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RETARDATION OF CHANGES IN PERIPHERAL AREAS OF CITIES - INVESTMENT STRATEGY OR INACTION?

Urban regeneration occupies an increasingly important place in the Polish development policy and cooperation between the state government and cities. Thanks to the support for Polish local governments financed by the 2014-2020 Technical Assistance Operational Programme, more than 1,400 communes in Poland developed regeneration programmes and undertook appropriate activities, mainly in downtown areas. On the other hand the potential of invested and abandoned peripheral areas is rarely perceived and enhanced in the regeneration programmes. The purpose of the article is to present the reasons for ignoring this potential in in-depth diagnoses and to analyse examples of retardation of re-using these areas as a conscious investment strategy for local governments.

Keywords: urban regeneration, regeneration area, local government, abandoned inhabited areas

I. INTRODUCTION

Sustainable space management is one of the major challenges of a sustainable development organisation [Kostecka 2009, Kostecka and Pączka 2016, Poskrobko and Kostecka 2016]. Abandoned buildings and areas are among the major challenges that city authorities face during the process of regeneration. There are many examples in the source literature that abandoned properties have a deeply negative impact on the communities' health and safety [Kondo et al. 2015, Wallace and Schalliol 2015, Foster 2020]. Vacant and abandoned properties have a significant economic impact on the property owners and social on local community [Han 2014]. For example, research conducted in Philadelphia showed that vacant properties can reduce property values city-wide by more than 5% and even by up to 20% in some neighbourhoods, representing enormous lost wealth for the city [Kondo et al. 2015]. Vacant properties cause a substantial economic burden in municipalities through lost tax revenues and costs associated with maintenance, remediation, and policing [Han 2014]. The research suggests that vacant and abandoned properties also have a negative impact on the communities' health and safety. Some other research found an association between the presence of neighbourhood vacant properties and an increased risk of neighbourhood assaults [Garvin et al. 2012].

These challenges also exist in many former socialist countries. There are quite a number of derelict and non-used buildings, which were built in the Soviet times, both in urban and rural municipalities [Zavadskas and Antucheviciene 2006, Sudonienė et al. 2011]. Such areas vary

from large sites that resulted from the massive decline of industry and mining at the beginning of the 1990s, to small private enterprises situated in downtown or rural derelict, usually extensive, sites connected to agriculture, forestry or military activities. In the literature the problem of derelict and mismanaged rural or urban buildings with a negative effect on the natural and social environment as well as on the economy has been analysed in many variants, i.e. on Lithuanian [Zavadskas and Antucheviciene 2006] or Romanian cases [Negoe et. al. 2019]. In the Polish literature, there are also some assessments of the scale of the various type abandoned uninhabited areas [Jarczewski and Kuryło 2009, Huculak 2009, Jarczewski and Kułaczowska 2019]. However, there is no reflection whether uninhabited areas are included in the regeneration programmes in a thoughtful and coordinated manner, whether Polish local governments have an idea for their re-use, and if they do see the opportunity offered by postponing these investments.

The aim of the article is therefore to present the reasons for ignoring this potential in the in-depth regeneration diagnoses based on the examples of delayed use of several such areas, and by highlighting the possibility of conscious retardation of the transformation of their natural resources. This way of thinking is a great opportunity for the investment strategy of local governments in the future.

II. MATERIAL AND METHODS

For the purposes of the article, statistical data from a monitoring study of the regeneration programmes collected for the report published by the IRMiR Urban Policy Observatory [Jarczewski and Kułaczowska 2019] and statistical data on the implementation of the regeneration programmes gathered by Statistics Poland (GUS) [Domańska-Bal and Buciak 2018] were quantified.

The article also uses a case study method, which is based on analysing selected, specific events, institutions or projects in a chosen field. It involves the analysis of a single case, based on its detailed description, allowing to draw conclusions as to the causes and results of the course of events. The knowledge obtained through the case study serves to better understand phenomena similar to the phenomenon being analysed and on this basis to improve the actions taken. The case study is used when analysing issues of high complexity, where individual aspects of the examined issue interact with each other, and the researcher has a limited control over the analysed object. According to Patton and Appelbaum [2003], this method works in particular when: * striving to clarify the cause-and-effect relationships that are too complex for surveys and at the same time impossible to analyse by experiment; * the researcher's goal is to provide a detailed description of the context in which a given phenomenon occurred (or is still occurring); * the actions taken and the results obtained of a certain programme or policy should be analysed from the point of view of their effectiveness and efficiency; * the effects of certain types of events, programmes or policies that do not have a strict and predictable set of results need to be fully studied.

