



ANALYSIS OF THE IMPLEMENTATION OF LAND CONSOLIDATION AND EXCHANGE IN THE VILLAGES OF THE LEŻAJSK DISTRICT

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Summary

Rural areas in Poland have a diversified spatial structure. The spatial structure of rural areas is improved by the procedures of land consolidation and exchange, aimed at creating more favourable management conditions in agriculture and forestry by developing the area structure of agricultural holdings, forests and forest lands, as well as rational shaping of land layouts and adjusting real estate boundaries to a system of land reclamation devices, roads and terrain. The Leżajsk district covers an area of 58,372 ha, including 40 cadastral precincts. So far, land consolidation has been performed in 29 villages, covering 46 113 ha, which is 79.0% of the total area of the district. Land consolidation in the Leżajsk district was carried out at various periods due to the changing legal regulations. The paper aims to present a chronological analysis of the land consolidation works conducted in the villages of the Leżajsk district, located in the Podkarpackie Voivodeship in 1945–2013, along with anticipated and implemented land consolidation works in the years 2014–2020.

Keywords

land consolidation • rural areas • land use • agricultural production space

1. Introduction

The European Union's policy for rural areas until 2020 is directed towards the diversification of functions performed by rural areas. The process of land consolidation is a procedure transforming the spatial structure of rural areas in the EU countries and Poland. The basic definition and purpose of such consolidation are set out in the act of 26 March 1982 on the consolidation and exchange of land (Dz. U. z 2014 r., poz. 700 z późn. zm.) [Journal of Laws of 2013, item 1157], where the consolidation was defined as *an arrangement and agricultural procedure aimed at transforming the spatial layout of land located in rural areas, in such a way as to create more favourable conditions for farming through the improvement of area structure of farms, the rational shaping of land*

distributions and the adjustment of property boundaries to a system of water reclamation facilities, roads and terrain.

The Rural Development Program for 2014–2020 promotes land consolidation works as geodetic works involving *the separation of new cadastral parcels, with a different shape compared to the original ones, in order to reduce the number of small, scattered plots that make up farms and increase their average size. As part of the consolidation project, there are also following works carried out in the field of post-consolidation land development, which include, in particular, the creation of a functional network of access roads to agricultural and forest lands and the implementation of projects directed at the regulation of water relations in an area covered by the consolidation.*

The combination of the above-mentioned definitions and the six priorities of the RDP for 2014–2020 in the implementation of land consolidation works will allow for the realisation of multifunctional and sustainable development by connecting management conditions with elements of the environment and landscape.

Land consolidation results in the reorganisation of farms and improves the land distribution coefficient, which is influenced by the area of an agricultural holding, the number of parcels per farm, the surface area of parcels, the distance of parcels from habitats and the perimeter of parcels. Also, the improvement of the layout of the road network for agricultural service and its quality are directly connected to the farming conditions. Consolidation projects improve the distribution, density and width of agricultural roads and shorten the length of access to fields. The quality of agricultural road surfaces planned for implementation in the framework of post-consolidation development is also significantly improving.

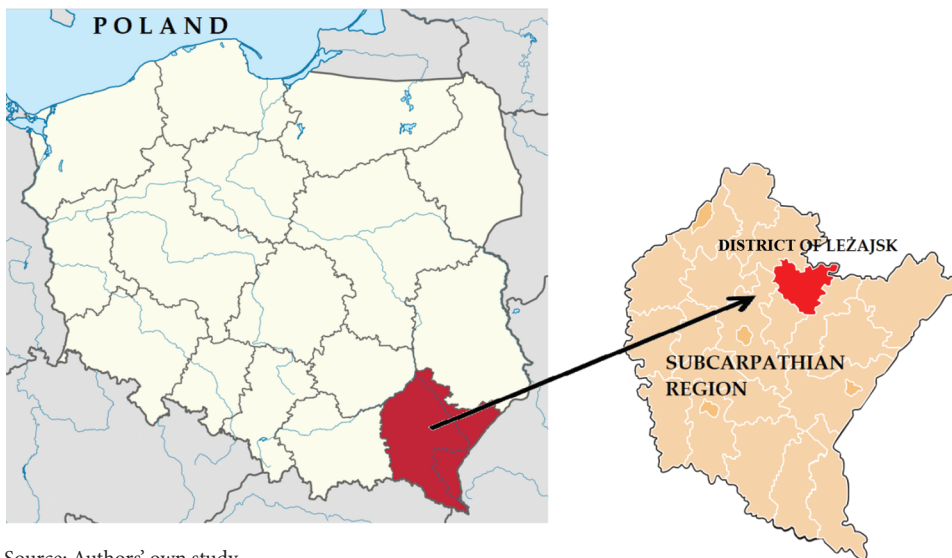
These factors are always part of a land consolidation project. In addition, the improvement of the land use structure will be supported by facilitating the transfer of land from small farms to farms with appropriate development potential and by designing the layout of agricultural parcels in these farms in such a way that these farms become competitive on the market.

