

The Influence of Areas Connected with Natura 2000 on The Development and Functioning of The Environmental Potential Based on The Example of Ponidzie Administrative District

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Abstract

This paper demonstrates the geographical comprehensive analyses of the practical use to indicate the potential possibilities and barriers of the development of the geographical environment in the areas of the local administrative units in Poland in the areas of the high natural value.

The introduction of the new legal category of the nature conservation in Poland, such as: the network of Natura 2000 tends to have an important contribution to the environmental potential of the Polish administrative districts, which is shown in the results of the studies conducted in Ponidzie, namely, the Pińczów municipality, Świętokrzyskie province. The studies were based on the analysis of the development strategies of Świętokrzyskie province and municipalities included in the Ponidzie Region, the studies of the conditions and directions of the spatial management of the municipalities, analyzed and developed plans of spatial management as well as personal surveys conducted in 2012 among the local communities. The studies allow to confirm that concerning such strategy 4 out of 5 planned actions will not be realized within the expected range, i.e. the development of plant and animal production, processing and developing the storage base, afforestation on the poorest soils (a low bonitation class), as well as the development of the inoffensive to the natural environment forms of business. There will be also problems with the infrastructure projects observed, mainly, in the range of road investments and waste management.

Keywords: environmental potential, Natura 2000, Ponidzie

Introduction

In the analyzed area of Natura 2000, there is a modification of the rural area development suggested, such as: farming by the use of organic agricultural methods, the development of tourism and agro-tourism, moreover, various forms of insignificant production and services, which are inoffensive to the environment.

The rural areas in terms of the land create more than 93 % of Poland. Thus, a major concern refers to the initiation of the appropriate strategies so as to manage such areas in terms of the spatial planning and zoning (land-use planning). The local development plan (LDP) is an act of

the local law (municipal law), which in the investment practice means the total dependence of this process on the designated spatial functions in the LDP.

The transformation of the Polish economy in the 90s of the 20th century had an impact on the characters of changes and prospects of the agricultural development leading to its considerable crisis. The share of the agriculture in the GDP (Gross domestic product) of the developed countries with the decline in the employment and the reduction of the agricultural areas has been constantly decreasing [2]. Hence, there is the urgent need for the functional transformation in the range of the potential of the rural areas. In this case, the space potential is associated with its ability to adopt certain utility functions.

The particularly valuable rural areas, which in their internal structure include the areas of the legal protection under Natura 2000 programme must be also taken into account. Such areas provide an essential element connecting the economic issues with the strict environmental protection. The protection of the biodiversity is one of the most important challenges of the modern world. The strong anthropopressure that occurs as the destruction of natural ecosystems, the urban development, the spread of the technical infrastructure and the intensification of the agricultural economy, weakens and destroys the biotic world of the Earth. Poland due to its location on the European continent has a well-diversified lithological composition and a significant topoclimatic differentiation. Thus, due to such environmental conditions *in situ*, there is a rich variety of flora and fauna.

The natural refuges are the basis of the European ecological network Natura 2000. The system refers to the unified character of their nature covering the entire continent of Europe for the protection of the regional biodiversity. Considering the legal terms, Natura 2000 is based on the so-called The Birds Directive (Council Directive 79/409/EEC on the conservation of wild birds) distinguishing the Special Protection Areas (SPA) and The Habitats Directive (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora) distinguishing the Special Areas of Conservation (SAC) [5].

The protection of the natural environment can be effective only if it is carried out comprehensively and coherently on the basis of the unified legislation. Therefore, there is a need for the protection tasks based on the methods of environmental management. One of the most important links of such management is the strategic approach towards the long-term planning of the development of the particular area. The zoning plans meet, *inter alia*, such requirements. The protective function in relation to the natural environment included in zoning plans has its legal basis in the form of a number of legal acts, which in the integration process with the EU were brought into conformity with the requirements of the EU legislation. The present work on the problem of adapting the spatial environmental protection requirements of the EU nature protection tends to be a challenge for the interdisciplinary research aiming at the initiation of the coherent approach to the methodology considering the typology of the valuable systems [10], without the significant loss in business and economics.

Economic and environmental determinants of the considered rural area

The rural areas of the *województwo świętokrzyskie* Province (Voivodship) constitute 94.3% of the whole province, in the scale of Poland, such areas cover a smaller area, i.e. 1.3% less in representation. However, the *Pińczów* municipality constituted 34.8% of the total area of the *Pińczów* administrative district (county), with the rural areas covering 93.4% [22].

The studied municipality is characterized by a total area of 21,275 ha and is of a agricultural and industrial nature, i.e., urban and rural municipality. The municipality is located in the *Pińczów* administrative district (county), in the southern part of the *województwo świętokrzyskie* Province (Fig. 1). *Pińczów*, as a town, is both the municipal and county administrative center. It is composed of 40 villages (subdivisions of municipality). In its area, there are exploitations of

minerals, such as: gypsum, limestone and gravels and sand [2]. It has difficult conditions for the agricultural production. The quality of the agricultural production space of the municipality (68.9 points.) is similar to the quality of the region (68.1 points) and the whole country (66.6 points) [14]. The municipality is characterized by the diverse relief with the upland tendency, where its main physiographic feature occurs to be the extensive valley of the Nida river. It is determined by a large amount of soils being subject to the erosion, namely, to the average and high degree (approximately 6% of the total area) . The farmlands are in a bad expanse. For that reason, only about 5,5 hectare farm [15] involves the land in eight plots of approximately 0.7 acre each, which means that it is too much fragmented, therefore, the whole area needs the reorganization – development based on the rational land consolidation [19].