For these reasons, the preliminary analysis of statistical data was strengthened by presenting the conditions of the municipality approach to postponing the development of the abandoned uninhabited areas.

III. REGENERATION IN POLAND – FORMAL CONDITIONS AND STATE OF PROGRAMMING

The delimitation of the regeneration areas where future interventions are to concentrate (including those supported from EU funds, but also national - public and non-public) is done by analysing the scale of degradation in the social, economic, technical, spatial-functional and

environmental spheres. With the Regeneration Act of October 9th, 2015, new strict requirements were introduced in Poland regarding the size of the regeneration areas and the number of their inhabitants. Before the delimitation procedure the diagnosis takes place which aims at identifying the most important clusters of negative phenomena in the city space. These areas are most often characterised by the lowest investment attractiveness, the lowest survival rate of enterprises, the highest long-term unemployment and the highest percentage of the unemployed with a low level of education and qualifications. Often, additional factors limiting the attractiveness of these areas are pollution, functional and spatial barriers, including communication ones. The quality of the town economic base is no less important. Therefore, regeneration is understood as the restructuring of the economic base of the designated area through concentrated social, economic, spatial, infrastructural and environmental activities leading to the removal of the signs of the crisis from the area and improvement of its socio-economic relations to the entire city.

Thanks to the support for Polish local governments financed by the 2014-2020 Technical Assistance Operational Programme, more than 1,400 municipalities in Poland prepared regeneration programmes and undertook appropriate activities. The data on the state of the regeneration programming in Polish municipalities, presented below (Tab. 1), come from the research of Statistics Poland (GUS) and were collected as part of the research work on "Statistical data on regeneration at municipal level", which is part of the project "Statistics for cohesion policy. Support for the cohesion policy monitoring system in the 2014-2020 financial perspective as well as programming and monitoring of the cohesion policy after 2020". A full survey, covering 2,478 municipalities, was conducted in two editions (data for 2015-2016 and 2017). In 2017 there were 1,406 regeneration programmes in Poland.

Table 1 – Tabela 1

Regeneration programmes by the local government type (2017) / *Liczba programów rewitalizacji według typu jednostki samorządu terytorialnego*

Type of local government <i>Typ jednostki samorządu terytorialnego</i>	Number of regeneration programmes <i>Liczba programów rewitalizacji</i>
Urban municipality / <i>Gminy miejskie</i>	205
City with the county status / <i>Miasta na prawach powiatu</i>	60
Urban-rural municipality / <i>Gminy miejsko-wiejskie</i>	455
Rural municipality / <i>Gminy wiejskie</i>	588
Total / <i>Razem</i>	1,406

Source: own preparation based on Domańska-Bal and Buciak 2018

Źródło: opracowanie własne na podstawie Domańska-Bal i Buciak 2018

In these programmes over 990 thousand hectares of the regeneration areas, including about 220,000 hectares of the so-called uninhabited areas, were designated. The uninhabited areas, e.g. post-industrial, post-mining, post-military areas can be designated as the regeneration areas, only if there are characterised by negative phenomena in the economic, technical, spatial-functional or environmental spheres and the activities that can be carried out there contribute to counteracting the negative social phenomena the in inhabited regeneration areas. As presented in Tab. 2, among the uninhabited regeneration areas, different types can be distinguished. Although the uninhabited areas constitute 20% of the regeneration areas, projects planned in these areas are very rare, so usually one of the abovementioned conditions necessary to qualify them as the regeneration area is not met. The potential of invested and abandoned peripheral areas in municipalities is rarely perceived and enhanced in regeneration programmes. This is not just a problem of assessing the uninhabited area potential, but generally the poor use of information from the real estate market in regeneration programming. This market is rarely

