

PHENOMENON OF ABANDONED VILLAGES AND ITS IMPACT ON TRANSFORMATION OF RURAL LANDSCAPES

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The problem examined in this research is how the loss of rural settlements, small towns, villages and farms contributes to changes in rural landscape and how can this change be managed? The survey was conducted in matching locations in Poland, Slovakia, Germany and in the southern part of Cyprus. The research methods were based on the analysis of source materials and on field analyses in the studied regions. Source research included searching for information in a literature on the subject, as well as planning documents, strategies and studies of spatial development conditions. The main causes of the decline of abandoned rural areas are the decrease in population and migration to cities, the intensification of production and the increase in production areas and the change in the nature of the activities of rural homesteads. The results of the research also show that in addition to common trends comprising the transformation of landscapes in rural areas, each of the analyzed regions differs in terms of the degree of adverse changes, the period in which changes were noted and the possibilities to prevent these changes. In order to prepare a village rehabilitation strategy, a comprehensive diagnosis of whole changes is required, in which the state and causes of landscape changes are determined, and possible solutions for halting rural depopulation are foreseen.

Key words: depopulation, landscape transformations, land use change, rural settlements, village abandonment.

JEL Codes: O18, R00, R51.

1. Introduction

In the European landscape, as pointed out by Antrop (2002), “a general polarisation between intensification and extensification of the use of the land can be noticed. There is a continuing concentration of people and activities in rather small, highly intensive and densely crowded areas, while vast areas of land become disaffected or even abandoned”.

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Pedroli et al. (2007) argue that traditional functions of landscapes like agricultural production are becoming less important, as a consequence of globalization and the economical change associated with it, and landscape has now largely become a nameless by-product of the global economy. Mitchell (2013, 28 p.) observes that “rural landscapes change as they transition from a productivist-based to potentially multi-functional state”. Also, as noted by Antrop (2002, 84 p.), “new urban centres for tourism and recreation develop amidst pure natural or rural environment, presenting extreme transitions in landscape type at short distances”.

The phenomenon of land abandonment, characteristic for transformations of rural landscapes, is observed in many regions, for example, the Mediterranean landscape has been rapidly changing over the past decades, typical features like farming terraces, olive yards, and upland grasslands have been decreasing over the past 50 years, population decline resulted in changing land use, abandonment of marginal lands and colonisation by shrubs and tree species (Sluis, 2011). Land abandonment is studied as a phenomenon involving negative or positive effects according to the analysis approach and/or the territorial context (Benayas, 2007; Keenleyside, 2010; MacDonald, 2000; Vidal-Macua, 2018). The phenomenon of land abandonment is closely associated with the phenomenon of abandonment of rural settlements, villages, small towns, and farms.

While in the European and world research the problem of villages and abandoned farms, including houses and agricultural land, in terms of the topic of depopulation is discussed in some detail (Collantes, 2014; Cloke, 2013; Stockdale, 2006; Stasiak, 1992; Vartiainen, 1989), the question of rural landscape transformation as a result of abandonment is less often analyzed. For the authors of this article, it seems striking how to stop disturbing trends by introducing appropriate strategies and programs for selected units (villages) and regions. The second issue is to cover the possibility of using the cultural potential of abandoned villages, for example by covering particular landscape elements with special protection, as well as determining their significance, eg for the creation of a tourist product. Ultimately, this last goal can be used especially in regions with a tourist function.

2. The aim of the research

This study focuses on the current phenomenon of abandonment of rural settlements, villages, small towns and farms, in selected rural areas in Central Europe (Poland, Slovakia and Germany) and Mediterranean Region (Cyprus, southern part). The main aim is to identify the characteristic features of this process of transformation of rural areas. The aim of the study is to determine the causes and characteristics of rural depletion, to analyze landscape changes and to submit suggestions on the management of rural landscapes in the context of the villages loss phenomenon. This phenomenon is associated with an economic factor and demographic changes. It results to a large extent from the unprofitability of agricultural production, but also is a consequence of the aging of the population and

the escape of young people to the cities. The presented analyzes serve to define the problem and they are the basis for future detailed research.