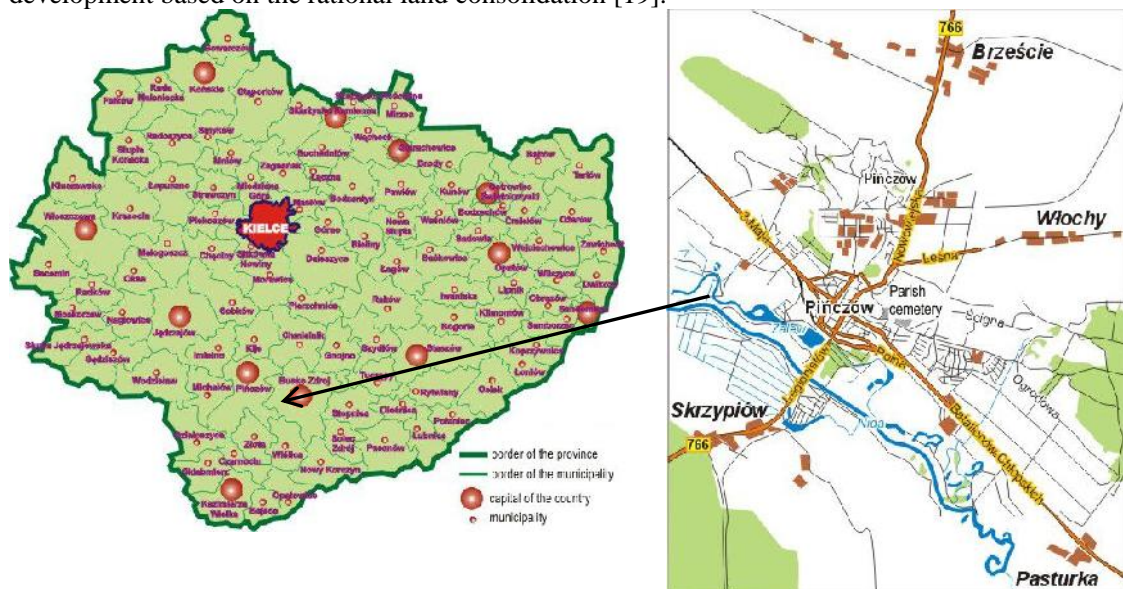


Fig. 1. The location of Pińczów municipality and studied subdivisions of the municipality, i.e., Brzeście, Pasturka, Skrzypiów, Włochy in the light of the municipalities of świętokrzyskie Province / The source: personal studies, Strzyż, 2012.

The valuable natural potential of the municipality has been subject to many forms of legal protection in the form of:

- three landscape parks (the Nadnizskie Landscape Park, the Landscape Park of Szaniecki, the Kozubowski Landscape Park),
- seven nature reserves (Pieczyska, Grabowiec, Krzyanowice, Winiary, Zagojskie, Skowronno, Skotniki Górne and Polana Polichno),
- two Natura 2000 areas (the Nida Valley, the Nidziańska Refuge).

The protected areas in the form of Natura 2000 network create a fairly large proportion of the area of the whole municipality. Figure 2 shows all the existing and proposed Natura 2000 areas within the Pińczów municipality. Approved by the European Commission, Refuges of the European Ecological Networks, such as: Natura 2000 the Nida Valley and the Nidziańska Refuge involve the area of 12,249 ha, i.e. 57.6 % of the entire municipality. The Nida Valley Special Protection Area (SPA) for Birds (PLB260001) called the Bird Sanctuary (Refuge) approved by the Regulation of the Minister of Environment dated on 21st of July, 2004 covers 23.43 % of the area of the municipality. The main element of the SPA for birds is the vast area of the valley of the Nida River reaching the wideness from 2 to 3 km with the numerous meanders

and oxbow lakes. It is surrounded by the damp and wet meadows and swamps. The annual creation of marshes is in favour of the development of reed beds and the presence of fertile meadows. Along the banks of the river, there are the willows and alder riparian and live riparian bands. The valley is surrounded by domed hills separated by many ravines (gorges).

In Młodzawy village, there is a fish pond and in Pi czów, there is a reservoir, which serves the retention and recreation functions. They are characterized by the Amur Bitterling (*Rhodeus sericeus*) and the thick shelled river mussel (*Unio crassus*). The Nida Valley is an important part of the migration route of birds and it constitutes the appropriate nesting site. As the most valuable for the Nida environment, the species related to the water environment are considered, namely, the aquatic invertebrates, fish and water birds [23].