analysed in the diagnosis made for the purposes of the regeneration programmes, despite the fact that low real estate prices and their limited liquidity are often main symptoms of the low attractiveness of the degraded area. The potential increase in the value of real estate may also be one of the basic motives for engaging property owners in the regeneration activities [Jadach-Sepiolo 2018]. For uninhabited and abandoned buildings, the assessment should first reflect to what extent the planned function allows a sustainable investment, the cost of which at both the investment and operation stages will not generate too much burden. The derelict and mismanaged inhabited areas and buildings in Lithuania have a negative effect on the natural and social environment as well as on the economy in many municipalities. The inclusion of these areas into regeneration programmes shows their importance for the local community. Most of these objects were built or developed under the socialist economic conditions from 1945 to 1990. Today, many of these areas, due to their large size, energy absorption and technological and economic depreciation, do not meet contemporary requirements. Large investments are required to be useful, which is usually difficult to evaluate due to the lack of technical documentation of the facilities, especially regarding soil contamination. Such contaminated and abandoned sites are negative for the environment and landscape, wasting the full potential of the properties. The basic condition for sustainable programming of their reinvestment is the proper assessment of technical conditions and the level of contamination [Jadach-Sepiolo et al. 2017].

Table 2 – Tabela 2

Surface of uninhabited regeneration areas by type /Powierzchnia niezamieszkałych obszarów rewitalizacji według typu obszaru

Type of the uninhabited regeneration area <i>Typ niezamieszkałego obszaru rewitalizacji</i>	Surface of the area [ha] <i>Powierzchnia obszaru [ha]</i>	Share of the area of a given type in the total of uninhabited areas <i>Udział powierzchni obszaru danego typu w ogólnej powierzchni obszarów niezamieszkałych</i>
Post-state-owned farms or other areas related to agriculture and forestry / <i>Obszary popegeerowskie i inne związane z rolnictwem i leśnictwem</i>	74,172	33.70%
Green areas / <i>Nieużytki zielone</i>	10,330	4.69%
Post-mining areas / <i>Obszary powydobywcze</i>	6,113	2.78%
Post-industrial areas / <i>Obszary przemysłowe</i>	4,408	2.00%
Post-military areas / <i>Obszary powojkowe</i>	2,492	1.13%
Post-railway areas / <i>Obszary pokolejowe</i>	1,976	0.90%
Post-port areas / <i>Obszary poportowe</i>	19	0.01%
Other inhabited areas / <i>Inne niezamieszkałe obszary</i>	120,553	54.78%
Total / <i>Razem</i>	220,063	100.00%

Source: own preparation based on excel tables included in Domańska-Bal and Buciak 2018

Źródło: opracowanie własne na podstawie Domańska-Bal i Buciak 2018

Over 14.5 thousand projects have been planned in all regeneration programmes, of which around 2.2% are foreseen for the uninhabited areas. Most of such projects were envisaged in Śląskie (102), Małopolskie (34) and Zachodniopomorskie (30) Voivodships. The value of these projects is PLN 2.5 billion. Most projects (193) are related to post-industrial areas, while the least to post-military areas (30) [Jarczewski and Kułaczowska 2019], what can be explained by a bigger frequency of such activities in earlier financial perspectives or even before the Poland accession to the EU. Designation of the uninhabited

areas for the regeneration activities means that municipalities see considerable potential and attractiveness of the areas that have been neglected to date, but the small number of such projects raise a question, whether there are precise plans for their redevelopment. The article presents two examples of diverse approaches of Polish local governments.

IV. PIONKI – DIFFICULT CHOICE: CULTURAL CENTRE IN THE FORMER HEATING PLANT OR RECREATIONAL FUNCTION IN REGENERATION AREA

One post-industrial area with a huge untapped potential is located in Pionki. This region was developed in the interwar period, after the decision taken in 1922 to build there the largest gunpowder and explosives factory in Poland. The factory was of a key importance for the implementation of the military policy of the Second Polish Republic. The location of production on the southern outskirts of the Kozienice Forest, which were sparsely populated areas and distant from the main transport routes, resulted in the region rapid development. The dynamic development, rapid influx of people from all corners of the country bringing with them intellectual, demographic potential and professional knowledge resulted in the creation of a unique local society with high professional qualifications. A modern, flourishing industrial complex that laid the foundations for the further rapid development was created. After the World War II, the plant was rebuilt and resumed production. As a result, for years, it was one of the largest chemical industry producers in Poland. Over 500 buildings were built on the area covering over 700 hectares. The development of the city of Pionki, which in 1995 had 22,072 inhabitants, followed the development of the plants.