Modernising the technical and social infrastructure in rural areas and improving living conditions, as well as increasing the investment attractiveness of rural areas (mainly through the development of technical and social infrastructure, including tourism) contribute to the increase of employment opportunities in rural areas. An increase in interest in rural areas as a place of residence and rest provide an opportunity for their development [Bielska and Leń 2015]

The most common defects in the spatial structure of land of individual farms in Poland are small cadastral parcels, a large number of parcels on a farm, small cadastral areas, especially in areas with varied terrain, and narrow and very elongated parcels in lowland areas, formless shapes of parcels, lack of access to plots, and above all the dispersion of these lands in the area of a village and beyond its borders [Noga 2001, 2005]. These problems have led to large restrictions or even inhibitions in agricultural production. This affects many countries across the world, several authors have written about [Noga 2001, Sonnenberg 2002, van Dijk 2003, Vitikainen 2004, Niroula and Thapa 2005, Dzikowska 2010, Brizoz and Havugiman 2013, Demetriou 2016]. The

resource of such information allows developing ways to assess the spatial and technical parameters of cadastral parcels. This is a necessary condition resulting from the fact that many regions of Poland (south, south-east, central and eastern) are characterized by large defects in the land spatial structure.

The paper aims to present a chronological analysis of the land consolidation works carried out in the villages of the Leżajsk district, located in the Podkarpackie Voivodeship in the years 1945–2013 and the analysis of the forecasted and implemented land consolidation works in the years 2014–2020, as well as the assessment of social demand for land consolidation works in individual precincts of the surveyed district. A spatial image of the location of the studied district is illustrated in Figure 1.



Source: Authors' own study

Fig. 1. Location of the studied district against the voivodeship and the country

2. Concept and purpose of the process of land consolidation

Land consolidation is a set of design and technical activities aimed at creating more favourable conditions for management in agriculture and forestry by improving the area structure of farms, forests and forest lands, rational shaping of land layouts, adapting property boundaries to the system of land reclamation devices, roads and terrain. When Poland joined the structures of the European Union, Polish agriculture was covered by the instruments of the Common Agricultural Policy and its rural development was supported with funds from the European Union budget. This resulted in greater interest of farmers in consolidation works aimed at improving the spatial conditions of farms functioning, especially as the current legal regulations on land consolidation assumes the implementation of investments covered by the so-called post-consolidation development, in addition to the preparation of geodetic and legal

documentation. Both during the previous programmes, i.e. in the periods of 2004–2006 and 2007–2013, and the current programme of 2014–2020, the consolidation works are supported by funds from the EU budget – currently from the European Agricultural Fund for Rural Development. The size of a farm as well as the number and shape of included parcels are important for the agricultural producer. The defective spatial structure of a farm is a very serious obstacle to adapting to changing market conditions through the modernisation of agricultural production. In addition, agricultural parcels below 0.10 ha can't obtain financial assistance in the form of direct payments to agricultural land, while their width excludes the possibility of afforestation. Land consolidation is a classic legal solution to improve a defective spatial structure that has a very long tradition in Poland dating back to the interwar period. The consolidation of land aims to improve the spatial structure of agricultural holdings but does not interfere with the sphere of ownership relations. The consolidation does not change either the number of owners or the ownership or other rights to the property, it only affects the shape and size of the separated convertible properties. In return for the land owned before the procedure, each participant receives different land of an equal estimated value. The decision approving the consolidation project constitutes a legal title to disclose the new ownership status in the land and mortgage register. In accordance with the Act of 26 March 1982 on land consolidation and exchange [Journal of Laws of 2014, item 700, as amended], the consolidation procedure is carried out by the starost (the chair of district executive board) as a task of government administration from the state budget funds. The consolidation procedure may be initiated at the request of a majority of the owners of farms located in the consolidation area or at the request of the owners of land whose total area exceeds half of the area of the proposed consolidation area. Contemporary land consolidations bring measurable results:

- the consolidation procedure is financed 100% from public funds at no cost to the participants,
- delimitation in the field, i.e. the layout of the new boundaries of the cadastral parcels and permanent stabilisation of the boundary points of these parcels,
- reduction of the number of parcels and thus increasing the average area of these parcels,
- reduction of the distance of parcels from dwellings and thus shortening the access time, which results in a reduction in the cost of agricultural production,
- provision of access for each post-development parcel to an internal or public road,
- reduction of the number of parcels of irregular shapes to the minimum necessary,
- the adaptation of the boundaries of the parcels to the system of land reclamation devices, roads and terrain,
- exemptions and reductions in agricultural tax for a period of three years,
- delineation and installation of a functional road network, including roads to agricultural and forest lands, as well as roads to farm buildings with technical parameters adapted to those currently used for the management of agricultural machinery,

- correction of the course and improvement of technical parameters of land reclamation devices,
- liquidation of unnecessary lynchets and roads along with reclamation works enabling mechanical cultivation of plots,
- improvement of the area structure of farms by increasing their area in return for cash payments with the lands of those farmers who intend to cease agricultural production,
- the possibility of adapting the structure of the land and the soil diversity to the needs of a chosen direction of production of an agricultural holding,
- making the necessary corrections to the borders of habitat parcels,
- separation of adequately located land for housing purposes,
- abolition of unnecessary land easements,
- separation of land necessary for local public utility,
- free of charge abolition of co-ownership of agricultural property at the joint request of their co-owners,
- free of charge division of a land community with the consent of an absolute majority of persons entitled to participate in that community,
- development of cadastral documentation for consolidation precincts in accordance with the requirements of currently applicable technical standards,
- preparation of geodetic and legal documentation necessary to enter the post-consolidation state in the land and mortgage registers.

3. Scope of previous land consolidation works in the Leżajski district

The Leżajsk district covers an area of 58,372 ha, including 40 cadastral precincts. So far, land consolidation has been performed in 29 cadastral precincts with an area of 46 113 ha, which is 79.0% of the total area of the district. Land consolidation in the Leżajsk district was carried out at various periods based on different changing legal regulations. Taking into account the legal provisions, the consolidations performed so far can be grouped as follows:

Carried out in 1945–1968

During this period, the following legal provisions were in force: the Act of 31 July 1923 on land consolidation, the Decree of 6 September 1944 on the implementation of land reform, the provisions of which indirectly determined the fate of the consolidation works as agricultural land was at that time allocated to enlarge smallholdings and new peasant farms were created; the Decree of 14 April 1948 on the adaptation of the rules of consolidation procedure provided for in the Act of 31 July 1923 on land consolidation due to war conditions; the Decree of 16 August 1949 on land exchange.

In connection with the situation after World War II, the so-called regulatory and exchange proceedings were carried out in several cadastral precincts of the district, as a result of which parcels with regular borders and direct access to roads were designated. A network of new roads and drainage ditches was also designed. During this period, the regulatory proceedings covered 4 cadastral precincts, i.e. Chałupki Dębniańskie, Dębno, Dąbrowica and Słoboda with a total area of 4 488 ha, which constitutes 7.69% of the district's total area. In the Chałupki Dębniańskie and Dębno precincts, the measurement on the ground was made in the years 1945–1948, the regulation project was prepared in 1952–1953 and the designation of the project on the ground was made in 1953. The classification of land was done in 1959 and land registers and documentation for the establishment of land and mortgage registers were compiled in 1962. Documentation concerning the initiation of the proceeding and its approval has not survived. In the Słoboda precinct, which has an area of 676 ha, the regulatory proceedings were initiated by the order of the PWRN in Rzeszów L.R.U-b/67/21/51 of 21.01.1951. The measurement on the ground was made in the years 1957–1958, and the regulatory procedure was approved by the PPRN ruling in Jarosław L.Dz.I.19/IId/41/6/58 of 22.09.1958.

The Dąbrowice precinct, with an area of 1,449 ha, land regulation was carried out in 1966 by measuring on the ground and drawing up a map of the Dąbrowica area, which was laid out for inspection of the villagers. Survey documentation was completed in 1968. No formal and legal documentation regarding the initiation and approval of regulatory proceedings has survived.