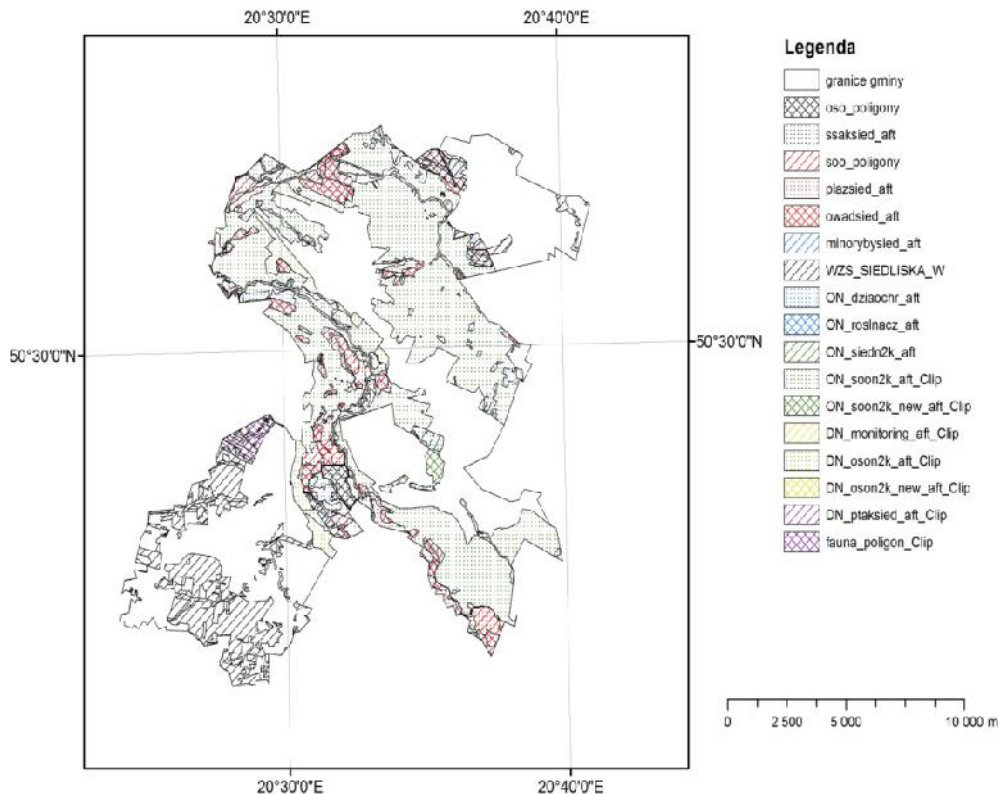


Fig. 2. Natura 2000 areas in the Pi czów municipality

The source: the data based on [23] prepared by GIS H. Wróblewski 2012, (unpublished).

The most important considering the point of view of the birds protection in the area of the Nida Valley is to preserve the endangered species of grassland (meadows) and pastures as well as fish ponds. The chance of their survival depends primarily on the way of managing the meadows and fishing economies

Currently, the greatest threat to the environment is considered to be the abandonment of the meadow and pasture use, the reduction of the woodlots, the work to regulate the river as well as inappropriate management of fishing [23]. There are also the following risks, i.e. the intensified exploitation of gypsum, burning of the reed beds, lowering the level of groundwater, the drainage

of the area, the water contamination as a result of the municipal wastewater, not to mention, poaching [25].

The second area of Natura 2000 in the studied area refers to the Nidzia ski Refuge (PLH 260003) approved by the European Commission – 10th of January, 2011. It involves the protection of the 17 types of habitats, 19 species of animals and 4 species of valuable plants. The Refuge includes the unique wetland, grasslands and xerothermic habitats. One of the most popular population of carline thistle (*Carlina onopordifolia* Besser). The Refuge also has many species of invertebrates and species of butterflies. The threatening factors, just like in the case of the Nida Valley Refuge involve the work on regulating the river, the drainage of the valley, lowering the agricultural land and littering. The significant risks are also connected with the collectors of the rare plant species [7].

The landscape of the Refuge is highly diverse. In terms of the orography, it includes the natural fragments of the Nida Valley as well as the neighbouring plateau. The Nida River, which is at the mature stage, meanders creating numerous oxbow lakes. Such process results in creating large complexes, moist and wet meadows and small swamps and marshes with the communities of reed beds and meadow vegetation. They occur in the central part of the studied Nida areas. However, deforested, loess, gently-undulating plateaus are separated by numerous gorges, ravines and dry valleys. The occurrence of the gypsum deposits is accompanied by the typical karst relief resulting in the appearance of numerous caves, karst funnels, karst springs and blind (steephead) valleys. The limestone and gypsum hills and the slopes of ravines are covered with xerothermic grasses, and the valleys are occupied by meadow communities. To the north-east of Szczerbaków village, there is a small piece of halophilic reed bed and meadows damaged by the dehydration and attempts of plowing. This area has a good chance of the natural restoration. The whole area of the Refuge is sparsely wooded and the existing communities of forests appear with fragments of the coniferous forest and alder habitats.

The greatest threat to functioning of the Niedzia ska Refuuge is the intensified use of gypsum (near Gacki), overgrowing of xerothermic grassland, burning reed beds, lowering of the level of groundwater, the drainage of the area, water contamination by municipal wastewater – sewage, as well as poaching [24].

Materials and methods

The basis of the demonstrated data was the detailed analysis of the sources of information received from:

- the Pi czów Municipality (the development strategy of the municipality, environmental protection programme, zoning plan),
- the County Office in Pi czów,
- the Agency for Restructuring and Modernisation of Agriculture – the Department in Pinczów (information dealing with the implementation of agricultural and environmental programmes, mainly concerning the areas of Natura 2000),
- Regional Directorate for Environmental Protection in Kielce (information dealing with Natura 2000 areas, nature inventories, projects of natural plans of protection tasks, the Internet),
- the Regional Data Bank (elements of assessing the level of development of the municipality).

The studies considered analyzing the existing land use plans (zoning) in the rural areas of the municipality and their reference to the issues of Natura 2000. On the map of the land use plans (zoning) of the selected for detailed analysis villages (Pasturka, Brze cie, Włochy and Skrzypiów) the boundaries of Natura 2000 were placed. On the areas of the Natura 2000, the records of the Local Land Use Plans were analyzed so as to determine whether there were

contradictions regarding the threats and the protectional tasks allowing to implement projects suggested in the zoning plans.

Furthermore, the possibilities of realising certain activities within the Rural Development Programme were also examined. They mainly dealt with the land consolidation and afforestation of the agricultural land.

