

# BETWEEN KAMPINOS NATIONAL PARK AND KAMPINOS VISTULA VALLEY. NATURBANIZATION IN LEONCIN COMMUNE IN THE 21<sup>ST</sup> CENTURY

Izabella ŁĘCKA<sup>1</sup>, Anna DUDEK<sup>2</sup>, Marta KANIOWSKA<sup>3</sup>

<sup>1</sup>University of Warsaw, Faculty of Management, ul. Szturmowa 1/3, 02-678 Warsaw, email: ilecka@uw.edu.pl

<sup>2,3</sup>University of Warsaw, Faculty of Geography and Regional Studies, ul. Krakowskie Przedmieście 30, 00-927 Warsaw, adudek@uw.edu.pl<sup>2</sup>, marta.kaniowska@student.uw.edu.pl<sup>3</sup>

Łęcka I., Dudek A., Kaniowska M., 2019, *Between Kampinos National Park and Kampinos Vistula Valley. Naturbanization in Leoncin commune in the 21<sup>th</sup> century*, „Czasopismo Geograficzne”, 90(2): 189-213.

---

## Abstract:

The text concerns the results of long-term field studies of students of the Faculty of Geography and Regional Studies in the commune of Leoncin, Mazowieckie Province. The main purpose of the work was to investigate whether residents of the commune lying between protected areas considered this location as an advantage or a barrier to the economic development of the commune. In addition, it was interesting to examine what natural resources commune citizens would be willing to sacrifice to create more jobs on site. Basically, the answer was obtained that the residents would not like too much changes in the commune where they live with joy. On the other hand, the lack of a clear economic development prevents them from improving economic conditions. The most anticipated investments include the extensive road, sewage and sports infrastructure.

---

**Key words:** naturbanization, protected areas, NATURA 2000, field work studies, economic studies, socio-economic geography

## Introduction

This paper concerns the social perception of environmental protection among the inhabitants of environmentally valuable areas, who live in protected areas or in their direct neighbourhood. The main research focus lies in the ambivalent standpoint of the local communities towards their place of living, reaching from the admiration for the beauty of nature and pride in living in a unique area on the one hand, and the necessity to look for sources of income as a prerequisite for the emergence of the former viewpoint on the other hand.

The concept of development of urbanization processes in the neighborhood or in areas covered by some form of nature protection is both fascinating and problematic for a number of researchers from around the world. They were looking to the issue from various perspective. Some of them focus much more on environmental

perspective [ex. Turner et al. 2004, Bradley & Altizer 2007, McDonald 2008, Elmqvist et al. 2013, Cumming et al. 2014 and many more]. Another's are more careful about human aspects, especially policy issue [ex. Benfield et al. 1999, Machlis & Field 2000, Swyngedouw & Kaika 2000, Swyngedouw 2010, Kaika & Swyngedouw 2011 and others]. Among the Spanish-speaking authors, it is an extremely interesting and current problem [Prados 2009, Escudero et al. 2012; Czerny & Castillo 2014, Lima & Valdiviezo 2015].

In Poland, the issue of the clash of the interests of nature and societies living near protected nature areas is of interest to representatives of many scientific disciplines, from naturalists to architects, economists and geographers [ex. Leszczycki, & Kobendza et al. 1979, Szymańska 2005, Szymańska & Biegańska 2011, Pajnowska 2006, Falkowski & Brodowski 2008, Czerny & Łęcka et al. 2009, Popławski, 2009, Ratajczyk et al. 2010, Miciukiewicz 2011, Degórska 2012, 2017, Drapella-Hermansdorfer 2014, Dziekańska 2015 and more].

In this text, the theme is focused on the broad concept of naturbanization. "By naturbanization we understand the identification and analysis of urbanization processes on rural areas close to and/or inside protected areas of specific natural values. The process of urbanization are understood in the widest sense, and include divers driving forces of rural and landscape change. It is possible to mention, among others,

- the arrival of new inhabitants that live in an area where the quality of the environment is a concrete fact;
- the re-activation of traditional economic activities;
- its influence upon the promotion of new activities to the consumption of nature and heritage; [...]
- changes in land cover - land use of agriculture land. " [Prados 2009, p. 5-6].

The current research took place in the Leoncin commune in the Mazowieckie Voivodeship, Nowodwory district, where numerous student internships of the Faculty of Geography and Regional Studies at the University of Warsaw have been organized since 1990's. Throughout many years, the program of the internship included not only the environmental research, but also the economic conditions of the inhabitants that have been dynamically changing as a result of the economic transformation after the year of 1989 and Poland's adaptation to the requirements of the European Union in the field of environmental protection. It needs to be pointed out that the commune can be proud of unique microclimatic qualities (among others, the high content of essential oils in the air) and environmental richness that is unique in Europe. In the area of the Leoncin commune, the following territories have been created:

- a) Kampinos National Park (1959) and its buffer zone. A part of this area has been added to UNESCO's list of biosphere reserves in 2000;
- b) Natura 2000 Special Protection Areas<sup>1</sup>: "Kampinos Forest"<sup>2</sup> (PLC 290001) Special Area of Conservation (SAC), "Middle Vistula River Valley" (PLB 140004) Special Protection Area (SPA) and "Kampinos Vistula Valley" (PLH 140029) Special Area of Conservation (SAC);
- c) Wikliny Wislane and Zakole Zakroczymskie Nature Reserves (1998);
- d) Environmental Protection Area of the Warsaw Protected Landscape Area (1997).

Today, the areas where the commune villages are located, stretch out between Natura 2000 Special Protection Areas i.e. the **Kampinos Forest and the Vistula Valley (Map 1)**. These areas have been officially recognized since 2008 and 2011 as Sites of Community Importance (SCI), (Natura 2000, map: PL.ZIPOP.1393.N2K.PLC140001, <http://natura2000.gdos.gov.pl/wyszukiwarka-n2k>). As a result, the inhabitants are required to adapt to clearly formulated principles of environmental protection which at the same time limit their economic activities. However, according to the opinion of the regional civil servants from the Mazowieckie Province Office, this situation has also positive aspects, because "new natural habitats provide the municipalities

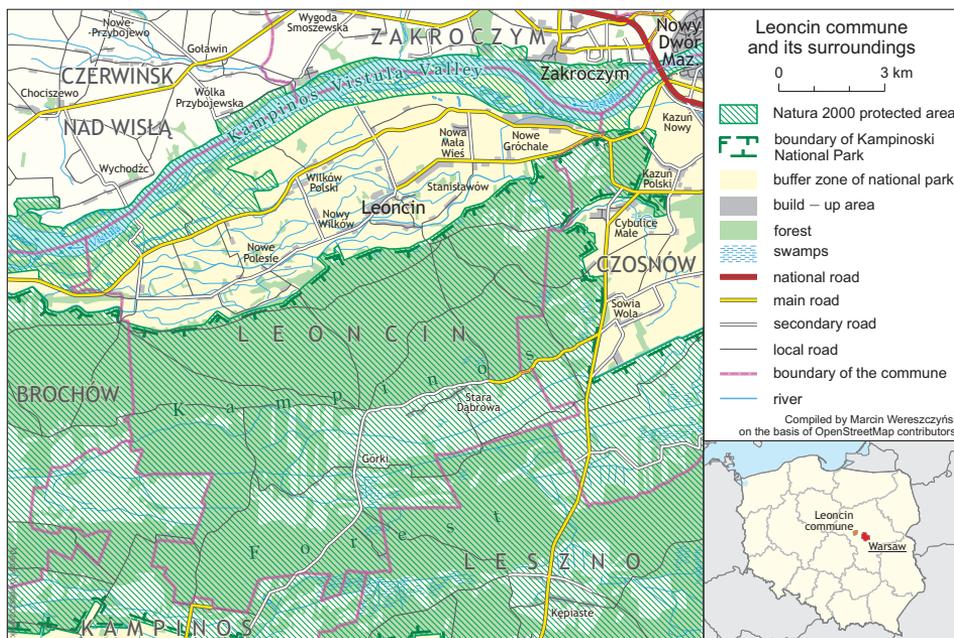
---

<sup>1</sup> Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds and **Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora** made it obligatory "for the member states of the European Union to introduce legislative basis for the development of network of areas that protect endangered flora and fauna species, as well as natural habitats at a European scale. These two directives aim at creating a system of areas that constitute a functionally coherent network – the European Ecological Network Natura 2000 which makes it possible to implement a coherent policy of protection of environmental resources in the area of the European Union, which is created within the frames of Special Protection Areas (SPA) and Special Areas of Conservation (SAC) indicated in the Directive 2009/147/EC on the conservation of wild birds and **Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. The obligation to indicate the Natura 2000 Special Protection Areas is the same for all EU member countries, and therefore, also for Poland**".