Carried out in 1969–1982

On 27 January 1968, the Act of 24 January 1968 on the consolidation and exchange of land entered into force and, as of that date, the previously applicable provisions on land consolidation and exchange ceased to be in force. During this period in the Leżajsk district land consolidation was executed *ex officio*. In 1969–1982, 12 cadastral precincts with a total area of 25 6262 ha, which gives 43.90% of the district's total area, were included in the consolidation proceedings. These were the following precincts.

Kolonia Polska precinct with an area of 785 ha

No documentation regarding the initiation of proceedings has survived, while the approval of the consolidation project was decided by the Presidium of the District National Council in Leżajsk no. 16/3/69 of 29.12.1969.

Piskorowice precinct with an area of 2498 ha

The proceedings were initiated based on the Presidium of the District National Council in Leżajsk no. 9/2/69 of 8.10.1969 and the approval of the project was based on the decision of the Presidium of the District National Council in Leżajsk no. 36/13/70 of 28.10.1970.

Ożanna precinct with an area of 1446 ha

The consolidation was carried out based on the decision of the District National Council in Leżajsk no. 42/10/70 of 19.08.1970. The consolidation project was approved based on the decision of the Presidium of the District National Council in Leżajsk no. 61/17/71 of 6.10.1971.

Rzuchów precinct with an area of 675 ha

The proceedings were initiated on the basis of the Presidium of the District National Council in Leżajsk no. 29/8/70 of 8.07.1970 and the approval of the project was based on the decision of the Presidium of the District National Council in Leżajsk no. 61/18/71 of 06.10.1971.

Kuryłówka and Tarnawiec precincts with a total area of 2409 ha

The proceedings were initiated on the basis of the Presidium of the District National Council in Leżajsk no. 64/19/71 of 17.11.1971 and the approval of the project was based on the decision of the Presidium of the District National Council in Leżajsk no. 91/24/72 of 10.12.1972.

Stare Miasto and Przychojec precincts with a total area of 2457 ha

The proceedings were initiated on the basis of the Presidium of the District National Council in Leżajsk no. 92/26/72 of 08.12.1972 and the approval of the project was based on the decision of the Presidium of the District National Council in Leżajsk no. 58/74 of 25.10.1974.

Kulno precinct with an area of 2659 ha

The proceedings were initiated on the basis of the decision of the head of the district in Leżajsk no. 51/74 of 30.09.1974 and approved by the decision of the Rzeszów Voivode no. RL.IX.Sc-0472/678b/75 of 20.09.1975.

Giedlarowa precinct with an area of 2995 ha

The proceedings were initiated on the basis of the decision of the Deputy Governor of Rzeszów Voivodeship, no. RL.IX.Sc-0472/342/37/76 of 30.10.1976 and approved by the decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/273/78 of 21.12.1978

Wierzawice precinct with an area of 2102 ha

The proceedings were initiated on the basis of the decision of the Deputy Governor of Rzeszów Voivodeship, no. RL.IX.Sc-0472/1504/44/76 of 06.12.1976 and approved by the decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/252/78 of 30.12.1978.

Brzyska Wola and Wólka Łamana precincts with a total area of 3436 ha

The proceedings were initiated on the basis of the decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/138/28/76 of 22.09.1976 and approved by the

decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/278/78 of 12/30/1978.

Jastrzębiec precinct with an area of 1342 ha

The proceedings were initiated on the basis of the decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/13/80 of 15.02.1980 and approved by the decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/307/80 of 15.10.1980.

Sarżyna precinct with an area of 2822 ha

The proceedings were initiated on the basis of the decision of the Deputy Governor of Rzeszów Voivodeship no. RL.IX.Sc-0472/53/81 of 28.03.1981, and approved by the decision of the Governor of Rzeszów Voivodeship no. G-WSc-7432-67/84 of 26.11.1984.

During this, most consolidations were performed in the Leżajsk district.

Carried out in 1983–1989

On 06 April 1982, the Act of 26 March 1982 on the consolidation and exchange of land entered into force, which has been in force to this day after being amended several times. On the day this act came into force, the Act of 24 August 1968 on land consolidation and exchange had expired. At that time, in the Leżajsk district two cadastral districts with an area of 500 ha, which constitutes 0.86% of the district's total area, were covered by consolidation works.

Ruda Lancucka precinct with an area of 242 ha

The proceedings were initiated on the basis of the notification of the Head of the Town and Municipality of Nowa Sarżyna no. G-7014/4/7/87 of 13.03.1987, and were approved on the basis of the decision of the Head of the Town and Municipality of Nowa Sarżyna no. G-7014/4/29/89 of 28.12.1989.