The studies also used the survey conducted in 2012 by Chwalik [2] which was organized among the municipal office staff in Pi czów, farmers from the selected villages, namely Pasturka, Skrzypiów, Włochy. Moreover, the studies also included the survey carried out by Strzy (2012) among farmers from Brze cie villages. The anonymous surveys involved 58 people – the employees of the local governments and farmers from Pi czów municipality . The questionnaire contained eight closed questions and four open-ended questions. The aim of the survey was to get the views of the representatives considering Natura 2000 network in the municipality of Pi czów and to identify the impact of the naturally valuable areas for the development of rural areas.

The results of the studies are to find their use in contributing to the development of the analyzed municipality including the rationalization of the local (municipal) process of planning and zoning.

The outcomes of the studies – the evaluation of the opportunities and barriers for the development in the light of planning studies

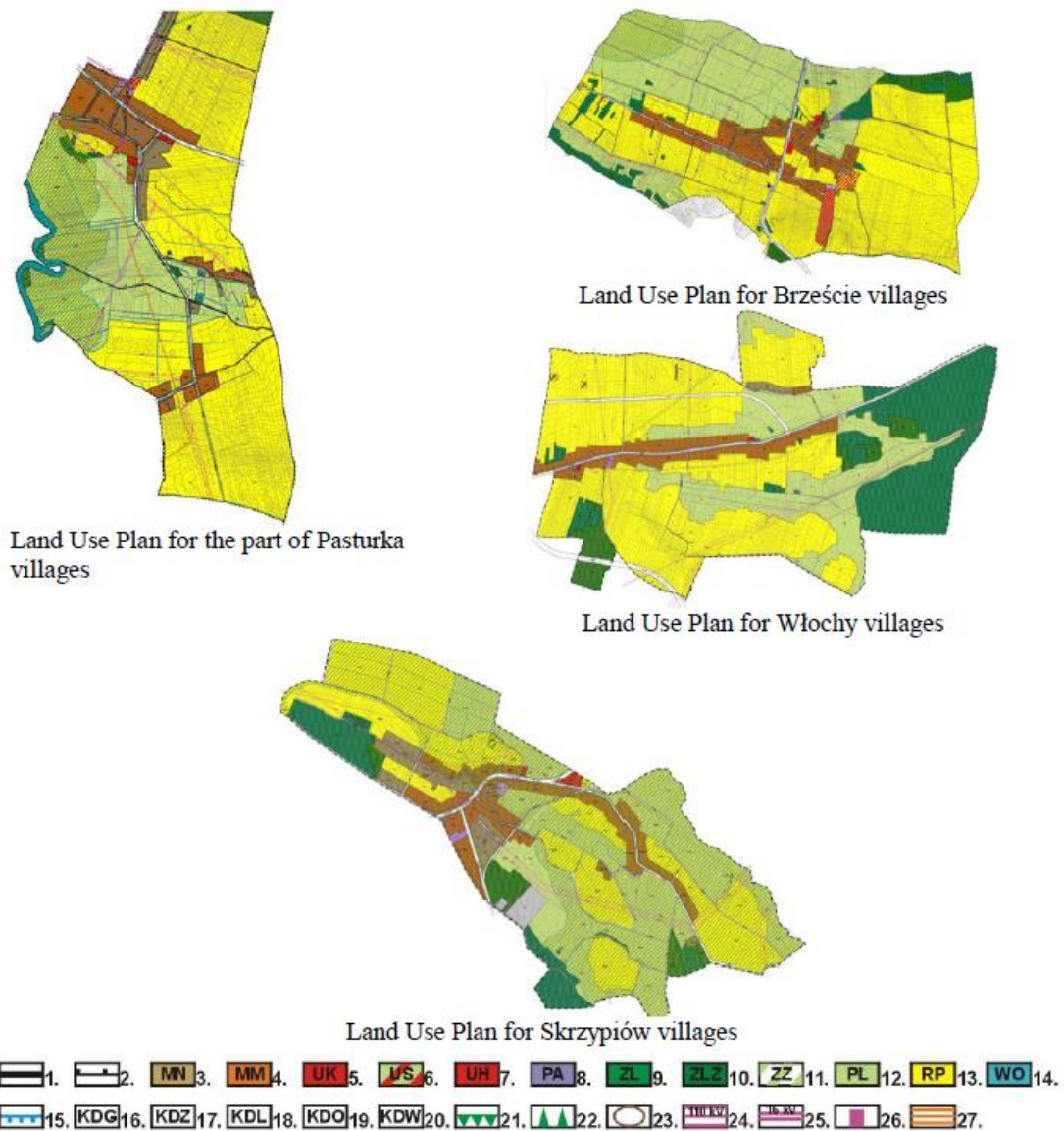
The Pi czów municipality aiming at the improvements of the financial situation of the rural residents has set the following strategies. They are designed to create new jobs and improve the living conditions for the rural population by:

- the development of the innovation in crop and livestock productions,
- afforestation of area with low-classification of soils,
- creating the appropriate conditions for the development in the range of processing and storage,
- the development of various forms of the entrepreneurship in rural areas,
- promoting organic production – organic farming [8].

Such objectives are to contribute to the rural area development through the modernization of the agricultural production, and looking for the alternative sources of income. However, in the way of implementation of the above-mentioned specific objectives, the problem with functioning of the protected areas appears, since in the municipality of Pi czów the protected areas constitute the significant percentage of the land. The objectives related to the development of the entrepreneurship, the creation of the base for processing and storage, afforestation and the development of the innovation can have a significant impact on the species and habitats considered for the conservation according to Natura 2000 network and other forms of legal protection.

The Polish law establishes the regulations that in case of the projects may in any way jeopardize the natural habitats or individual species of plants and animals for which the protected area has been designated, it is necessary to assess the impact on the environment [13].

