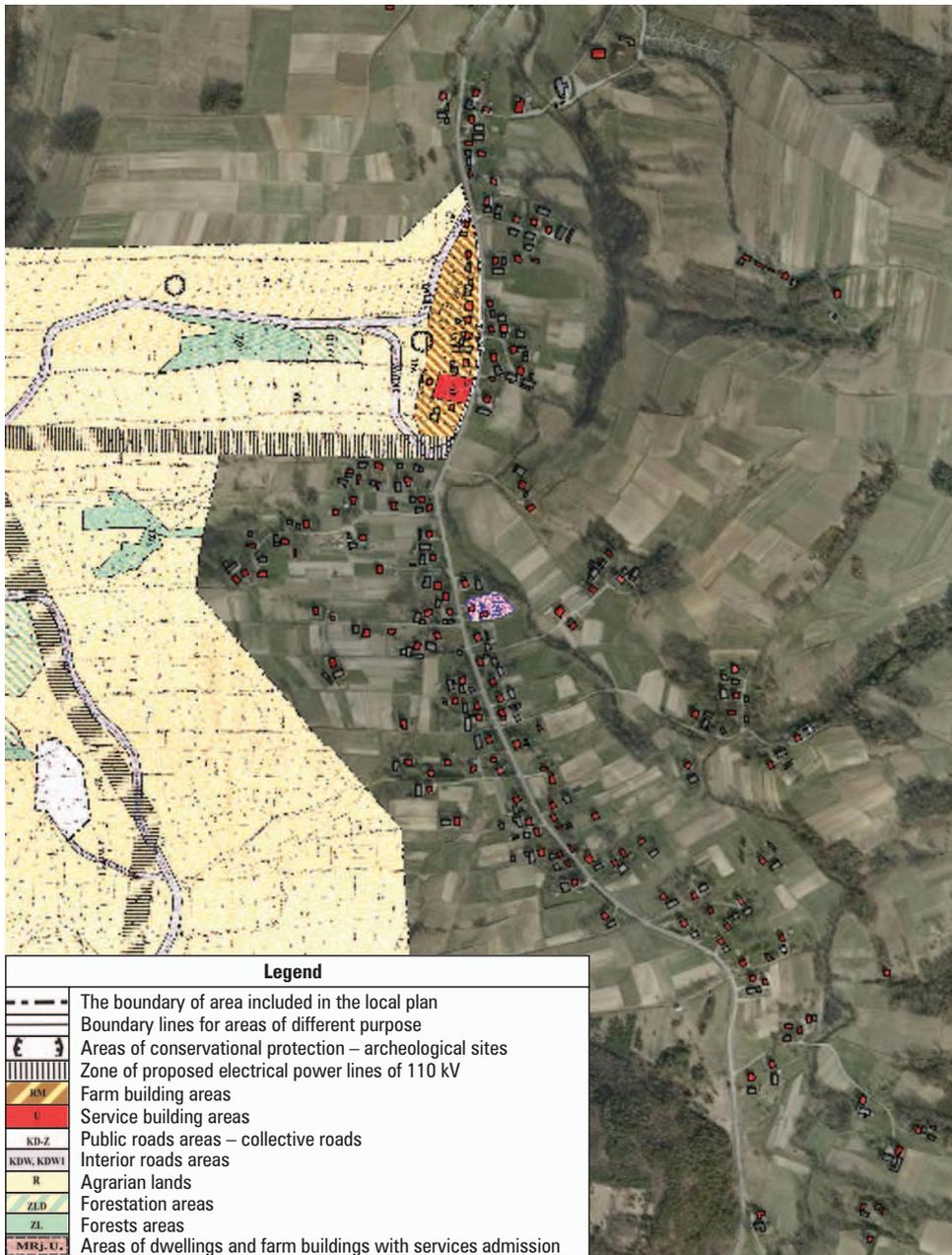
MPZPs concern the areas intended for housing and farm building, often with services admission. Older local plans usually include the area to 1 ha and their establishments are very general. However, MPZPs enacted after 2010, include big areas of former agricultural productive space. The analysis of aerial pictures revealed that it is difficult to find differences in built-up areas' structure between areas included in MPZP and these without local plans. Figure 7 presents Hłudno's space included partly in MPZP, whereas Figure 8 presents Wara's space which is not included in the local plan. In both places the building development was carried out on the basis of WZ decision.