3. Methodology

The methodology of this research is based on fieldwork in combination with geographical, agricultural and landscape analyses. It was a two-step procedure to pursue aims. In the first step, it was important to assess the topic of abandonment of villages and farms using a compound of different sources including contemporary resources, national and regional documents. Information about rural areas abandonment has been captured in a wide range of sources containing archives, primary and secondary literature. Theoretical studies based on available monographic and cartographic materials as well as sources of information such as strategies, case studies, previous analyzes including rural mapping were successively carried out in 2015–2018. In the second step, analysis for several European regions with different economic conditions, and cultural and social specificity was performed. The article presents the situation of village and farm transformation towards their total or partial disappearance in Poland, Slovakia, Germany and Cyprus. Field research consisted of local visions in selected regions, after earlier identification of places where the process of landscape degradation as a result of abandoning and loss of agricultural production was visible. Analytical studies in selected regions were carried out in 2016–2018, while local visits being carried out twice, the first in 2016–2017 and the second in 2018. Detailed analyzes were carried out in the Polish regions (Eastern Part, Warmia and Mazury, Podlasie), Slovak regions (districts of Banska Bystrica region and Prešov region), German regions (Eastern Part, including Brandenburgia, Mecklenburg-Vorpommern), Cypriot regions (Southern part, including Pafos, Akamas and Limassol surroundings).

Detailed analyzes in selected regions concerned the specification of the following changes:

1) in the open landscape:

- disappearance of arable fields,
- disappearance of divisions into agricultural plots,
- disappearance of agro-forest boundaries,
- disappearance of mid-field shelter,
- disappearance of ponds,
- blurring of visual elements in the landscape;

2) within the border of the village and areas directly adjacent to them:

- transforming the traditional layout of the village,
- transformation of the village structure,
- the existence of a gap in the structure of the village after the former buildings,
- transforming the architecture of residential and business buildings,
- changes in architectural details,

- disappearance of traditional building material,
- devastation of residential and farm objects (ruins),
- disappearance of visual elements.

The case studies reveal different processes as well as explore relationships between original landscape character, rural abandonment, and transitions into new forms of space. The comparative analysis seems to be particularly important for understanding changes in landscape structure and configuration. In the final stage, a scheme for identifying and protecting, as well as creation of new function for abandoned villages and farms, was developed.

4. Results

Transformations in the landscape of many European regions due to social, economic or political factors intensified after the Second World War. Changes in the structure of the village, apart from the war losses, at that time initiated the migration movements, changes in the political and economic system, as well as the way of managing agricultural areas. Rural areas have undergone transformations over the decades, which in consequence form the today's picture of the village. The most significant fact as regards the ways of transformations, perceived especially at the end of the previous and in the beginning of the present century, is the change of the functions within the structure of rural areas. This indirectly results from the ongoing socio-economic processes. Respectively, in relation to adverse phenomena one can notice that the elements within the landscape, which are important for the identity of a given place and community, have been disappearing. Socio-cultural changes are also soon reflected in transformations in the functional and spatial structure of the landscape (Latocha, 2009). The situation of changes in the rural landscape in different European regions is briefly outlined below.

Analysis of rural areas transformation – case study of Poland

Functional and social transformations in rural areas after 1989 in the countries of Central and Eastern Europe caused unfavorable changes in landscapes. Among the Polish regions in which changes in the rural landscape occurred, the region of Warmia and Mazury is distinguished. Transformations of rural areas result from historical conditions, especially after World War II. In the areas of former East Prussia, which after the war were within the Polish borders, the former inhabitants, while fleeing, left mass farms and estates. On the other hand, people from eastern and central Poland were resettled, which reluctantly took over German buildings. The facilities were partly rebuilt; however, some of the farms were destroyed. Nowadays, remains of manors and palaces or historical farm buildings can be seen in the landscape. There are also planted trees, old orchards, and overgrown evangelic cemeteries. Rural landscape after World War II has been transformed as a result of the acquisition of land by the Polish state. The next period of changes in the rural landscape of Warmia and Mazury was the period of political transformation after 1989. This initiated the

process of landscape degradation, reduction of agricultural function, rising unemployment and outflow of people abroad and to large cities. With the landscape once again since World War II historical buildings began to fade. Historic parks began to overgrow with the blurring of their original historical layout. Areas previously used for agriculture have started to change into areas with a tourist function (mass tourism), especially those attractively located near the lakes (tabl. 1).