Pi czów municipality had the studies of conditions and directions of the spatial development prepared in 2003, which was updated in 2008 and has been still in force since then. However, the prepared in 2009 Local Land Use Plan only refers to four examined villages and Pi czów. Thus, on the basis of the comparative analysis of the plans (the analysis excludes Pi czów itself) the attempt to assess the impact of Natura 2000 on the potential development of the rural areas was made.



Explanation: 1. The boundaries of land use plan, 2. Impassable building line, 3. Area of residential areas with single-family detached houses 4. Area of residential areas with single-family detached houses and farm buildings, 5. Area of services and culture, 6. Area of sports and recreation services, 7. Area of trading, catering and craft services, 8. Area of small – scale economic activity, 9. Area of forests, 10. Area of afforestation, 11. Area of possible flooding 12. Area of meadows, 13. Area of forming 14. Area of waters and rivers, 15. The boundaries of areas threatened by flooding, 16. Area of main road – G class, 17. Area of collective roads Z class, 18. Area of local roads L class, 19. Area of driveways D class, 20. Area of internal roads 21. The boundaries of Spatial Protection Areas for Birds Conservation, Nida Valley – Natura 2000, 22. Spatial Protection Areas for Habitats Conservation Nidzia ski Refuge – Nature 2000, 23. The zones of archeological protection 24. Existing power lines 110 kV together with the free from building zone, 25. Existing power lines 16 kV together with the free from building zone, 26. Existing transformer stations, 27. Mileage high-pressure pipeline

Fig. 3. Natura 2000 in the Local Land Use Plans of the chosen areas rural administrative districts of Pi czów municipality / The source: personal studies M. Strzy based on [26].

The analysis of the Local Land Use Plan (Figures from 3 to 5) was carried out separately for all villages [26].

Pasturka Village. The dominant source of income is based on the agricultural production that slowly gives way to urban functions due to the fact of being close to Pińczów, i.e., 1 km [20]. The whole area of Pasturki is located within the Nadnidziański Landscape Park. However, some parts of this sub-division (Fig. 3) are placed on Natura 2000 areas, namely, the Nida Valley and the areas of the Nidziański Refuge. The limitations in the range of functioning of the protected areas, to a small extent, refer to the agricultural economy, expressed in the ban of locating large intensive farming in the field of animals. Such restrictions also apply to any investments that can significantly affect the environment. In the Urban Planning for the area, there were the areas of the industrial and storage character designated, for which it is also possible to locate the large – scale industrial complexes that are not disturbing the environment [26]. The Local Land Use Plan for Pasturka villages did not include such areas, however, it indicated the areas of forests (about 40%), of agricultural cultivation (Photo 1), which were located in the Special Protection Areas for birds Natura 2000 – the Nida Valley, the land of meadows and pastures covering the Special Protection Areas for birds Natura 2000 – the Nidziański Refuge, residential areas with single-family detached houses and farm buildings, afforestation areas located within the Special Protection of birds, land for sports and recreation services, the areas of the lightweight economic activity (Fig. 3) [26].

The foregoing analysis shows that the municipality, due to functioning of Natura 2000, abandoned the development of the industrial activities as well as it will have to give up the process of planned afforestation (low bonitation of soil – 5th and 6th classes), because in these areas there is a ban in the range of afforestation [17].

Brzeście Village. It is the agricultural area. It is located partly within the Nadnidziańskiego Landscape Park, in the buffer zone and to a large extent in Natura 2000 areas [20]. The Local Land Use Plan is designed for the following development areas: field crops and grasslands areas (agricultural land). The farmland (agricultural land) almost completely (Fig. 4) covers the area of Natura 2000 – the Nida Valley, the single-family residential buildings and single-family residential buildings with farm buildings, sports and recreation services in the attractive touristic area of Pińczowski Garb, the maintenance of the farm production, small-scale economic activities and other economic activities-outside the area of Natura 2000, forestry activities and afforestation (Fig. 3) [26].

The analysis of the Local Land Use Plan suggests that there is no possibility of the future activities that may have the negative impact on the environment, such as: the intrusive industry, moreover, there is no sign of the designed Pińczów ring road and the planned afforestation on the poor quality soils [20].

Brzeście Villages, as well as three other places, are located close to Pińczów. It is also an agricultural village. Large parts of the village area are located within two Natura 2000 networks (Fig. 3, Photo 4 and 5). The directions of the space use observed in the Local Land Use Plan are the same as in the previously discussed two rural administrative units, with the difference in only one sphere, namely, the afforestation is suggested on the small area and just outside the boundaries of Natura 2000 network. It suggests that the development of the Local Land Use Plans included the restrictions for the economic activities, which could have the negative impact on the ecosystems of Natura 2000 areas.

Skrzypiów Village. It also has the typical agricultural character of building. In addition, it is located in the significantly large parts of the studied Natura 2000 areas, namely, the Nida Valley and the Nida Refuge (Photo 6). However, the records of rural planning suggest that the village should develop in the direction of the extensive building of an urban kind, of widening the elementary range of services located in the rural areas as well as modernization, or liquidation of

the existing landfill [26]. The landfill is located in the protected area and a short distance from the built-up area of the village. Skrzypiów has similar to the provisions analyzed regulations found in the Local Land Use Plan.

After analyzing Urban Planning [20] and some of the existing Local Land Use Plans of the chosen places in the overall functioning rules of Natura 2000 areas, it can be concluded that in all studied localities, there are difficulties in implementing the objectives pursued *a priori* without any thorough analysis of the various functions of the spatial interactions and their influence on functioning in the divers environmental systems. The appliance of the extreme caution in determining the spatial potential of the examined areas was due to the poor recognition of the natural conditions of such areas in the range of large scale spatial forms of the legal protection – the Nadnidzia ski Landscape, the Nida Valley and the Nidzia ska Refuge. The analysis of the natural ecological system in the area concerned the Nadnidzia skie Landscape Park and its surrounding buffer areas. The demonstrated studies were created over 30 years ago [23] and required a thorough natural inventory and the analysis in the context of the possible environmental potential of the examined areas for the needs of the spatial planning.