The economic changes of the 1990s led to a protracted bankruptcy process of the ZTS “Pronit”, which had negative effects on the further development of the city, regarding in particular the local labour market, i.e. the emergence of high unemployment. From the prosperity period, the industrial infrastructure remained, unique in Europe, intended for the chemical production profile. The problem of unemployment is one of the most important issues to be faced by the city because it entails social difficulties: a significant weakening of social ties, a low degree of inhabitants’ activity and their identification with the city, as well as the outflow of the most mobile and educated residents.

Because of the abovementioned, a part of the post-industrial area of the former ZTS “Pronit” was included in the regeneration programme. For instance, the former heating plant is intended for a social economy project. In this area, the building of the director of the combined heat and power plant is also located – which is currently the seat of the pedagogical library and the Kozienice Landscape Park. Therefore, the city authorities strive to concentrate cultural and social activities there. The idea of the reconstruction of the former heat and power plant in Pionki for the PRO Art culture centre was born in 2007. Its inclusion in the regeneration programme in 2016 did not imply any funds for this purpose. Therefore, the city authorities tried to transfer this facility to the voivodship authorities with a guarantee of location there the cultural centre facility. Nevertheless, the building is still abandoned, because the project would require too high investment expenditures and then the maintenance costs would certainly not be covered by the recipients, but would have to be financed by the voivodship authorities. Unless this building gains new commercial functions, it will not be renovated, because of the large volume and decapitalisation level.

Nearby the water reservoir (16 ha), which had enjoyed great popularity for decades, is also located. As a recreation centre, it was a place designed for the city residents. It was surrounded by summer houses and leisure infrastructure. The new socio-economic situation after 1989 meant that the area lost its attractiveness due to poor technical conditions and devastation. The city of Pionki planned to undertake modernisation activities to restore the place to the

community, because it is the only place in the area located at the water reservoir where you can spend your free time actively and attractively. The planned action included the modernisation and construction of a new recreational and tourist infrastructure, accordingly to the needs of the inhabitants. Residents living near the area, who formerly worked in the Pronit factory, would be directly involved in the regeneration activities implemented in this area. These plans have recently been accomplished. In 2018, the existing buildings were renovated and new social functions established.

The example of Pionki shows that despite ambitious plans included in the regeneration programmes, some projects regarding the uninhabited areas will not be implementable due to too high costs. For most local governments, new cultural facility means an increase in expenses for its maintenance. In such situation, retardation is the best solution – re-use of the abandoned property is delayed until another function or an entity that will finance the investment and future maintenance are found.

V. RADOM – RETARDATION AS A CHANCE FOR FULFILMENT OF THE RENEWAL STRATEGY FOR DERELICT POWER PLANT AREA

Both environmental information, as well as socio-economic data in case of the power plant in Radom represent a typical image of industrial areas in Poland, requiring rapid and thorough transformation, especially in the field of functional and spatial fabric, in order to be a real driving force for the development of the cities where they are located. However, in Radom the social context is particularly important, because in this area four social housing facilities are located. The estate is situated off the beaten track, with a low level of entrepreneurship and poor communication, so it is strongly affected by ghettoisation. The abandoned area is also in the immediate vicinity to a difficult, degraded area which requires a holistic intervention. No related activities were foreseen in the regeneration programme, but the area is part of the investment offer of the city.

The bankruptcy of the Power Plant Radom SA was announced in 1998. Since the bankruptcy, the potential of this area has not been used, even though various possibilities for the area development have been considered, since the municipality of Radom became the owner of the land. A quite unexpected element are four social blocks, which are inhabited by 300 families. The cost of the social housing estate amounted to over 22 million. The buildings are inhabited by the residents with the greatest social problems and were largely devastated in first years of exploitation [Jadach-Sepiolo et al. 2017].