Analysis of rural areas transformation – case study of Slovakia

In Slovakia, the current trends in the processes of transformation of rural landscapes and the processes of abandonment of farms have been initiated by the socio-economic changes after 1989. The previous socialist period lasted only 40 years, but its impact on the structures of rural agricultural landscapes was significant – the traditional small-block agricultural land of private owners was collectivized in 1948, and large blocks of arable land were farmed by socialist co-operatives. After 1989 the new political and socio-economic situation of transition from centrally planned to the market economy again affected the changes of agricultural and rural landscapes. Property rights towards agricultural land have been reintroduced again, and the ownership of land has gained new meaning. However, the interruption of the relationship between owners – farmers and their land, which lasted over 40 years caused that owners lost their links towards land and the experience with farming (Kristiánová, 2010). The owners of small pieces of land today are not able to farm and have only limited market opportunities to sell or rent their land to new agro-entrepreneurs, or to the old transformed cooperatives. Most of the former cooperatives were not able to compete in the market economy conditions, and as a result, many abandoned farms are found in rural landscapes of Slovakia. The absence of market with agricultural land, unformed ownership rights and relations between owners and farmers, and agricultural policies not addressing these problems influence distortions in land use and often land abandonment. The study of agricultural land abandonment in Slovakia by Pazúr et al. (2014) found that abandonment mostly affected arable lands and grasslands in the transition period of 1990–2000 and was extensive in the central and eastern mountainous parts of Slovakia, it predominantly occurred in fields with lower soil quality located on less accessible areas close to non-farmed land, and was largely influenced by the migration and changes of population structure in rural areas. Land, village and farm abandonment occurs mostly in rural areas remote from urban centers of growth and is manifested by transformation of settlements`urban structure and agricultural land use (tabl. 1). In rural settlements and rural landscapes close to urban centers another trend is observed – increase of inhabitants and transition of agricultural land towards built-up land. Also the agricultural land in rural areas connected to main transport corridors is built up – for functions of industrial parks, distribution, storage, logistic centers or shopping parks. The economic motivations determine the decisions of changes in land use and are significant driving forces affecting rural cultural landscapes.

Analysis of rural areas transformation – case study of Germany

In Germany, regions most susceptible to transformation are areas located in the eastern part of the country. Here, as in Poland, the situation in agriculture, and thus in the agricultural landscape, began to change drastically after the political transformation in 1989. An even bigger problem was depopulation of the village, mass migration of residents, most often young people to cities. Specific changes are visible in the region of Mecklenburg-Vorpommern (Mecklenburg West Pomerania). Its distinguishing features include the occurrence of lakes and extensive woodland areas, agricultural landscape (fields under cultivation, meadows, and pastures), residential and farm architecture, and numerous manor-and-park and palace-and-park landscaping complexes. Transformations include country roads and their surroundings, especially those internal, i.e., historical and cobbled ones which have been converted into bitumen-surfaced, walled-in roads. In bed situation are the alleys along the roads, and the old-time rural buildings, first changed into blocks of flats for the LPG employees, then into the so-called “free-style” ones. Due to socio-economic transformations associated with the political transformation in the German Democratic Republic, as well as to a flexible planning and legal approach, buildings styled as Bavarian, along with more “exotic,” namely Tuscanian buildings, started to appear in the region. The above expresses the slogan “Freedom of construction for the freedwellers.” Another cause for changes and in consequence for the loss of abandoned and/or unused buildings in numerous villages is the mass migration of population to large cities in the western part of Germany (tabl. 1).