In case of the Pasturki rural area, due to functioning of Natura 2000 programme, it was abandoned to deal with the industrial activities as well as planned afforestation (of low class soil of the land, namely, 5th and 6th classes), since in these areas, there is a ban considering the afforestation [17]. Such a decision also requires the environmental studies because there are no studies that would clearly provide the evidence for the application of such restrictions. Considering any areas of the soil that is characterized by the lowest class of bonitation for afforestation in areas of Natura 2000 and other protected areas the reliable research should be preceded.

In the village called Brze cie, the activities that may have the significantly negative impact on the environment, such as industrial one, which is included in Urban Planning was not indicated [20]. It should be noticed that in the Local Land Use Plan, there were errors in the display of the public investments, e.g. the Pinczów ring. This fact will result in the serious problems in implementing of this project. According to the development strategies of the Pi czów Municipality the planned ring-bypass for Pi czów should be located on the area of Brze cie villages [8]. Unfortunately, in the Local Land Use Plan, this investment was not included [26]. Furthermore, there was no information explaining why it was excluded. The exclusions were also found in the range of the planned afforestation on the low bonitation land and also in this case, there is a lack of the content-related reasons for such a state. Similarly, in case of Włochy and Skrzypiów villages the Local Land Use Plans did not involve the implementation of the afforestation of the land (5th and 6th classes of bonitation). Considering Włochy Villages, there are restrictions for the investment activities caused by the location of Natura 2000 areas just like in Skrzypiów Villages.

The argumentative issue appears to be in the field of identifying the implementation of the extensive urban-type building in Skrzypiów. Maintaining such regulations creates the conflict of the cultural nature of the whole Pomiecie and destroys the landscape order. Additionally, in Skrzypiów, the indications on extending the existing elementary services and the need to modernize or get rid of existing landfills were introduced. The most reasonable with this regard was the elimination of the existing landfill because of its basic technical deficiencies in the quality standards of its functioning.

Apart from the above-mentioned conditions and limitations in the development of the examined areas due to functioning of the areas Nature 2000, there is a need for changes in the rationalization of the management of the agricultural land. A very unfavorable separation (parcelling) of land in the municipality requires its consolidation in the so-called complex consolidation [16] and they are required to be carried out in 44.3% of the total area of the

municipality [19]. However, it should be expected that the procedure for initiating and prosecuting reparcelling will be very difficult [17]. Practically, the Regional Directorate for Environmental Protection in Kielce cannot allow it or it will be allowed, but restricted to several conditions. Hence, it will not also be limited to the agro-forest formation with simultaneous enlargement of forest areas [17].

It should be highlighted that in the present state of planning advancement for the management of the potential natural and cultural environment in rural areas, it is not possible to identify detailed management principles in the whole country, or particular regions. The state of the Local Land Use Plan studies across the country constitutes only about 25% of the Polish area (Fig. 4).