[Natura 2000 w Europie, <http://natura2000.gdos.gov.pl/natura-2000-w-europie>].

<sup>2</sup> The area constitutes a part of the international "Kampinos Forest Biosphere Reserve". Among others, it encompasses a bird sanctuary of the European rank E 45. In the bird sanctuary, over 150 bird species have been reported. The fauna of the Kampinos Forest is estimated to include approximately 16 000 species. Among the vertebrates, there are: 13 species of amphibians, 6 species of reptiles, 52 species of mammals including 3 species after a successful reintroduction, i.e. an elk (1951), a beaver (1980) and a lynx (1992) [Natura 2000, <http://natura2000.gdos.gov.pl/wyszukiwarka-n2k>].

with the opportunity of promotion in the field of agritourism and ecotourism. This situation also gives an opportunity to develop small-size entrepreneurship and it offers an excellent location for scientific research” [Mazowiecki Urząd Wojewódzki w Warszawie, Obszary Natura 2000 na Mazowszu].



**Map 1.** Leoncin commune and its surroundings (Source: on the basis Natura 2000, map: PL.ZIPOP.1393.N2K.PLC140001, <http://natura2000.gdos.gov.pl/wyszukiwarka-n2k>).

**Mapa 1.** Gmina Leoncin i jej otoczenie (Źródło: na podstawie Natura 2000, mapa: PL.ZIPOP.1393.N2K.PLC140001, <http://natura2000.gdos.gov.pl/wyszukiwarka-n2k>).

When it comes to the problems related to living in the area of the Kampinos National Park (among others, in the villages of Górki, Zamość, Dąbrowa Stara and Dąbrowa Nowa), the local community and the commune authorities have been familiar with them for over 40 years. However, further limitations in the field of environmental protection linked to the creation of the Natura 2000 Special Protection Area only recently did surprise the inhabitants of the commune. In the years 2013-2014, the concerns expressed during the meetings of the inhabitants and regional civil servants with the Regional Directorate for Environmental Protection in relation to the preparation of the plan for protective tasks in the area of the Kampinos Vistula Valley referred to:

- the lack of proper social consultations and general difficulties in the cooperation between the authorities supervising the environmental protection on the one hand,

- and the municipalities located in the neighbourhood of the Kampinos Vistula Valley on the other hand,
- a general character of maps and a laconic tone of documents presented on the websites of the General Directorate for Environmental Protection, which makes it impossible for the authorities of municipalities to properly prepare for the upcoming changes in the field of land management.

Relatively late, only during these meetings, the participants started to discuss the practical problems in the everyday life of inhabitants because of the newly created area of protected environment (*Raport z drugiego spotkania dyskusyjnego...* 2013). It needs to be emphasized that the area of the Kampinos Vistula Valley has been proposed by the Polish decision-makers in the second, follow-up phase of creating the Natura 2000 Special Protection Areas. However, according to the Ministry of the Environment, the process of social consultations was conducted in the proper way, according to Article 27, Paragraph 2 of the *Act of 16 April 2004 on the protection of nature*. The response of the Secretary of State at the Ministry of the Environment, on behalf of the Minister, to the interpellation no. 1576 concerning the conflict generating circumstances of adding the area of the Kampinos Vistula Valley to the Natura 2000 Program (while referring to the stance represented by the European Commission) was as following: *“While referring to the social and economic justifications that influenced assigning the area in question, I would like to inform that the selection of the given areas qualified to be added to the Natura 2000 network takes place only on the basis of scientific criteria. Economic, social, regionally conditioned and local criteria have to be treated as a second-important priority”* [Odpowiedź sekretarza stanu w Ministerstwie Środowiska... 2012].

### **Definition of naturbanization**

The analyzed topic constitutes a part of the naturbanization concept, defined anew by Prados [2009] in a voluminous publication devoted to this thematic field.

### **Methodology**

The beauty of the commune landscape, and most of all, the conflict resulting from its location and referring to the environmental care on the one hand, and the economic activities of its inhabitants on the other hand, has motivated the researchers to concentrate exactly on this aspect of naturbanization. Since the beginning of the 21<sup>st</sup> century, the research has been carried out on the following topics: professional activities of the inhabitants, commune administration in the conditions of transformation and the subsequent adaptation to the requirements of the European Union, as well as real and expected availability of services and the *urban sprawl* [Czerny et al. 2009]. However, the

aim of research introduced in 2007, and subsequently in the years 2013-2014 and 2017 was to find the answer to the question whether the inhabitants are satisfied with living in the vicinity of the protected areas, in this case between the Kampinos National Park (with which they have been familiar since many years) and the Natura 2000 Special Protection Area (a new area), or perceive it as an imposed and difficult neighbourhood. The detailed questions have been formulated in the following way:

1. Do you enjoy living in the Leoncin commune?
2. Do you perceive the neighbourhood of the Kampinos National Park as an advantage or a disadvantage?
3. Do you perceive the neighbourhood of the Natura 2000 Special Protection Area as an advantage or a disadvantage?
4. Would you like to move to the city?
5. Would you like to see the Leoncin commune expand?
6. Would your family members like to become involved in the development/expansion of the commune?
7. In which way would you like to become involved in the development of your commune?
8. From which environmental resources would you be ready to resign to the benefit of naturbanization?
9. Would you give your consent to the environmental degradation of the commune in case of various investments (indicated in the survey)?
10. Would you prefer the environmental protection laws to be harsher or milder?

The research was carried out in 2007 and it was repeated in the years 2013-2014 and 2017 (always in the last days of June) as a part of the internship in the field of socio-economic geography organized for the students of the Faculty of Geography and Regional Studies at the University of Warsaw. Each time, the basis for research constituted a similar set of open questions in the questionnaire implemented in the face to face encounters. Each year, apart from 2017, the survey was conducted on Saturday, i.e. on a holiday, so that the respondents were likely to be at home, also those working outside the commune.

The results obtained during the 2007 research (the so called “primary research”) were linked to the first attempts to designate the Natura 2000 Special Protection Areas in Poland. The results of the surveys from 2013-2014 and 2017 came from the so called “secondary research” and they refer to the period of time when the functioning of the Natura 2000 Special Protection Area became a legal fact. This legal decision was put into practice in the area of Leoncin commune after 2008, while 2013 marked the beginning of the phase of arguments with the Regional Directorate for Environmental Protection in Warsaw, which supervises these areas. In

the primary research, 384 questionnaires have been collected, while the secondary research resulted in 577 questionnaires from the years 2013-2014 and 78 follow-up questionnaires in 2017. In the questionnaire from 2017, not all questions from the previous questionnaires have been repeated.

In none of the survey phases the representative sample has been identified, so that the obtained results refer only to the analyzed group of respondents of the Leoncin commune. The results need to be treated as an outline of the naturbanization problem at the local scale. The results have been processed with the use of the SPSS and Excel packages.

In a broader context, the collected results are linked to the level of the socio-economic development of the commune and the professional activities of its inhabitants. It can be assumed that the low level of economic development of the commune and the lack of workplaces might influence the low level of satisfaction represented by the inhabitants and the radicalization of their opinions regarding the need to follow the rules of the environmental protection of environmentally valuable areas in their commune. In fact, the rules in question are those that limit their economic activities.

### **Socio-economic characteristics of the Leoncin commune**

The Leoncin commune is located within the distance of approximately 45 km north-west from Warsaw. It encompasses the area of 159 km<sup>2</sup>, whereby 97 km<sup>2</sup> is covered by the area of the Kampinos National Park which was created in 1959. The half of the commune area (50%) encompasses forests and forest lands, whereas agricultural land occupies 38% of its total area [*Statystyczne Vademecum Samorządowca. Leoncin 2017*]. There are 32 villages in the commune [*Plan Odnowy Miejscowości LEONCIN w Gminie Leoncin na lata 2010-2017*]. The past of the Leoncin village has been immortalized in the memoirs of one of the most important writers of the 20<sup>th</sup> century Isaac Bashevis Singer, who was awarded the Nobel Prize in Literature 1978 and wrote his works in Yiddish language, as well as in the books of his brother Israel Joshua Singer. They were born in a densely populated Jewish community in Leoncin (Isaak Bashevis Singer in 1904), that remained only a memory, just like this whole community of writers in Leoncin from these times<sup>3</sup>. However, Leoncin is sometimes visited by tourist groups of Jewish communities who mainly live outside Poland.