In order to inspect the impact that the lack of MPZP had on the commune's spatial development, and the building development created as a result, WZ decisions in the Nozdrzec commune released in the years 2011–2014 (ULI decisions were not included in the analysis) were analyzed. In that period, 118 WZ decisions were issued mainly for plots located along communal roads. The greatest number of these decisions, that is 43, was issued in 2012. There were 28 of them in 2013, in 2011 – 25, whereas in 2014 there were only 22 decisions (Fig. 9). Izdebki village is the largest in size in the commune of Nozdrzec. In spite of that, MPZPs do not cover large area here although the most investments were realized there. It mainly results from high landscape values. Varied road route of the village with numerous serpentine became the reason of organizing occasional events such as former rallying or current longboard competitions.



Source: authors' study based on WZ decisions gained from Nozdrzec Commune Office

**Fig. 9.** Number of decisions in the commune of Nozdrzec released in the years 2011–2014 according to the villages



Source: authors' study based on <http://portal.gison.pl/nozdrzec/>

**Fig. 10.** Building dispersion in south-western part of Nozdrzec village, resulting from the building development on the basis of WZ decision. Area included in MPZP where ordered building development occurs was marked with signature marks

Moreover, there are numerous monuments and other attractions such as the Bukowski family manor together with surrounding park or ponds attractive for fishermen. These factors have significant influence on tourist traffic and also one-family building development.

In turn, Wołodź is a countryside mostly covered with forests so during 4 years only one WZ decision for it was issued. This place is included together with Siedliska and Huta Poręby to the commune areas of the lowest population density.

So the place's attractiveness and transport approach are of great importance for investments location. Building does not practically develop where transport difficulties occur as it is in the countryside situated on the other side of San River (Wołodź, Siedliska and Huta Poręby), from where access to the Communal Office requires ferry transfer.

In the analyzed period, up to 79.0% of all WZ decisions in the Nozdrzec commune were issued for housing single-family building. Percentage of these decisions for farm building was only 5.0%. Decisions for the remaining kinds of building i.e. housing single-family terraced ones and productive and service ones were less than 1%.

The results of analyses allow to state that in the Nozdrzec commune the spatial management in the basis of WZ decisions poses a threat for effective space shaping and simultaneously enacted local plan does not guarantee rational building development. Too large area of new construction lands decides about that. As a result of such practice, building develops in a dispersed way and building forms and styles chaos dominates. MPZP should be the legal instrument to counteract uncontrolled building dispersion – but in Polish practice it is only possible in case when it includes small and possible to quick building, equipped with utility infrastructure areas (Fig. 10).

## 5. Spatial development and program of rural management works

The program of rural management works (PPUR) of communes are in Poland non-formalized elaborations aimed at multifunctional development of rural areas and agriculture development. These programs are usually preparatory stages to implement instruments of the Rural Development Programme (Program Rozwoju Obszarów Wiejskich, PROW) concerning in particular land consolidation together with post-consolidation management (farm roads, meliorations and others). For many rural communes, PPURs have got equal (or even greater) meaning than MPZP because of their pro-investment and pro-developmental character. These programs rely on inventory of rural space existing state. Thanks to these programs, it is possible to undertake essential activities aiming at the improvement of life and work conditions in the given area, agricultural and non-agricultural economy sectors development as well as protection and shaping of the natural environment and landscape while taking into consideration local conditions. It is also extremely important that these programs enable to determine costs and sources of financial support for the realization of assumed goals. It should be indicated that PPURs can only become obligatory when they will be accepted by the commune council in the form of resolution or if their decisions are included in MPZP.