Analysis of rural areas transformation – case study of Cyprus

The transformation of rural areas, demographic changes and the growing competition of European and global markets, cause a weakening of the agricultural sector in Cyprus. Uncultivated fields, abandoned villages, and habitats, especially in mountainous areas, negatively affect the maintenance of the traditional agricultural landscape. At the beginning of the 21st century, special attention was paid to the dramatic reduction of crops (mainly fruit trees, olives, vine), progressive succession and the increase of built-up areas in the suburban area. On the coast production of citrus decreased, and in mountainous areas (Lemesos and Pafos) also vines that were somehow a symbol of the traditional cultural heritage from 5.5 thousand years. Currently, they are grown mainly on stony mountain and foothill slopes, where other crops are unprofitable. In the valleys, on the terraces, the area of cultivation of olive trees has decreased. This is due to the import of cheaper olive oil, mainly from Turkey. The declining profitability of production is one of the main factors causing the loss of valuable, historic cultural landscapes. A huge impact on the changes has the development of mass tourism (tabl. 1).

Tabl. 1. The main problems of transformation of rural areas in selected regions (countries)

Country (region)	Transformation of structures in a village	Transformation of arable land(main problems)
Poland (Eastern Part, Warmia and Mazury, Podlasie)	Transformations of the traditional oval or line street system Changes in residential and farm buildings, devastation of objects Changes in materials Reducing the aesthetics of the environment	The disappearance of mosaics of fields and meadows Land consolidation The disappearance of the interbeds, mid-field trees, and ponds
Slovakia (districts of Banska Bystrica region and Prešov region, areas of dispersed settlements)	Disintegration of urbanstructure of the village Devastation of objects – losses of historical, cultural and aesthetic values Transformation of the building stock towards recreational, part time use	Transformation of arable land to pasture, to forest , or to transitional woodland/shrub Transformation of pasture to forest, or to transitional woodland/shrub
Germany (Eastern Part, Brandenburg, Mecklenburg-Vorpommern)	Transformations of the traditional oval or line street system Changes in residential and farm buildings	The disappearance of mosaics of fields and meadows Land consolidation Increasing production of non-consumable plants
Cyprus (Southern part (Pafos, Akamas, Limasol surroundings)	"Disappearing of the village" as a result of leaving it by the inhabitants Residential and commercial buildings in ruins Overgrowing of a habitat plot	Progressive succession in areas formerly used for agricultural purposes Reducing of the production of citrus trees, olive trees and vines

Directions of disappearance of villages and farms on the example of selected countries

The reasons for leaving the village vary depending on the region or country. They are usually associated with political and political changes. Historical factors have influence on it as well. Nowadays there is noticeable the relation to global problems such as, for example, depopulation of the countryside and migration of rural population to cities. Below the genesis of the disappearance of villages and farms in various geographical, as well as social and economic conditions is briefly described.

Most of the abandoned farms in eastern Poland, which quickly did not find new owners, were falling into disrepair. The buildings were dismantled and the building material was transported deep into the country to rebuild the war damage. Settlements which were located within dense development of the village were absorbed without a trace by neighboring farms. What can be observed nowadays the form of development of existing rural farms is constantly transformed by current owners (Fenyk, 2010). The situation undoubtedly deteriorated after 1989, at the time of political transformation. The objects of old court and park groups and estates began to disappear. Economic facilities on former state farms also fell into disrepair. The local population, leaving the former working places, moved to new places, often outside