---

<sup>3</sup> The commune also appeared in a movie. Its environmental and cultural richness were appreciated by the distinguished Polish director Andrzej Wajda, who was awarded with the honorary Oscar for his contribution to world cinema, in the movies “*The Birch Wood*” and “*Pan Tadeusz: The Last Foray in Lithuania*”, which became classics of the Polish cinematography.

More heritage has been preserved from the Dutch and German settlements that were established in the 2<sup>nd</sup> half of the 18<sup>th</sup> century with the permission of the King Stanisław August Poniatowski on the wetlands of the village Wilków in the vicinity of the Vistula river, which belonged to the commune. At that time, a linear village was created and its cultural landscape has been preserved in a relatively good condition until today. Unfortunately, the traditional wooden architecture linked to the Dutch settlement is in decline. In order to preserve the memory about the previous settlers, the wooden Evangelical church of the Augsburg confession from 1923 located in this area has been renovated. Moreover, an asphalt road has recently been created on the flood bank, which connect the post-Dutch settlements located in the vicinity of the Vistula river. Maybe these steps will support the development of the agritourism farms, which partly make use of the old, wooden buildings. There are already two agritourism farms located in this area: “Dom między Wisłą a Kampinosem” (“The House between Vistula and Kampinos”) and “Domek nad łąkami. Między Wisłą a Kampinosem w Nowym Secyminie” (“The House Over the Meadows. Between Vistula and Kampinos in Nowy Secymin” (Booking.com). Today Leoncin is a rural commune. Its current economic development is shaped, however, not by agriculture, but through the house building sector and recreation building sector. The number of population is constantly growing. Within 10 years it has grown by approximately 600 persons, which might indicate a systematic influx of new inhabitants interested in living in an ecologically clean and beautiful area (Table 1). In the documents of the local area development plan in the Leoncin commune, it has been agreed that the priority task in this area is the protection of the environmental richness, especially the landscape beauty, as well as the natural and unique way in which the settlements have been created. In the areas covered with various forms of environmental protection, which are the most valuable from the environmental perspective, the legally valid documents that regulate the development methods and inhabiting these areas, are in power: [*Dziennik Urzędowy Województwa Mazowieckiego, Uchwała Nr XIX/105/16 z dnia 24 lutego 2016*].

The restoration plan of the Leoncin commune (Restoration plan of the LEONCIN settlement in the Leoncin commune for the years 2010-2017) stipulates the improvement of life conditions and security of the inhabitants of this village and the increase of attractiveness of this settlement. Out of 16 detailed points, the preservation of the environmental heritage, i. e. the increase of inhabitant’s knowledge about the need to preserve the environmental heritage and marking valuable and interesting environmental sites, was mentioned down on the list as point no. 14. Meanwhile, as pointed out by the authorities of Leoncin in 2010, there have been negative circumstances noticed in the area of the commune, such as: the high level of poverty and exclusion, high rate of long-term unemployment, low number of registered business entities, as well as a low level of education and a visible deficit of professional

qualifications among the inhabitants. The preferred organic farming in the area of the commune is not cost-effective due to the lack of favorable soil conditions and specialized knowledge among the commune inhabitants.

**Table 1.** Leoncin Commune: selected statistical data from the years 2006 and 2014-2016

**Tabela 1.** Gmina Leoncin: wybrane dane statystyczne dla roku 2006 i lat 2014-2016

Selected statistical data	2006	2014	2015	2016
Population	5095	5532	5556	5548
Population density (km <sup>2</sup> )	32	35	35	35
Women per 100 men	101	102	102	102
Non-working age population per 100 persons of working age	36,9	58,6	59,2	60,4
Total revenue of the commune budget per capita in PLN	nd.*	3230	3653	3415
Total expenditure of the commune budget per capita in PLN	nd.	2918	4091	3495
Employed persons per 1000 persons	122	125	124	132
Registered unemployment as a percentage of the population of working age	5,1	5,8	4,2	4,0
Business entities in the National Official Business Register per 10 000 persons of working age	nd.*	1296	1313	1353
Flats handed over for use to the commune inhabitants per 10 000 people	nd.*	38	43	90

\*nd. – no data

Source: Statystyczne Vademecum Samorządowca. Leoncin, 2017, GUS, [https://warszawa.stat.gov.pl/vademecum/vademecum\\_mazowieckie/portrety\\_gmin/nowodworski/1414032\\_leoncin.pdf](https://warszawa.stat.gov.pl/vademecum/vademecum_mazowieckie/portrety_gmin/nowodworski/1414032_leoncin.pdf); Bank Danych Regionalnych GUS (Leoncin), [www.stat.gov.pl](http://www.stat.gov.pl)

Some employment opportunities for the commune inhabitants are provided by local companies, such as the printing house VILPOL which was established in 1991 and hires over 200 people; grocery shops, a bakery shop, Cooperative of Machinery Rings, Production Cooperative RYTM, District Motor Vehicle Inspection Station, Installation and Construction Company Michałów, etc. However, most inhabitants are forced to look for work in Warsaw, Łomianki, Sochaczew and Nowy Dwór Mazowiecki. Self-employed inhabitants make up a small percentage of the population. Even though at a slow pace, the employment rate is constantly growing, while the unemployment rate is sinking and gradually more business entities are being registered in the National Official Business Register. Most business entities operate within the field of wholesale and retail trade, automobile and motorcycle repair, as well as construction. However, the inhabitants of the commune are growing older and the groups of population which are not of working age are increasing. This is partly due to the fact that people who migrate from the city to the commune are of retirement age and they would like to enjoy a beautiful surrounding in their autumn years. This situation is indicated by a high growth of number of flats handed over for use in the recent years, as well as many implemented housing invest-

ments in close neighbourhood of the Kampinos National Park (Table 1). Permanent residence registrations boomed in 2012, and in 2016 a visible decrease in the migration balance has been noticed [*Statystyczne Vademecum Samorządowca. Leoncin*, 2017].

### Survey results

In 2007, 384 surveys were conducted, while 328 of them were used for the purpose of the further analysis. 52% of respondents were female [Brzuska 2008]. The biggest group of respondents consisted of persons aged 46-65 (30%), followed by persons above 65 years old (21%). The majority (39%) obtained the level of secondary education. A slightly smaller group of respondents (27%) obtained a primary education level and has been living in the commune throughout its whole life (39%) or over 20 years (39%). Almost the half of the respondents (49%) own an agricultural holding. The average amount of persons in the agricultural holdings of the respondents amounted to 4.2 and in every family there was one child at school age on average. The majority of respondents (76%) stated that they have a family member who works outside the agricultural sector, and in this group of respondents, 67% stated that this person works outside the commune.

83% of the respondents were satisfied with living in the Leoncin commune and to justify this point of view, they mentioned the following benefits: peace and quiet, security, personal attachment to their local area, clean air and living in the neighbourhood of environmental sites. The unsatisfied respondents amounted to 15%. As a reason for their discontent they mentioned: difficulties with commuting to Warsaw, lack of activities and perspectives for a better life for children and teenagers, as well as lack of employment opportunities in the commune. Almost 90 % of the respondents stated that they would not like to move to the city. However, the definite majority of the respondents (85%) would like to see the Leoncin commune develop and for this purpose, they would be ready to resign from the benefits of the environment and security to the benefit of naturbanization. In this group, the majority (27% of respondents) would be ready to resign from some green areas; 15% respondents could resign from peace and quiet and 8% from fresh air; 20% of respondents stated that they could sacrifice the feeling of security; 3% indicated that they could resign from other benefits, e.g. giving their permission to the sale of commune grounds to the benefit of new housing construction. However, 185 respondents (42%) would not like to resign from any aspects of the environmental richness in their commune.