The Urban Regeneration Programme for Radom 2014-2023 does not provide any action in this area. However, the area is recognised as part of the investment offer of the Radom municipality, listed in the “Study of finding an investor for brownfields Municipality of Radom”. The regeneration programme tries though to tackle the main social problems. The residents complain about the safety, problems with access to the city centre. There is a socio-therapeutic centre but only for children, there. Young people and adults have no recreation place, and because of distance to work opportunities and social stigmas they are at risk of social exclusion.

During the GreenerSites project (Environmental Rehabilitation of Brownfield Sites in Central Europe) co-financed by INTERREG Central Europe, Mazovia Development Agency (ARM SA) developed a brownfield regeneration strategy for the area based on in-depth environmental analyses and research, supported by consultations with stakeholders and local groups. The strategy leads to a full rehabilitation of the area and restoration of its social and economic functions. Its preparation was preceded by a report on a soil contamination and a description of the technical condition of the area buildings, and then by preparation of a methodology for brownfield remediation including a report on the analysis of the quality of the soil environment in this area.

Due to the cost-consuming elements, the implementation of the strategy is postponed until a partner is found who will propose an appropriate commercial function for the area. In the meantime, the city authorities are preparing the area for the investment, working on legal issues and planning to solve social problems of the social estate residents. In this case, postponing the investment may allow the implementation of a full strategy instead of partial projects that have no chance to create a critical mass for the renewal of this area.

VI. CONCLUSIONS

The importance of promoting the retardation of the environmental negative transformation should be emphasised. Uninhabited abandoned areas, which can be potentially renewable resources, need well-thought-out decisions, the bad ones leave traces for a long time, at least for several human generations.

The abandoned uninhabited areas potential is rarely noticed in the regeneration programmes. One of basic reasons for ignoring it in the regeneration diagnoses are methodological imperfections. To avoid them, a homogeneous assessment methodology is needed. A preliminary assessment would enable to indicate priority areas in terms of their use for future economic purposes. Taking into consideration the need of the development policy effectiveness – and the fact that these areas are not exclusively local government responsibility – it should be considered to prioritise the areas according to the degree of danger for the ecosystem and health in order to accelerate rehabilitation processes.

Information should be gathered for preparation of the transformation scenarios. The IT tool should be created in order to manage the uninhabited areas development taking into consideration environmental protection purposes, area transformation potentials, including social and demographic changes. The IT tool should make planning processes more effective on the regional level and offer regional prognosis and development models. There is a need of a homogeneous strategy as well as introducing a regional system of nature degradation and rehabilitation monitoring. This strategy would enable consolidated planning of the social and economic development of valuable uninhabited nature zones as well as the integration of economic and planning policies, especially regeneration of ecosystem services. Thanks to this, it will be possible to avoid accidental decisions in the area management.

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RETARDACJA ZMIAN NA NIEZAMIESZKAŁYCH OBSZARACH MIAST – STRATEGIA INWESTYCYJNA CZY BEZCZYNNOŚĆ?

Streszczenie

Rewitalizacja miast zajmuje coraz ważniejsze miejsce w polskiej polityce rozwoju oraz współpracy między rządem a miastami. W wyniku finansowego wsparcia polskich samorządów z Programu Operacyjnego Pomoc Techniczna 2014-2020, ponad 1400 gmin w Polsce opracowało programy rewitalizacji i podjęło działania, głównie w śródmieściach. Potencjał zainwestowanych i porzuconych obszarów peryferyjnych w gminach jest natomiast rzadko dostrzegany i wzmacniany w programach rewitalizacji. Celem artykułu jest próba przedstawienia przyczyn ignorowania tego potencjału w dogłębnych diagnozach rewitalizacyjnych oraz analiza przykładów opóźnionego ponownego wykorzystania tych obszarów jako potrzeby świadomej strategii inwestycyjnej samorządów.

Słowa kluczowe: rewitalizacja, obszar rewitalizacji, samorząd gminny, niezamieszkałe obszary rewitalizacji