the countryside or stayed in buildings that have not been renovated for years. For example, in the Warmian-Masurian Voivodship after World War II, and later after 1989, about 100 abandoned villages and larger settlement structures were recorded (mainly in the Pisz District). According to Worobiec (2008), they include Lipa Tylonia, Lipa Przednia, Paski, Piskorzewo, Przerosl, Pogonie Przednie, Sowirog, Szast. A somewhat different genesis of the "disappearance of the village" can be noted in the case of eastern Germany. This results in most cases from the change of structure after the reunification of Germany. In almost 30 years, the number of inhabitants decreased in many places, and some villages were almost deserted. German villages, especially those in the east of the country, are subject to dramatic depopulation. Research shows that the main reason for this condition, and consequently the disappearance of the village, is the fact that young people go to large cities for work and stay there. There are only a few families and older people in the village who are not able to work on farms. These dramatic results are given by the German Central Institute for Urban Development and Spatial Development (BBSR). While the situation with the use of agricultural resources in the eastern regions of Germany is not so alarming (large farms operate successfully here), the structure of the village, from an economic, spatial and social point of view, changes diametrically. It turns out that sparsely populated regions in Germany entail an increase in state budget expenditures. There were a handful of people left in some of the municipalities on the sidelines. Maintaining complete infrastructure for them generates huge financial outlays (including roads, bus and rail connections). Most abandoned villages are recorded in the regions of Brandenburg, Mecklenburg-Western Pomerania, and Saxony.

In Slovakia, the traditional settlement patterns date back to the middle ages. Towns and villages are relatively regularly distributed in open agricultural landscapes with a proportion of forests varying according to the natural conditions. The landscape outside settlements traditionally contained very few buildings, which mostly served agricultural purposes such as hay storage or shelter for animals. Residential houses outside settlements were limited to special purposes such as hunting and game keeping (Löw, 2003; Janečková Molnárová, 2017). In some parts of Slovakia, however, also dispersed settlements patterns (patterns of individual family farms) are found. In the socialist period also cooperative farms has been built in the open landscape.

The settlement structure of Slovakia can be described as greatly fragmented with a large proportion of small villages. A small village is considered a village to 1000 inhabitants. The villages, which experience abandonment are generally the small villages, they have generally less than 500 inhabitants (Gajdoš, 2009) and they are located primarily in the northeastern Slovakia (in Prešov region, district of Bardejov, Svidník, Stropkov, Medzilaborce, Humenné, Snina, Sobrance) and in southern central Slovakia (in Banská Bystrica region, district of Veľký Krtíš, Krupina, Lučenec, Rimavská Sobota, Poltár, Revúca). Agriculture was a traditional sector of employment in these districts and lost its dominant position. Agriculture was a main type of economic activity also in the dispersed settlements, and many of the old rural houses in these areas face abandonment, too (Supuka, 2011). Today they are often

converted to recreational use. The specific phenomenon is the abandonment of the premises of the former socialist cooperative farms. This situation seems to be similar to the example of Polish villages.

As already mentioned, the process of progressing urbanization, also in Cyprus, is closely related to global problems. The marginalization of rural areas, migration of people to cities and expansion in land grabbing and suburbanisation are also noticeable here. The boundaries of cities "crack," (example of Paphos), they "consume" more and more rural areas, also those with traces of abandoned villages. At the same time, the old structures are degraded. Forms were deprived of function, and villages and small towns depopulated. The deserted farms visible today in the landscape and the progressing succession in the areas formerly used for agriculture are the direct signs of the loss of cultural heritage objects and traditions, often with world rank. It should also be remembered, in contrast to the presented regions of Poland, Germany and Slovakia, the insular nature of the landscape and a certain isolation of the country from the continent, which may undoubtedly affect the obliteration of old village structures, as well as the conflict with Northern Cyprus. As an example of an "abandoned" landscape, can be given the villages on the Akamas Peninsula, including farms in Arodes. Another example of a village abandoned partly due to the flooding of the village (Anarita dam), but also due to the conflict is the village of Finikas, or the village of Old Theletra deserted after the earthquake.

Abandoned villages are usually located peripherally in relation to large cities and agglomerations. According to the analysis of villages in the studied regions (countries), the areas of abandoned villages are distinguished by a characteristic type of landscape. Historical features overlap with this landscape, indicating signs of past development. A special role in this landscape, due to its connections with the areas formerly used for agriculture, is played by natural elements. As Soszyński and Sowińska (2012) point out, these features mean that abandoned villages usually have a very distinct identity of place. At the same time, they are associated with a place that has ceased to exist, but whose traces are still visible in the type of vegetation, relief, boundaries, or in the remains of buildings, houses, farm buildings, schools or churches (Soszyński, 2012). The characteristic features of abandoned landscapes, villages, farms and arable land are given in tabl. 2.