Łuków district with an area of 258 ha

The proceedings were initiated on the basis of the notification of the Head of the Town and Municipality of Nowa Sarżyna no. G-7014/3/6/87 of 13.03.1987 and approved on the basis of the decision of the Head of the Town and Municipality of Nowa Sarżyna no. G-7014/3/30/89 of 28.12.1989.

Carried out in 1990–2005

In 1990, after the transformation of the state system in Poland, the competencies of the Head of the Municipality in the field of land consolidation were taken over by the Head of the District Office, and later, after the creation of poviats (districts) on 01.01.1999, the competences were taken over by the starost (chair of district's executive office) as a government administration task. In this period, the consolidation procedure covered

6 cadastral precincts with a total area of 13,509 ha, which accounts for 23.14% of the total area of the district.

Maleniska precinct with an area of 105 ha

The proceedings were initiated on the basis of the notification of the Head of the Leżajsk Municipality no. 7014/8/2/88 of 06.01.1988 and were approved on the basis of the decision of the Head of the District Office in Leżajsk no. G-60140/5/44/95 of 22.08.1995.

Jelna district with an area of 2502 ha

The proceedings were initiated on the basis of the notification of the Head of the Town and Municipality of Nowa Sarzyna no. G-7014/1/4/87 of 26.01.1987, and were approved was based on the decision of the Head of the District Office in Leżajsk, no. G.7431/15/90 of 07.12.1990.

Brzóza Królewska district with an area of 4909 ha

The proceedings were initiated on the basis of the notification of the Head of the Leżajsk Municipality no. 7014/2/3/86 of 08.09.1986 and were approved on the basis of the decision of the Head of the District Office in Leżajsk no. G-60140/V-2/77/92 of 29.12.1992.

Wola Zarczycka precinct with an area of 3508 ha

The proceedings were initiated on the basis of the decision of the Head of the District Office in Leżajsk no. G-60140/VII/1/92 of 09.11.1992, and were approved was based on the decision of the Head of the District Office in Leżajsk, no. G-60140/VII/7/92/98 of 16.09.1998.

Wólka Grodziska precinct with an area of 629 ha

The proceedings were initiated on the basis of the decision of the Chair of Leżajsk District no. GN-6017/37/2000 of 19.10.2000, and the approval on the basis of the decision of the Chair of Leżajsk District no. GN-6017/1/125/2005 of 19.08.2005.

Grodzisko Górne precinct with an area of 1856 ha

The proceedings were initiated on the basis of the decision of the Chair of Leżajsk District, no. GN-6017/37/2000 of 19.10.2000 and approved on the basis of the decision of the Chair of Leżajsk District no. GN-6017/I/132/05/08 of 26.03.2008. Even though the approval of the project took place in 2008, i.e. after the launch of the European Union structural funds, because the technical activities of land consolidation were completed by 2005, the financing of this consolidation was carried out according to existing regulations, i.e. entirely from the state budget.

Carried out in 2006–2013

Following Poland's accession to the European Union, the possibility arose of subsidising land consolidation from the so-called Structural Funds. Since 2007, land consolidation

has been co-financed under the Rural Development Program for 2007–2013 as financial aid granted to the chair of the district as the body carrying out the consolidation procedure and post-consolidation development under the priority axis, i.e. improving the competitiveness of the agricultural and forestry sector, as measure 125 “Improving and developing infrastructure related to the development and adaptation of agriculture and forestry through land consolidation”. According to the amended law on land consolidation and exchange of 26 March 1982, the consolidation procedure is coordinated and performed by the provincial government with the help of organisational units appointed by this government to perform these tasks. In the area of operation of the Podkarpackie Voivodeship, such a unit is the Podkarpackie Office of Geodesy and Agricultural Areas in Rzeszów.

Within the framework of the RDP 2006–2013 in the Leżajsk district, consolidation covered two cadastral precincts with an area of 1990 ha, which accounts for 3.41% of the total area of the district.

Hucisko precinct with an area of 579 ha

The proceedings were initiated on the basis of the decision of the Chair of Leżajsk District no. GN.661.30.2012 of 19.07.2012 and approved on the basis of the decision of the Chair of Leżajsk District no. GN.661.30.2012 of 27.09.2013.