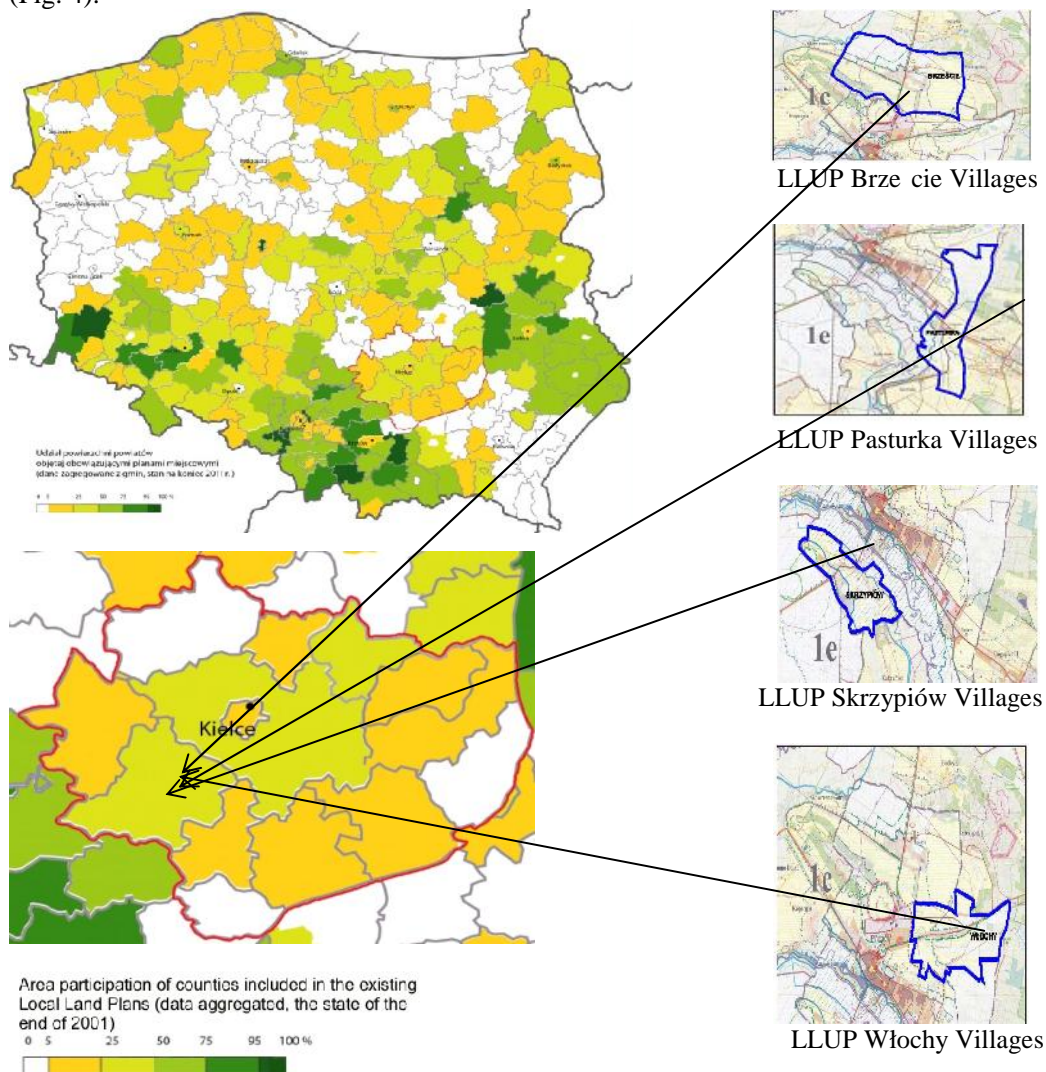


Fig. 4. Local Land Use Plans (LLUP) in Poland and Świętokrzyskie Province according to administrative districts; the state by the end of 2011 and LLUP in the areas of rural municipalities of Pińczów / The source: personal studies M. Strzyż based on [26].

We must also remember that the municipalities first of all determine the fact of creating the law of the management of their lands. Thus, the adopted Local Land Use Plan has the status of the local legal act. Such approach in principle gives a great possibility of meeting the needs of the local communities that participate at every stage of the process of creating local land use plans

According to the Rural Development Programme, the management on the Natura 2000 areas provides the financial support as the compensation for the loss of profits. It is possible in the implementation of agricultural and environmental programmes. According to Chwalik [2], information gathered from the Agency for Restructuring and Modernisation of Agriculture in Pinczów, there are 2,261 farms that function in Pińczów municipality. It is difficult to determine how many farmers are eligible for the payments considered in the agricultural and environmental programmes in the range of the 4th and 5th packages. However, taking into account the fact that Natura 2000 areas in the studied municipality constitute almost 60%, the number of the applications submitted to the Agency for Restructuring and Modernisation of Agriculture is not significant, i.e., about 8% of farms (Table 1). It means that few farmers use their right to get vested payments.

Table 1. The number of submitted and approved applications due to the management in the areas of Natura 2000 in the Municipality of Pińczów in 2011

Variation of Natura 2000 area management	Number of the submitted applications	Number of the accepted applications	Amount of money for 1 ha
Extensive permanent grassland (must be located in the areas of Natura 2000)	75	75	500 PLN
Protection of endangered species of birds and habitats in the areas of Natura 2000	87	87	1,370 PLN
Protection of endangered species of birds and habitats outside the areas of Natura 2000	10	10	1,200 PLN

The source: studies of Chwalik [2] based on the data received from ARM in Pińczów.

Such state of affairs may result from the lack of the sufficient knowledge, or difficulties related to the process of applying for such types of payments. Apart from that the programme Natura 2000 requires some restrictions from farmers who want to take advantage of the special grants involved in the agricultural and environmental packages (Package 4 and Package 5). They are based mainly on the way of the land use. It is forbidden e.g. to:

- use wastewater and sewage sludge,
- plowing and rolling,
- constructing and developing water management facilities,
- limitations in the range of the fertilization, mowing and grazing, as well as applying to some kinds agricultural works,
- using pesticides.

It is even worse, in some other areas. For example, in the entire Lipsk county, located by the Vistula River and referring to Natura 2000 areas in the period of 2007-2010, there were not any farmers who could realize the package protection of the endangered bird species and habitats in Natura 2000 areas [18].

Evaluation of the possibilities and barriers in the range of the development resulting from the survey examination

The respondents (residents with a high percentage of local government staff) Natura 2000 identified as:

- “... the area to protect endangered species of birds, valuable plants and animals”;
- “... programme protecting the areas of the particular natural attractive, but subject to the significant anthropogenic pressures”;
- “... the area protected by the European Union Law”.

From the responses to the question about the positive and negative impacts of the protected areas of the rural municipalities of Pi czów, it seems that as many as 72 % of the respondents believed that the existence of the protected areas in their municipality was beneficial for this municipality, and 28 % considered the existence of the protected areas only as the problem associated with the development of municipality. 48% of people were afraid of the restrictions resulting from the occurrence of Natura 2000 areas.

According to the studied group (Table 2) the protected areas had a positive impact on the agriculture – 70 % of the respondents, and the development of tourism – 86%. Only 4% of the respondents believed that the protected areas could have a negative impact on the agriculture. However, no one believed that such areas reduce the increase of tourism. As for the impact of Natura 2000 areas on the implementation of planned investments, the majority of the respondents (88%) was consistent in their negative opinions.

Table 2. *The influence of Natura 2000 on the particular management in the range of the various fields of activities according to the respondents*

Fields of management	Positive	Negative	Indifferent	I do not know
Agriculture	70%	4%	18%	8%
Planning of investments	0%	88%	8%	4%
Development of tourism	86%	0%	6%	6%
Development of technical infrastructure	8%	58%	22%	14%

The source: studies of Chwalik [2]2012.