The biggest group of the survey respondents in 2007 was made up of persons who would give their consent to the environmental damage to the benefit of development and the improvement of road infrastructure (27%), construction of sport and recreation

facilities (22%), construction of waterworks and sewage system network (20%), construction of residential housing (11%) and the construction of a supermarket (8%). In order to justify their readiness to sacrifice the environmental richness, the respondents pointed to the possibility of reaching a better life standard and the influx of new inhabitants. They highlighted the opinion that the commune should develop and new investments are indispensable. Those against such changes claimed that such steps would cause noise pollution, overpopulation and will be linked to the lack of security.

From the point of view of the most respondents (72%), the neighbourhood of the Kampinos National Park is an advantage. Only 12% of all respondents stated that it is a disadvantage, and 41 persons did not have an opinion on that matter. A similar set of answers was given in regard to the Natura 2000 Special Protection Area, whereby slightly more persons thought that the presence of this area in the commune is a disadvantage (18%). Almost the half of respondents (49%) was for milder regulations concerning the environmental protection. 39% of them stated that they would welcome harsher regulations and pointed towards illegal dumps and a lack of system for punishing the culprits. The majority of the respondents (65%) would like to contribute to the development and expansion of the commune. The highest number of respondents (24%) would like to become involved in the agri-tourism and catering sector (17%), establish a stud farm (15%), run a boarding house (12%), establish an entertainment center (11%), a sport equipment rental (8% of all respondents) or a golf course (5%). The respondents also pointed out to other ideas that could support the development and expansion of the village, such as: the kindergarten, parking lots, car rental, tourist information center, football pitch, swimming pool, playground for children, pub, coffee shop, or even a cinema or a theatre (Brzuska 2008). In the years 2013-2014, 577 respondents took part in the survey and approximately 52% of them were female. In the most recent survey, which was conducted in 2017, there were 78 respondents, among them 41% were female. The biggest group of respondents both in the years 2013-2014 and 2017 were persons at the age of 46-65 (30% and 37% respectively), followed by persons over 65 years old (19% and 24% respectively). The majority of respondents from the years 2013-2014 obtained secondary education (35%) or vocational education and have been living in the Leoncin commune since their birth (31%) or for 21-30 years (15%)<sup>4</sup>. Almost the half of the respondents (42%) own an agricultural holding. However,

---

<sup>4</sup> In 2017, 39% of respondents obtained vocational education, and slightly less (36%) of them obtained secondary education. Almost 20% have been living in the commune since their birth, and 37% of respondents for less than 20 years. Such representation of respondents might have resulted from the day of the week on which the survey was conducted. It was the only year in which the survey was conducted on a workday and not on Saturday.

the majority of the respondents said that their family members work outside the agricultural sector (77%), and in this group of respondents, 74% work outside the commune, while the others in the area of the commune.

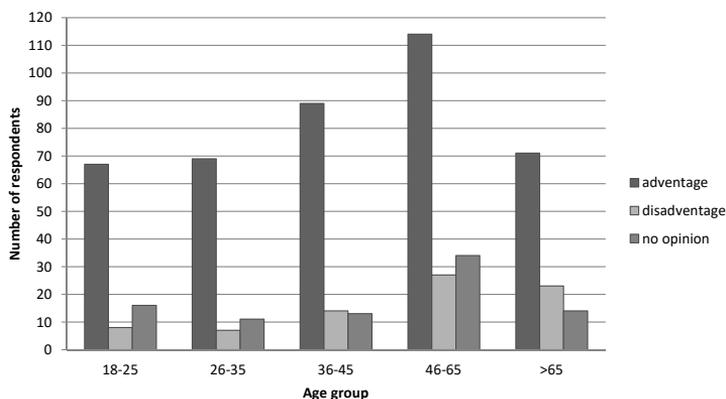
The further part of the conducted survey aimed at showing whether the inhabitants of the Leoncin commune are satisfied with their living area and how they perceive the neighbourhood of the protected area. In this group of respondents, over 83% stated that they are satisfied with their living area. In 2017, as many as 91% of the respondents claimed that they are happy with living in their commune, but this group also included a higher percentage of new inhabitants. Among the enlisted reasons for this perception were: a good village mayor, peace and quiet, green area and the neighbourhood of the Kampinos National Park. It is interesting that among the reasons for the positive evaluation of the commune, an important role was ascribed to a non-environmental factor – the activities of local authorities were positively assessed.

When the respondents were directly asked whether they perceive the neighbourhood of the Kampinos National Park as an advantage or disadvantage, the majority (68%) claimed that the vicinity of this area is an advantage (Fig. 1, 2). The same percentage of respondents gave a positive answer to this question in 2017. The mature age respondents, i.e. over 45 years old, were those who most frequently perceived the neighbourhood of the Kampinos National Park as an advantage, whereby gender did not play any role in this group. Among the reasons for the positive answers, the following aspects have been enlisted: vicinity of environmental sites, clear air, peace and quiet. Some persons perceived the opportunity to pick mushrooms and berries as an advantage of their commune. At the same time, as many as 15% of respondents perceived such a localization as a disadvantage. The arguments for this perception included: construction limitations, harsh environmental protection laws, including animal protection and practices relating to the resettlement of people.

The neighbourhood of the Natura 2000 Special Protection Area was perceived among 46% of the surveyed inhabitants of the Leoncin commune in the years 2013-2014 as an advantage, while 16% of them saw it as a disadvantage. In 2017, the neighbourhood of the Natura 2000 areas was perceived as an advantage by a bigger group (68%) of respondents (this group consisted of a higher percentage of new inhabitants), and by a smaller group (7%) as a disadvantage, while almost one third of respondents did not have an opinion on this topic.

The majority of respondents in the years 2013-2014 (almost 85%) stated that they would not like to move to the city, but they would like to see their commune expand (78%). In this group, 61% of respondents would be willing to become involved

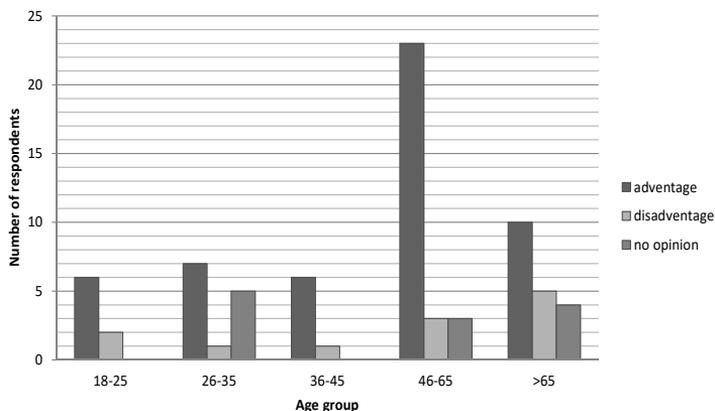
in the development of the commune, preferably through their involvement in the agritourism sector (56%) and catering sector (34%) (Fig. 3). A much lower amount of respondents pointed out to other possibilities mentioned in the survey. Similar answers were selected in 2017. 79% of respondents would like to see their commune expand, whereby 60% of them would like to become actively involved in this development, and 57% of respondents pointed to the agritourism sector.



**Fig. 1.** Answers of respondents in the years 2013-2014 to the question: Do you perceive the neighbourhood of the Kampinos National Park as an advantage or a disadvantage?

**Ryc. 1.** Odpowiedzi respondentów w latach 2013-2014 na pytanie: Czy postrzegasz sąsiedztwo Kampinoskiego Parku Narodowego jako zaletę czy wadę?

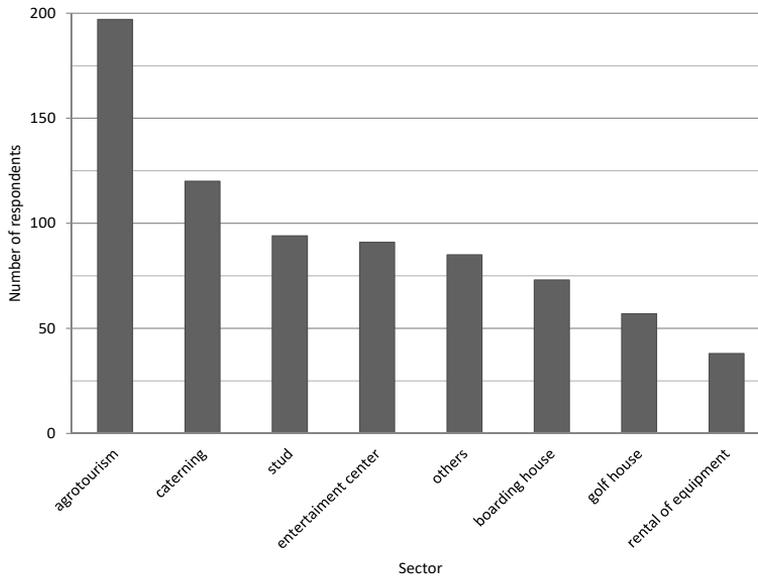
Source: own elaboration / Źródło: opracowanie własne



**Fig. 2.** Answers of respondents in the year 2017 to the question: Do you perceive the neighbourhood of the Kampinos National Park as an advantage or a disadvantage?