Tabl. 2. Elements in the landscape that testify the existence of a village in the past

Arable lands	Cultural elements (village)	Natural elements (village)
<ul style="list-style-type: none"> • Divisions of arable plots • Shelterbelts on the border of the parcels • Dikes • Channels 	<ul style="list-style-type: none"> • Living buildings (ruins) • Farm buildings (ruins) • Ruins of palaces or estates • Old churches or chapels • Cemeteries or graves (single or group) • Stone fences • Paved roads • Railway embankments 	<ul style="list-style-type: none"> • Remains of orchards • Groups of trees and shrubs (gardens) • Single trees • Roadside alleys • Trees on former cemeteries

Possibilities of using the remains of villages and farms

The probability of progressive destruction or degradation of the exceptional resources observed in the abandoned villages is very high. For years, abandoned and forgotten, they were subject to gradual processes of re-naturalization, occurring in a significant or in some areas the complete disappearance of anthropopressure. Meanwhile, these places can be determined anew by introducing new functions and new forms of activity, which in turn may generate new investments. Therefore, it is important to develop appropriate rules for the development of these places, taking into account their potential, which will allow to preserve their identity (Soszyński, 2012).

Governments at national regional and local level possess the tools which could enable the revitalization processes. They can set the strategies, can guide the development and the land use through regional and local land use master plans which set the rules for land use, limits, or protected areas, and can initiate the development – restoration of buildings, restoration of historic sites, by using economic or financial incentives, for example tax reduction, or direct subsidies, grants, etc., to owners or farmers to initiate revitalization. Regional and local governments can invest in development of tourism infrastructure, tourist routes, hiking and biking trails, and establish for example educational or healthcare amenities, etc.

The introduction of new functions in abandoned villages and farms should be based on the following three pillars: identification, protection and conception. The individual stages concentrated on these three pillars can be divided into: 1) analytical stage – analysis, inventory, identification, 2) documentation stage – preparation of descriptive and photographic works as well as graphics, 3) protection – ordering, preservation, conservation, 4) planning – planning, design and economic specifications, 5) executive stage – implementation of the idea.

The first stage before introducing new functions to the abandoned landscapes and areas of former villages and farms is to determine the existing resources of the given area. Therefore, it is important to place a detailed diagnosis including, among others, inventory of cultural and natural elements. All information should then be collected, described in detail (sketches and mapping). It is necessary to analyze the data, and on its basis to set a scheme towards securing and protecting previously diagnosed resources. The next step is to plan new functions and to define new ideas for the analyzed areas, and then to prepare individual projects adapted to these areas. Overview of the suitable possible options for new functions and new projects for abandoned villages and farms is given in tabl. 3.

Tabl. 3. Possibilities of new functions/ new projects for abandoned villages

Directions of using the remains of a village / farm	New features for the area of an abandoned village/farm
<ul style="list-style-type: none">• Restoration of the value of resources consisting in the restoration of the whole or part of the village / farm structure• Giving new functions taking into account several elements of the former village / farm• Giving new functions including a single element of a former village / farm	<ul style="list-style-type: none">• Tourist function - development of a tourist product, e.g. a tourist route with a description of places, delineation of old farms and important places in the village• Protective function - securing places with unique cultural and social values, eg churches, cemeteries, mansion buildings, schools• Use of places for educational purposes, e. g. for schools

An important task of the local government is the vacillation of the area. Business development, development of living conditions and infrastructure can be reduced phenomena of „abandoned villages“.

5. Conclusions

1. Traditional rural areas in Europe are gradually transformed and the phenomenon of land, rural settlement and farm abandonment is observed in most of the researched regions. When rural areas became abandoned the agricultural landscape loses its original rural character.

2. Analyses of directions of rural areas transformation in Central Europe (Poland, Slovakia and Germany) and Mediterranean Region (Cyprus) show that those countries have similar problems with landscape abandonment. There are regional differences in different countries.