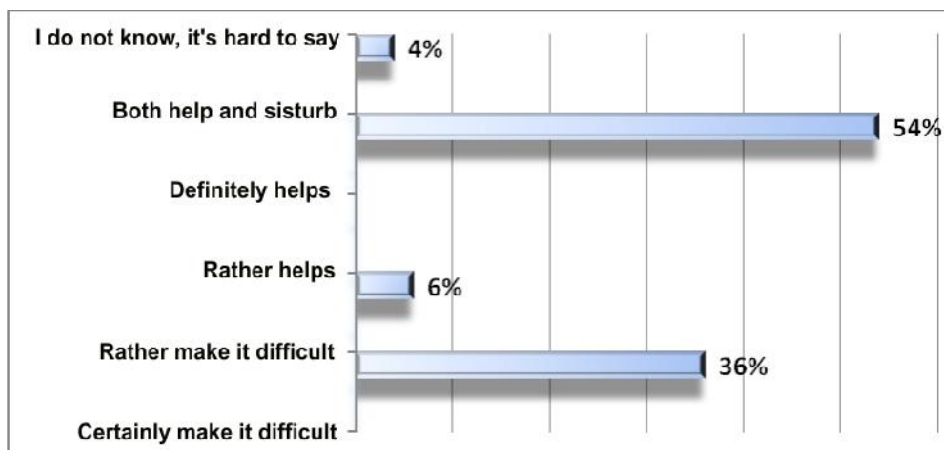
As many as 88 % of respondents felt that such areas negatively affected the implementation of the investment projects, and only 6 % felt that the impact was neutral. A great percentage of the respondents – 58 % saw the negative impact of protected areas on the development of the technical infrastructure, and 22% felt that such areas did not affect the infrastructure. However, somewhat surprising appears to be the fact that some of the respondents could spot that Natura 2000 areas contributed to the development of the technical infrastructure.

When asked whether Natura 2000 programme helped or hindered in the development of rural areas, 54 % of the respondents answered that it both helped and hindered. On the other hand, 36 % felt that the existence of the protected areas, in particular Natura 2000 network rather hindered the development of the rural areas. Only 6% of the respondents said that they could rather help in the development, while 4 % of the respondents had no opinion on the subject (Fig. 5).

Additionally, the respondents stated that the most important issues were the following:

- difficulties related to obtaining the building permits,
- restrictions considering the realization of investment plans,
- extending the terms of the investment, even the small and technically simple ones,

- restrictions in the field of constructing the technical infrastructure, mainly roads, water and sewage systems,
- excessively restrictive laws for the protection of certain elements of the environment,
- prohibition in the range of afforestation despite the fact that it is on the land of the low soil quality,
- acting according to plans of protection tasks that often prevent us from realization of the planned investment,
- not being able to create the industrial zones,
- the problem of cleaning the Pi czów Lagoon,
- too much land of the protected area,
- difficulties for farmers in their management,
- unnecessary bureaucracy;



*Fig. 5. The influence of Natura 2000 network on the rural areas in the respondents' opinions
The source: personal studies 2012 and based on Chwalik [2].*

The main advantage of the existence of the protected areas most frequently was the following:

- payments for farmers because of agricultural and environmental programmes,
- the protection of unique species of birds, plants and natural habitats,
- the effective protection of the nature and landscape,
- the increase of the touristic attractiveness of the municipality,
- the positive impact of the protected areas on the health and well-being of the residents.

The respondents suggested the following activities in the areas of Natura 2000, which should effectively influence their constant sustainable development:

- reliable verification of the boundaries of Natura 2000 areas so as to include the coverage of areas that deserve the protection,
- providing people with more adequate information dealing with Natura 2000 programme,
- providing adequate compensation for the loss of profits,
- weakening of present regulations,
- shortening the duration and reducing the costs of the environmental impact assessment,
- creating a list of projects that can be carried out in the protected areas,
- encouraging farmers to introduce the organic farming methods,

- investing in tourism development based on the use of natural values,
- using the protected areas to promote the region.



Photo 1. Fragments of the Nidy Refuge in the area of Pasturka Villages



Photo 2. Field crops – Włochy Vilages



Photo 3. Natura 2000 area – the Nida Valley south from Pińczowa



Photo 4. Natural fragments of Natura 2000 area – the Nida Valley Dolina near Skowronna



Photo 5. Natural fragments of Natura 2000 area – the Nida Valley Dolina – north from Pińczów



Photo 6. Natura 2000 area – the Nida Valley in the foreground Pińczów in the background Skrzypiów

Photographed by. M.Strzy 2012.

Conclusions

Natura 2000 network should be considered as both an opportunity and a threat to the rural area development. Natura 2000 is not *a priori* ban. All the investments that do not have the negative impact on the objectives of Natura 2000 protection can be

implemented in the area. In the case of the investments negatively affecting the environment, the solutions that will minimize the negative impact on the environment should be looked for. The only requirement for doing business in Natura 2000 areas is the need to preserve the protected populations and habitats so as not to make their conditions worse than at the time of their establishment. Any planned burdensome investments must be subjected to the environmental impact assessment at the early stage of pre-conditioning the building and land development requirements of such investments in case of the absence of the Local Land Use Plan.

Four out of five planned strategies of actions will not be realized within the expected range, i.e. the development of the plant and animal productions, afforestation of low – class bonitation of land, the development of processing and storage as well as the development of various forms of economic activities. There will be problems with the realization of the public investments, mainly, roads and other public investments

The conditions for functioning of Natura 2000 areas suggest the modification of the directions in the field of the rural areas development, namely, organic farming by the use of ecological methods, the development of tourism and the various forms of small-scale production and services not burdensome to the environment.

The status of Natura 2000 area gives a chance for the new developments and additional payments to support such developments by the European Union. It can be used in many ways, i.e., to promote local products and services, to develop tourism, to serve educational and research functions, which in the current context are used to an insignificant extent.

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