In local planning – also in rural areas – the legislator concentrated notations mainly in the areas dedicated for construction lands. There is lack of notations that enable rational shaping of rural productive space described as open areas. The subject of this space appears only in the context of the range of analyses towards the needs of MPZP preparation – whereas these plans do not formulate proper settlements concerning this space. Therefore, enlarging areas included in new local plans cannot often lead to effective solutions in the range of rural areas development. Figure 11 illustrates a scale of differences between the MPZP and PPUR settlements in regard to rural productive space on the example of Lower Silesian Nielubia village (Żukowice commune, Głogów District) [Małek and Smyk 2014].



Source: Małek and Smyk 2014

Fig. 11. Nielubia village – MPZP decisions on the left and PPUR – on the right

The growing socio-economic development in rural areas forces to look for new solutions in the range of shaping and improvement of the current state of spatial order – mainly in the context of providing sustainability. Generally, there is lack of elaborations for rural areas which would be in favor of not only agriculture development but also non-agricultural economic development with assumption of paradigm of integrated multifunctional development. It is indicated by analyses results in the commune of Nozdrzec. It has no PPUR the superior task of which should be according to authors' opinion simultaneous realization of many goals such as creating structural and spatial bases for the development of agriculture, leisure and agrotourism as well as improving conditions of production and work in agriculture but also people's life and work conditions through:

- lands consolidation connected with building or improving the state of rural transport roads and melioration devices, water management and even flood protection,

- nature protection and also landscape maintenance and development,
- development and restoration of rural settlement units.

Considering natural specificity, the Nozdrzec commune constitutes good place for the development of ecological agriculture which also should be an important element of PPUR as its areas are natural and not contaminated with industry. Apart from productive function, agriculture has fundamental importance for shaping and maintaining of rural landscape.

It should be mentioned that in the Nozdrzec commune within the PROW 2007–2013 land consolidation works were performed in the Hłudno village and reclamation action from the range of ditches modernization, building and modernization of rural transport roads as well as grounds reclamation were performed within post-consolidation management. However, land consolidation did not fulfill every need of local community – including farmers – concerning for instance water and anti-erosion meliorations or village's restoration. In other words, these actions were not complex enough. Multifunctional evolvement of rural areas is a chance for the development of the Nozdrzec commune as agriculture still plays a dominant role here. Competent integrating of additional non-agricultural functions into rural space can contribute to improving the population's life conditions, including among others creating new work places and, in consequence, stopping migration of working-age population. The region's uniqueness reflected in the characteristic for south-eastern Poland landscape and natural values as well as cultural heritage has great importance for the development of agro-tourism which is a chance for the commune's development and promotion.

Creating modern villages with the proper infrastructural base providing places for work, leisure and recreation should be, therefore, a priority. Also, undertaking of tasks from the range of technical infrastructure expansion, such as the water supply and sewage systems, roads modernization, construction of sidewalks and street lights as well as building a bridge on the San River in order to provide more efficient communication for inhabitants of Wołodź, Siedliska and Huta Poręby with other commune's residents is essential for the commune of Nozdrzec. Renovations of public utility buildings, like schools, creation of playgrounds for children or schoolyards or at last setting up the first nursery in the commune, are also important. Restorative works of culture monuments are not out of the question as well. Performing the aforementioned actions would surely create an attractive place for settlement and creating new production and service facilities. PPUR might become a chance for multifunctional development of the commune of Nozdrzec giving possibility of acquiring funds and presenting a further schedule of activities.

## 6. Conclusions

In general, current spatial planning of the commune of Nozdrzec negatively influences rural areas development. In the multifunctional model of the development which presumes equalization of disproportions between cities and villages, development

problems of agriculture and country should be treated comprehensively, including the whole area and not only the chosen elements. Despite covering parts of the area with MPZPs, the commune is not able to fully control dispersion of building development. Moreover, the existing local plans have got very general arrangements and their main aim is to determine new building areas. The basic communal planning instrument turns out to be a WZ decision instead of a MPZP.

The binding spatial planning system in Poland is ill-suited to rural population needs because it is most of all concentrated on built-up areas. There is lack of elaborations strictly oriented on integrated development of rural areas that would join building aspects, landscape and also agricultural productive space. PPUR might turn out to be such a document. It should be widely executed, particularly in rural communes struggling with big structural problems in agricultural productive space.

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