**Ryc. 2.** Odpowiedzi respondentów w 2017 roku na pytanie: Czy postrzegasz sąsiedztwo Kampinoskiego Parku Narodowego jako zaletę czy wadę?

Source: own elaboration / Źródło: opracowanie własne



**Fig. 3.** Answers of respondents in the years 2013-2014 to the question: In which way would you like to become involved in the development of your commune?

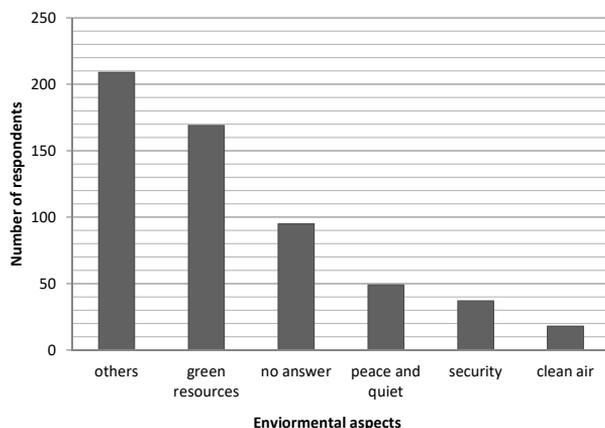
**Ryc. 3.** Odpowiedzi respondentów w latach 2013-2014 na pytanie: W jaki sposób chciałbyś zaangażować się w rozwój swojej gminy?

Source: own elaboration / Źródło: opracowanie własne

When it comes to the urbanization process, equally in the years 2013-2014 and in 2017 the respondents would be most willing to resign from the so called other elements, such as barren areas and, in general, green areas (Fig. 4).

It might be assumed that the richness of green areas in the commune motivated the respondents to think that that resigning from a bit of green resources would seemingly not result in the visible decrease of their life quality. The respondents were the least ready to resign from such aspects as clean air and security. However, their answers depended on their age and gender (Fig. 5). Peace and quiet are mostly appreciated by elderly inhabitants over 65 years old (Fig. 5), and when it comes to the gender division, by women (Fig. 6). The 2017 survey has shown that young inhabitants below 25 years old value peace and quiet the least, and young women are frequently more ready to resign from this aspect (Fig. 7). Security is appreciated more by mature persons (but the differences between age groups are quite invisible), and when it comes to the gender division in general, by women. Interesting preferences have been presented among the respondents above 45 years old in the years 2013-2014 and in 2017. A surprisingly considerable group of respondents chose the category "Other" and mostly justified this choice with the words that they would not like to resign from

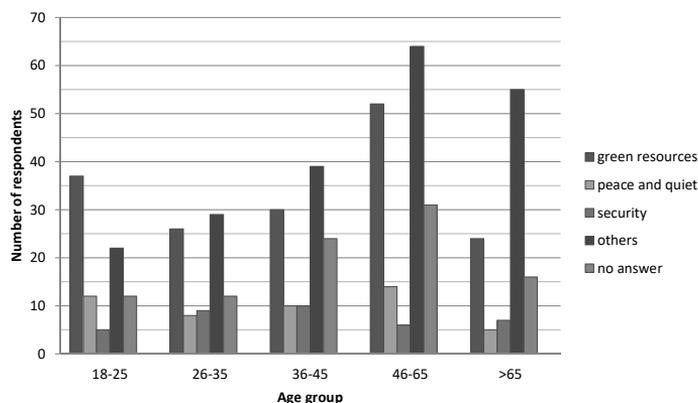
any enlisted aspects. It might be that the sentiment towards their commune might be the reason behind this answer, which naturally deserves further research. It also needs to be indicated that as many as 16% of the respondents did not answer to this question. Among those who could most easily resign from the present environmental resources are persons from the age group 35-45 and it might be presumed, that they work during the majority of their time outside their commune (Fig. 8).



**Fig. 4.** Answers of respondents in the years 2013-2014 to the question: From which environmental aspects would you be ready to resign to the benefit of naturbanization?

**Ryc. 4.** Odpowiedzi respondentów w latach 2013-2014 na pytanie: Z jakich aspektów środowiskowych byłbyś gotowy zrezygnować na rzecz urbanizacji?

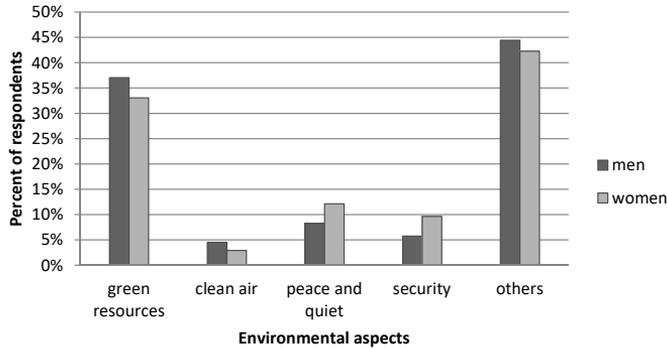
Source: own elaboration / Źródło: opracowanie własne



**Fig. 5.** Answers of respondents in the years 2013-2014 (according to the age group) to the question: From which environmental aspects would you be ready to resign to the benefit of urbanization?

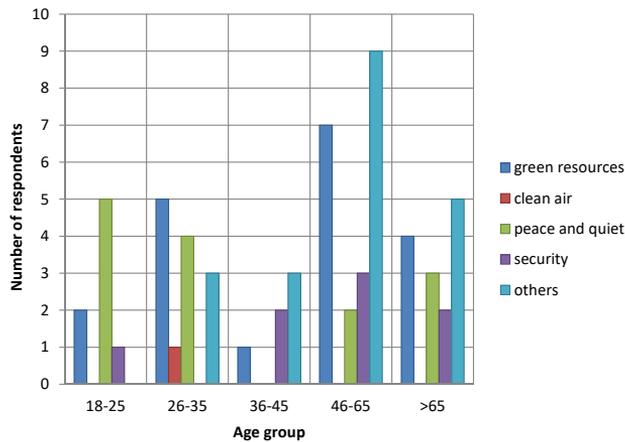
**Ryc. 5.** Odpowiedzi respondentów w latach 2013-2014 (według grupy wiekowej) na pytanie: Z jakich aspektów środowiskowych byłbyś gotowy zrezygnować na rzecz urbanizacji?

Source: own elaboration / Źródło: opracowanie własne



**Fig. 6.** Answers of respondents in the years 2013-2014 (according to the gender) to the question: From which environmental aspects would you be ready to resign to the benefit of naturbanization?

**Ryc. 6.** . Odpowiedzi respondentów w latach 2013-2014 (według płci) na pytanie: Z jakich aspektów środowiskowych byłbyś gotowy zrezygnować na rzecz urbanizacji?  
Source: own elaboration / Źródło: opracowanie własne

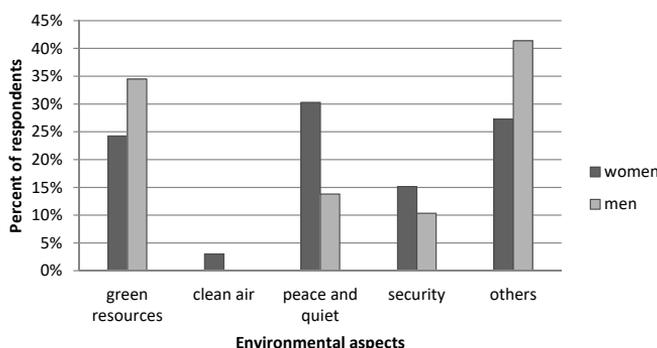


**Fig. 7.** Answers of respondents in 2017 (according to the age group) to the question: From which environmental aspects would you be ready to resign to the benefit of naturbanization?