3. Research showed that in the areas of Poland, as well as Slovakia and eastern Germany, which were formerly used for agriculture, and the landscape was a mosaic of fields, meadows and pastures, there are visible changes in the structure of the agricultural landscape. In these regions, the result of land abandonment and the sale of land to large landowners was partly due to the land consolidation, the extensive use of land and the disappearance of typical landscape elements. The remains (ruins) of large farm facilities of former state farms are also still visible in the landscape.

4. In the case of landscape changes in the Cypriot regions, leaving agricultural land without use led to the occurrence of secondary succession and disappearance of the characteristic agricultural landscape. Here, however, the landscape is not as compacted and monolithic as in the other regions.

5. Landscape abandonment is associated with the phenomenon of land abandonment. Land abandonment results in transformation of arable land, grassland, pastures, vineyards or orchards by succession processes, disappearance of mosaics of fields and meadows, disappearance of the interbeds, mid-field trees ponds. Other

reasons are connected with land abandonment – the phenomenon of village, farm and built-up structures abandonment.

6. Processes of “disappearance of village”, desintegration of infrastructure of settlements, devastation of objects in rural areas, lead to the loss of historical, cultural and aesthetic values of rural areas.

7. The complex diagnoses for abandoned areas are needed in order to set the revitalization strategies and national, regional and local government should use the tools, which could enable this process. In addition to the preparation of appropriate programs, it is also important to find a way to protect the architectural objects still existing in the landscape (even in the form of a protected ruin), and the remaining objects and areas of historical and cultural importance. In addition to security and protection, it should be possible to use them to create new functions such as tourism or education, such as mentioned in the article.

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KAIMŲ NYKIMO REIŠKINYS IR JO ĮTAKA KAIMO KRAŠTOVAIZDŽIO POKYČIAMS

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Santrauka

Tyrimo problema – kaip kaimo gyvenviečių, mažų miestelių, kaimų bei ūkių nykimas prisideda prie kaimo kraštovaizdžio pokyčių ir kaip tą pokytį galima valdyti? Tyrimo tikslas – nustatyti kaimų nykimo priežastis ir būdingus bruožus, išanalizuoti kraštovaizdžio pokyčius bei pateikti siūlymus dėl kaimo kraštovaizdžio valdymo (planavimo, institucinių funkcijų ir atsakomybių paskirstymo, monitoringo ir kontrolės), esant kaimų nykimo reiškiniui. Tyrimo metu buvo atliktas vizualinis kraštovaizdžio pokyčių stebėjimas bei fiksavimas (fotografavimas), planavimo dokumentų, vietovių vystymo planų analizė bei interviu su vietos valdžios atstovais. Analizuojant nuotraukas bei senus žemėlapius buvo vertinami kaimo vietovių kraštovaizdžio pokyčiai, susiję su pastatų bei kitų objektų kaimo vietovėse nykimo reiškiniu. Tyrimas atliktas atsitiktinai pasirinktose vietovėse Lenkijoje, Slovakijoje ir Vokietijoje bei Kipro pietinėje dalyje. Nustatyta, kad esminės apleistų kaimo vietovių nykimo priežastys yra: gyventojų skaičiaus mažėjimas ir jų migracija į miestus, žemės ūkio gamybos intensyvinimas bei gamybos plotų padidėjimas, kaimo sodybų veiklos pobūdžio keitimas. Apleistų teritorijų kraštovaizdis kinta nuo vyraujančių žmogaus veiklos degradacinių apraiškų iki natūralių ekosistemų formavimo. Siekiant parengti kaimų gaivinimo strategiją, reikalinga kompleksinė apleistų teritorijų pokyčių priežasčių analizė ir sintezė, nustatant kraštovaizdžio pokyčių būklę ir numatant galimus sprendimus dėl kaimo nykimo stabdymo.

Reikšminiai žodžiai: gyventojų skaičiaus sumažėjimas, kraštovaizdžio transformacijos, žemės naudojimo paskirties kaita, kaimo gyvenviečių, kaimų palikimas.

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