**Ryc. 7.** Odpowiedzi respondentów w 2017 roku (według grupy wiekowej) na pytanie: z jakich aspektów środowiskowych byłbyś gotowy zrezygnować na rzecz urbanizacji?  
Source: own elaboration / Źródło: opracowanie własne

When asked which kind of investments were positively assessed by the local community, even if their implementation was linked to the environmental degradation, pragmatic answers have been given. The construction of indispensable infrastructure in the commune, i.e. the construction of roads or sewage system and waterways or sport facilities were accepted most easily (Table 2). However, none of the proposed

investments was given the full consent of the respondents, if it had to devastate the environmental richness. It is interesting that establishing telephone network was not accepted as a good idea (as many as 83% expressed their lack of consent). Very similar answers were given during the 2017 survey. It needs to be pointed out that it was a multiple choice question and that only 5 persons (out of 577 in the years 2013-2014) did not choose an answer to this question.



**Fig. 8.** Answers of respondents in 2017 (according to the gender) to the question: From which aspects would you be ready to resign to the benefit of the urbanization process?

**Ryc. 8.** Odpowiedzi respondentów w 2017 roku (według płci) na pytanie: z jakich aspektów byłbyś gotowy zrezygnować na korzyść procesu urbanizacji?

Source: own elaboration / Źródło: opracowanie własne

**Table 2.** Answers to the question in the years 2013-2014: Would you give your consent to the environmental degradation of the commune in case of various investments (indicated in the survey)?

**Tabela 2.** Odpowiedzi na pytanie zadane w latach 2013-2014: Czy wyraziłbyś zgodę na degradację środowiska przyrodniczego gminy w przypadku wprowadzenia różnych inwestycji (wskazanych w ankiecie)?

Name of investment	Number of respondents who said "YES"	Number of respondents who said "NO"	Number of respondents who said "YES" in %	Number of respondents who said "NO" in %
1. Development and improvement of road infrastructure	402	170	70%	30%
2. Construction of waterways and sewage system network	337	235	59%	41%
3. Establishing telephone network	95	477	17%	83%
4. Construction of residential housing	151	421	26%	74%
5. Construction of supermarkets	142	430	25%	75%
6. Construction of sport and recreation facilities	337	235	59%	41%
7. Other	45	527	8%	92%

Source: own elaboration / Źródło: opracowanie własne

However, the question about the reasons for which the respondents think that some investments are or are not worth the damage of the environment, posed serious difficulties both in the years 2013-2014 and in 2017. Most respondents were not able to formulate any argument for or against (cf. Table 2, 3).

As a response to the question about the consent to the environmental degradation in case of selected types of investments, the gender of the respondents from the years 2013-2014 did not cause a difference in their answers. Both women and men were in majority against establishing the telephone network, construction of residential housing or a supermarket. However, they were for the development and improvement of road infrastructure, waterways and sewage system network and the construction of sport and recreation facilities. In 2017, women were in majority against the development of the road infrastructure, as well as the improvement of waterways and sewage system network on the cost of the environment.

**Table 3.** Answers to the question in the years 2013-2014: Would you give your consent to the environmental degradation of the commune in case of various investments (indicated in the survey)? If yes, why?

**Tabela 3.** Odpowiedzi na pytanie zadane w latach 2013-2014: Czy wyraziłbyś zgodę na degradację środowiska przyrodniczego gminy w przypadku wprowadzenia różnych inwestycji (wskazanych w ankiecie)? Jeśli tak, to dlaczego?

“YES” answers	Number of answers
no justification	243
they are needed (there are not at all or too few such buildings)	64
improvement of life quality	49
more entertainment	41
they support the development	39
they are in a bad condition	29
they activate young people	24
development of tourism industry	10
private shops are too expensive	2
new workplaces	2
other	2

Source: own elaboration / Źródło: opracowanie własne

The age of respondents differentiated to some extent the answers both in the years 2013-2014 and in 2017. Elderly inhabitants (over 65 years old) were more often against the construction of new residential housing, establishing a telephone network, construction of a supermarket, construction of sport and recreation facilities, and they were even in general against any changes (they made up a big group of respondents who said “NO” to the answer “Other”, Table 4, 5).

**Table 4.** Answers to the question in the years 2013-2014: Would you give your consent to the environmental degradation of the commune in case of various investments (indicated in the survey)? If not, why?

**Tabela 4.** Odpowiedzi na pytanie zadane w latach 2013-2014: Czy wyraziłbyś zgodę na degradację środowiska przyrodniczego gminy w przypadku wprowadzenia różnych inwestycji (wskazanych w ankiecie)? Jeśli nie, to dlaczego?

"NO" answers	Number of answers
no justification	456
noise pollution	19
pollution	19
overpopulation	18
because I like it here; environmental degradation	17
no necessity/need for investments	17
lack of security	11

Source: own elaboration / Źródło: opracowanie własne

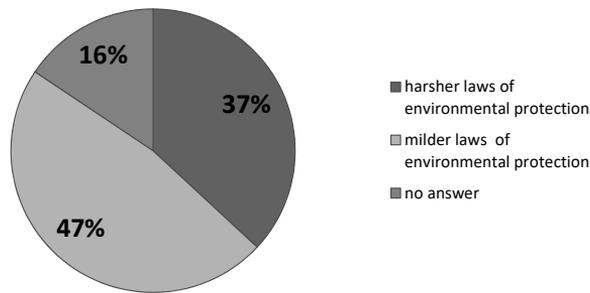
**Table 5.** Answers to the question in the years 2013-2014 in respect to the age group of respondents and the type of investment: Would you give your consent to the environmental degradation of the commune in case of various investments (indicated in the survey)?

**Tabela 5.** Odpowiedzi na pytanie zadane w latach 2013-2014 w odniesieniu do grupy wiekowej respondentów i rodzaju inwestycji: Czy wyraziłbyś zgodę na degradację środowiska gminy w przypadku różnych inwestycji (wskazanych w ankiecie)?

The age of respondents	18-25		26-35		36-45		46-65		>65	
	yes	no	yes	no	yes	no	yes	no	yes	no
Number of persons who said "yes"/"no"										
<b>Type of investment</b>										
improvement of road infrastructure	66	24	60	27	79	35	125	49	72	35
improvement of waterways and sewage system	41	49	51	36	65	49	113	61	67	40
telephone network	15	75	17	70	20	94	28	146	15	92
construction of residential housing	27	63	15	72	25	89	53	121	31	76
construction of supermarket	26	64	21	66	22	92	45	129	28	79
and the construction of sport and recreation	64	26	54	33	74	40	102	72	43	64
others	8	82	4	83	7	107	16	158	10	97

Source: own elaboration / Źródło: opracowanie własne

In this situation, the difference among the respondents from the years 2013-2014 and 2017 between those who would appreciate milder laws of environmental protection (47% and 58% respectively) and those who would like these laws to be harsher (37% and 38% respectively) is not much different from the results of the survey conducted in 2007.



**Fig. 9.** Answers of the respondents in the years 2013-2014 to the question: Would you prefer the environmental protection laws to be harsher or milder?

**Ryc. 9.** Odpowiedzi respondentów w latach 2013-2014 na pytanie: Czy wolałbyś, aby przepisy dotyczące ochrony środowiska były surowsze czy łagodniejsze?

Source: own elaboration / Źródło: opracowanie własne

The percentage of persons who are not sure about their opinion is growing, while the group of definite supporters of harsher laws has remained constant. However, it can be concluded from the conversations with them that they would be happy to see that the perpetrators of environmental damage are pursued in a more effective way.

## Conclusions

Two repeated phases of the survey gave approximate results which enable the following conclusions. They concern the group of respondents that took part in the research and not all inhabitants of the commune. While taking some precautions, it can be noticed that:

1. The respondents are in majority satisfied with living in their commune, despite numerous limitations linked to the legal protection of environmentally valuable areas;
2. A difficult question to answer was whether the neighbourhood of the Kampinos National Park is an advantage or disadvantage of living in the Leoncin commune. Although the percentage of those who perceive this neighbourhood as an advantage is higher, the group of the opponents is visible and has remained stable;
3. From the point of view of the inhabitants, still not much is known about the Natura 2000 protected areas. Therefore, in this case, there is a lack of judgment concerning the advantages and disadvantages of these areas for the development of the commune;
4. The definite majority would not like to move to the city, despite the difficulties which result from the limitations of the allowed business activities in the commune;
5. However, they would like to see their commune expand and their standard of life grow;

6. The inhabitants have been declaring since many years their will to contribute to the development of the commune, especially through the investment in the tourism sector. They expect the development of this sector in their commune, because it is rich in unique environmental sites;
7. The respondents are planning the development of the accommodation and catering services in the nearest vicinity of the Natura 2000. Some of them already offer rooms for rent in the agritourism households located nearby the Vistula river or they rent wooden cottage houses inherited from their grandparents to the tourists. However, these activities are not sufficient to become the main source of income for a family, because tourism is not that intensive in this commune. Unfortunately, the vicinity of Warsaw contributes to the fact that there are not many tourists who would like to use the commune accommodation or catering services in the winter season. Nevertheless, this topic requires separate research;
8. Among the inhabitants of the commune, not many respondents would give their consent to other investments accompanied by the devastation of the natural environment. They would appreciate to a higher degree the investments which support the functionality of the commune, which means that the indispensable road infrastructure, as well as the waterways and sewage system infrastructure are preferred. On the other hand, young inhabitants dream of sport infrastructure;
9. The inhabitants of the Leoncin commune show a personal attachment to their place of living and they appreciate the value of their living environment. Only few of them would be ready to sacrifice a part of the green area and resign from a high level of security. Scarcely anyone would support bigger changes in the commune infrastructure on the cost of the clean air. The biggest conundrum for those respondents who are unhappy with their current situation (ca. 15%) is the lack of workplaces in their commune;
10. Over a half of the inhabitants would like the environmental protection laws to be milder in the area that they inhabit, but the percentage of those who are for stricter laws remains the same (over one third).

The research conducted in 2017 showed that numerous new inhabitants, who settled down in this commune at the mature age, are visible in the public space. Since the survey took place on Friday (a workday for people of productive age) and not on Saturday (as in the previous years), more new persons, who moved to the commune after becoming pensioners, participated in the survey. These persons have a financial stability and they moved from a city to the countryside in order to enjoy the pristine nature. These respondents expressed a moderate enthusiasm for more considerable economic changes in the commune. However, they would be happy with an improvement of the basic infrastructure that could make their lives easier, so that they could grow older with dignity.

## Literature

- Bank Danych Regionalnych GUS (Leoncin)* [Regional Data Bank of Main Statistical Office. Leoncin], www.stat.gov.pl, 12.04.2008.
- Benfield F., Raimi M.D., Chen D.D.**, 1999, *Once There Were Greenfields: How Urban Sprawl is Undermining America's Environment, Economy, and Social Fabric*, National Resources Defence Council, New York.
- Bradley C., Altizer S.**, 2007, *Urbanization and the ecology of wildlife diseases*, Trends in Ecology & Evolution, 22 (2): 95-102.
- Brzuska J.**, 2008, *Naturbanizacja w gminie Leoncin* (Master thesis), Wydział Geografii i Studiów Regionalnych, Uniwersytet Warszawski (manuscript).
- Cumming G., Buerkert A., Hoffmann E., Schlecht E., von Cramon-Taubadel S., Tschardt T.**, 2014, *Implications of agricultural transitions and urbanization for ecosystem services*, Nature, 515: 50–57.
- Czerny M., Castillo G., ed.**, 2014, *Suburbanization Versus Peripheral Sustainability of Rural-Urban Areas Fringes*, Nova Science Publishers Inc., New York.
- Czerny M., Łęcka I., Wujek M.**, 2009, *The development of urbanization in the neighbourhood of Kampinoski National Park*, [w:] M. Prados, ed., *Naturbanizacja. New identities and processes for rural-natural areas*, CRC Press Taylor & Francis Group, Boca Raton- London-New York- Leiden: 29-45.
- Degórska, B.**, 2012, *Problemy planowania struktur przyrodniczych Obszaru Metropolitalnego Warszawy związane z żywiołową urbanizacją przestrzeni*, MAZOWSZE Studia Regionalne, 10: 89-106.
- Degórska, B.**, 2017. *Urbanizacja przestrzenna terenów wiejskich na obszarze metropolitalnym Warszawy: kontekst ekologiczno-krajobrazowy*, Instytut Geografii i Przestrzennego Zagospodarowania im. Stanisława Leszczyckiego. Polska Akademia Nauk, Warszawa.
- Drapella-Hermansdorfer A.**, 2014. *Urbanizacja przyrody – przyroda w kompozycji obszarów zurbanizowanych*, Problemy Ekologii Krajobrazu, 21(21).
- Dzikańska J.**, 2015, *Presja urbanizacji jako istotne zagrożenie Kampinoskiego Parku Narodowego* (Doctoral dissertation), Katedra Gospodarki Przestrzennej i Nauk o Środowisku Przyrodniczym, Politechnika Warszawska.
- Dziennik Urzędowy Województwa Mazowieckiego, Uchwała Nr XIX/105/16 z dnia 24 lutego 2016*, [Official Journal of the Mazowieckie Province, Resolution No. XIX/105/16 of 24 February 2016].
- Elmqvist T., Fragkias M., Goodness J., Güneralp B., Marcotullio P., McDonald R., Parnell S., Schewenius M., Sendstad M., Seto K., Wilkinson C., ed.**, 2013, *Urbanization, Biodiversity and Ecosystem Services: Challenges and Opportunities. A Global Assessment*, Springer Open, Dordrecht Heidelberg New York London.
- Escudero R., Robles C., de Azpillaga L., Gómez A., López A.M., Martínez B., Amador I., Luna J., Prados Velasco M., Simeón C.**, 2012, *Investigando en rural*, Ulzama, Navarra.
- Falkowski J. Brodowski P.**, 2008, *Ocena kontinuum miejsko-wiejskiego obszarów metropolitalnych Polski metodą potencjału społeczno-gospodarczego*, [The evaluation of the Polish metropolitan areas using method of socio-economic potential], [w:]

- W. Gierańczyk, M. Kluba, red., *Problemy i metody oceny kontinuum miejsko-wiejskiego w Polsce*, Studia Obszarów Wiejskich, Komisja Obszarów Wiejskich, Polskie Towarzystwo Geograficzne, 13: 11-36.
- Kaika M., Swyngedouw E.**, 2011, *The urbanization of nature: Great promises, impasse, and new beginnings*, [w:] G. Bridge, S. Watson, ed., *The New Blackwell Companion to the City*, John Wiley & Sons Ltd, Oxford: 567-580.
- Leszczycki, S., Kobendza, J., Tuszek A., Berezowski S., Smogorzewski J.**, 1979, *Kampinoski Park Narodowy i jego problematyka*, [Kampinos National Park], Dokumentacja Geograficzna, Instytut Geografii i Przestrzennego Zagospodarowania im. Stanisława Leszczyckiego. Polska Akademia Nauk, 1, Warszawa, [http://rcin.org.pl/Content/27272/WA51\\_39842\\_r1979-z1\\_Dokumentacja-Geogr.pdf](http://rcin.org.pl/Content/27272/WA51_39842_r1979-z1_Dokumentacja-Geogr.pdf), 4.05.2019.
- Lima P., Valdiviezo A., ed.**, 2015, *Ecourbanismo y habitabilidad regional. Contribuciones de America Latina*, Universidad Autonoma Metropolitana, Mexico.
- Machlis G., Field D.**, 2000, *National parks and rural development: practice and policy in the United States*, The Center for Resources Economy, Island Press, Washington D.C.
- Mazowiecki Urząd Wojewódzki w Warszawie Obszary Natura 2000 na Mazowszu*, [Mazowieckie Province Office in Warsaw, Natura 2000 areas in the Mazowieckie Province], <https://mazowieckie.pl/pl/aktualnosci/aktualnosci/5205,Obszary-Natura-2000-na-Mazowszu.html>, 18.01.2018.
- Mcdonald R., Kareiva R., Forman R.**, 2008, *The implications of current and future urbanization for global protected areas and biodiversity conservation*, Biological Conservation, 141 (6): 1695-1703.
- Miciukiewicz K.**, 2011, *Urbanizacja natury: w stronę relacyjnej ekologii miejskiej*, Przegląd Socjologiczny, 60(2-3): 167-186.
- Natura 2000 w Europie*, <http://natura2000.gdos.gov.pl/natura-2000-w-europie>, 11.01.2018.
- Natura 2000*, <http://natura2000.gdos.gov.pl/wyszukiwarka-n2k>, 11.01.2018.
- Odpowiedź sekretarza stanu w Ministerstwie Środowiska - z upoważnienia ministra - na interpelację nr 1576, w sprawie okoliczności wpisania obszaru Kampinoskiej Doliny Wisły do programu Natura 2000, 2012*, [Answer of the Secretary of State at the Ministry of the Environment], <http://www.sejm.gov.pl/sejm7.nsf/InterpelacjaTresc.xsp?key=7491EE15>, 11.01.2018.
- Pajnowska H.**, 2006, *Zakres kompromisów w ochronie środowiska wobec narastającej presji urbanizacji [Margin of compromise in environment protection against increasing urbanization]*, Przegląd Naukowy. Inżynieria i Kształtowanie Środowiska, 2 (34): 34-42, [http://iks\\_pn.sggw.pl/z34/przeglad34.pdf#page=34](http://iks_pn.sggw.pl/z34/przeglad34.pdf#page=34), 4.10.2018.
- Plan Odnowy Miejscowości LEONCIN w Gminie Leoncin na lata 2010 - 2017*, [Renovation Plan of Leoncin Settlement in the Leoncin Commune for the years 2010-2017], [http://www.leoncin.pl/\\_portals\\_/leoncin/CKFiles/dokumenty/Plan\\_odnowy\\_m.\\_Leoncin\\_na\\_lata\\_2010\\_-\\_2017.pdf](http://www.leoncin.pl/_portals_/leoncin/CKFiles/dokumenty/Plan_odnowy_m._Leoncin_na_lata_2010_-_2017.pdf), 11.01. 2018.
- Popławski, Ł.**, 2009, *Gospodarstwa agroturystyczne, ekoagroturystyczne i ekologiczne jako czynnik rozwoju turystyki na obszarach chronionych województwa świętokrzyskiego*, Zeszyty Naukowe Małopolskiej Wyższej Szkoły Ekonomicznej w Tarnowie, (3 (14): 139-152.

- Prados M.**, 2009, *Naturbanization: new identities and processes for rural-natural areas*, in *Naturbanization*. [w:] Prados M., ed., *New identities and processes for rural-natural areas*, CRC Press Taylor&Francis Group, Boca Raton- London-New York- Leiden: 3-7.
- Raport z drugiego spotkania dyskusyjnego w sprawie opracowania projektu planu zadań ochronnych dla obszaru Natura 2000 Kampinoska Dolina Wisły*. PLH 140029, [Report from the second discussion meeting on the development of a draft plan of protective tasks for the Natura 2000 area of the Kampinos Vistula Valley], 2013, [http://warszawa.rdos.gov.pl/files/artykuly/21592/Sprawozdanie\\_z\\_II\\_spotkania.pdf](http://warszawa.rdos.gov.pl/files/artykuly/21592/Sprawozdanie_z_II_spotkania.pdf), 15.01.2018.
- Ratajczyk, N., Wolańska-Kamińska, A., Kopeć, D.**, 2010, *Problemy realizacji systemu przyrodniczego miasta na przykładzie Łodzi*, [w:] M. Burchard-Dziubińska, A. Rzeńca, red., *Zrównoważony rozwój na poziomie lokalnym i regionalnym: Wyzwania dla miast i obszarów wiejskich*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź: 78-97.
- Statystyczne Vademecum Samorządowca. Leoncin, 2017*, [Statistical Vademecum of Regional Civil Servant. Leoncin], [https://warszawa.stat.gov.pl/vademecum/vademecum\\_mazowieckie/portrety\\_gmin/nowodworski/1414032\\_leoncin.pdf](https://warszawa.stat.gov.pl/vademecum/vademecum_mazowieckie/portrety_gmin/nowodworski/1414032_leoncin.pdf), 15.01.2018.
- Swyngedouw E.**, 2010, *Trouble with nature: ecology as the new opium for the people*, [w:] J. Hillier and P. Healey, ed., *Conceptual Challenges for Planning Theory*, Ashgate, Farnham: 299–320.
- Swyngedouw E., Kaika M.**, 2000, *The environment of the city....or the urbanization of the nature*, [w:] G. Bridge, S. Watson, ed., *A companion to the city*, Blackwell Pub., Oxford: 561-581, [http://library.mibckerala.org/lms\\_frame/eBook/City%20and%20Urbanization/Bridge-Watson%20-%20A%20Companion%20to%20the%20City%20\(Blackwell\).pdf#page=583](http://library.mibckerala.org/lms_frame/eBook/City%20and%20Urbanization/Bridge-Watson%20-%20A%20Companion%20to%20the%20City%20(Blackwell).pdf#page=583), 20.01.2019
- Szymańska D.**, 2005, *New towns in the settlement system in Central-Eastern European countries*, <https://depot.ceon.pl/bitstream/handle/123456789/2987/NEW%20TO%20WNS%20IN%20THE%20SETTLEMENT%20SYSTEMS%20IN%20CENTRAL.pdf?sequence=1>, 4.05.2019.
- Szymańska D., Biegańska J.**, 2011, *Fenomen urbanizacji i procesy z nim związane*, Studia Miejskie, 4: 13-38.
- Turner W., Nakamura T., Dinetti M.**, 2004, *Global Urbanization and the Separation of Humans from Nature*, *BioScience*, 54 (6):, 585–590, [https://doi.org/10.1641/0006-3568\(2004\)054\[0585:GUATSO\]2.0.CO;2](https://doi.org/10.1641/0006-3568(2004)054[0585:GUATSO]2.0.CO;2), 20.01.2019.

## Streszczenie

### MIĘDZY KAMPINOSKIM PARKIEM NARODOWYM A KAMPINOSKĄ DOLINĄ WISŁY. NATURBANIZACJA W GMINIE LEONCIN W XXI WIEKU

Tekst dotyczy wyników długoterminowych badań terenowych studentów Wydziału Geografii i Studiów Regionalnych w gminie Leoncin w województwie mazowieckim. Głównym celem pracy było zbadanie, czy mieszkańcy gminy, leżącej między w różnym stopniu obszara-

mi chronionymi, uznali tę lokalizację za zaletę lub barierę w rozwoju gospodarczym gminy. Ponadto interesujące było zbadanie, jakie zasoby naturalne obywatele gminy byłoby skłonni poświęcić, aby stworzyć więcej miejsc pracy w miejscu zamieszkania. Zasadniczo uzyskano odpowiedź, że mieszkańcy nie chcieliby zbyt wielkich zmian w gminie, w której żyją w miarę szczęśliwie. Z drugiej strony brak wyraźnego rozwoju gospodarczego uniemożliwia im poprawę warunków ekonomicznych. Najbardziej oczekiwane przez mieszkańców inwestycje obejmują infrastrukturę drogową, kanalizacyjną i sportową.

**Słowa kluczowe:** naturbanizacja, obszary chronione, NATURA 2000, badania terenowe, studia ekonomiczne, geografia społeczno-ekonomiczna.

*Podziękowanie:*

*Autorki wyrażają podziękowanie wójtowi gminy Leoncin Adamowi Mirosławowi Krawczakowi za dzielenie się, z wielką życzliwością, wiedzą o gminie podczas corocznych praktyk terenowych studentów Wydziału Geografii i Studiów Regionalnych Uniwersytetu Warszawskiego. Ponadto bardzo dziękujemy Pani Mariannie Górniak za, przygotowywane co roku przez 15 lat, materiały kartograficzne, informacyjne i promocyjne o gminie Leoncin, bez których praca studentów w terenie byłaby znacznie mniej efektywna.*

*Acknowledgments:*

*The authors express their great thanks to the head of the municipality of Leoncin commune, to Adam Mirosław Krawczak for sharing with great kindness knowledge about the municipality during the annual field practice of students of the Faculty of Geography and Regional Studies of the University of Warsaw.*

*In addition, we would like to thank Mrs. Marianna Górniak for cartographic, information and promotional materials about Leoncin commune, collected for us every year for 15 years, without which the work of students in the field would be much less effective.*