Tarnogóra precinct with an area of 1411 ha

The proceedings were initiated on the basis of the decision of the Chair of Leżajsk District no. GN.661.29.2012 of 19.07.2012 and approved on the basis of the decision of the Chair of Leżajsk District no. GN.661.29.2012 of 18.12.2013. By the judgment of the Voivodeship Administrative Court in Rzeszów, the decision to approve the consolidation was revoked in its entirety. After completing the procedure, the land consolidation project in the village of Tarnogóra was re-approved by the decision of the Chair of Leżajsk District, no. GN.661.29.2012 of 11.07.2017. Post-consolidation development in the precincts of Hucisko and Tarnogóra was completed in 2014.

The land consolidation performed so far in the Leżajsk district in the individual periods has been listed chronologically in Table 1.

4. Projected and implemented consolidation works under RDP 2014–2020

The European Parliament has defined the prospects for agricultural policy until 2020. These perspectives for Poland are defined in the Rural Development Program (RDP) 2014–2020. Appropriate legal provisions have been issued in this regard, including the Act of 20 February 2015 on supporting rural development with the participation of the European Agricultural Fund for Rural Development for 2014–2020 and the Regulation of the Minister of Agriculture and Rural Development of 10 December on the detailed conditions and procedures for granting and paying financial assistance for land consolidation under the sub-measure “Support for investments related to the development, modernization and adaptation of agriculture and forestry” covered by the Rural

Table 1. Consolidation works carried out so far in the Leżajsk district

No.	Municipality	Name of precinct	Area of precinct [ha]	Period of execution					
				1945-1968	1969-1982	1983-1989	1990-2005	2005-2013	
1	Leżajsk	Brzoza Królewska	4909				1992		
2	Leżajsk	Chatupki Dębniańskie	619	1962					
3	Leżajsk	Dębno	1744	1962					
4	Leżajsk	Giedlarowa	2995		1978				
5	Leżajsk	Hucisko	579					2013	
6	Leżajsk	Maleniska	105				1995		
7	Leżajsk	Piskorowice	2498		1970				
8	Leżajsk	Przychojoc	1283		1974				
9	Leżajsk	Rzuchów	675		1971				
10	Leżajsk	Old Town	1174		1974				
11	Leżajsk	Wierzawice	2102		1978				
Leżajsk Municipality in Total			18 683						
12	Nowa Sarzyna	Jelna	2502				1990		
13	Nowa Sarzyna	Łuków	258			1989			
14	Nowa Sarzyna	Ruda Łańcucka	242			1989			
15	Nowa Sarzyna	Sarzyna	2822			1984			
16	Nowa Sarzyna	Tarnogóra	1411					2013	
17	Nowa Sarzyna	Wola Zarczycka	3508				1998		

Table 1. cont.

No.	Municipality	Name of precinct	Area of precinct [ha]	Period of execution				
				1945-1968	1969-1982	1983-1989	1990-2005	2005-2013
	Nowa Sarzyna Municipality in Total		10 743					
18	Kuryłówka	Brzyska Wola	3076		1978			
19	Kuryłówka	Dąbrowica	1449	1968				
20	Kuryłówka	Jastrzębiec	1342		1980			
21	Kuryłówka	Kuryłówka	1984		1972			
22	Kuryłówka	Kulno	2659		1975			
23	Kuryłówka	Kolonia Polska	785		1969			
24	Kuryłówka	Ożanna	1446		1971			
25	Kuryłówka	Słoboda	676	1958				
26	Kuryłówka	Tarnawiec	425		1972			
27	Kuryłówka	Wólka Łamana	360		1978			
	Kuryłówka Municipality in Total		14 202					
28	Grodzisko Dolne	Grodzisko Górne	1856				2008	
29	Grodzisko Dolne	Wólka Grodziska	629				2005	
	Grodzisko Dolne Municipality in Total		2 485					
	Total		46 113					

Source: Authors' own study based on data from the District Administration in Leżajsk

Development Program for 2014–2020. As part of this program, consolidation works are carried out in the Leżajsk district in one cadastral precinct, i.e. the village of Grodzisko Dolne, with a total area of 2,689.82 ha. The village of Grodzisko Dolne is the seat of the Grodzisko Dolne municipality in the Leżajsk district, situated in the north-eastern part of the municipality. The buildings are concentrated mainly in the central part of the precinct along district road no. 1259 R from Gniewczyna – Grodzisko – Giedlarowa, which runs from south to north, and in the north-eastern part of the precinct along the district road no. 1273 R from Chodaczów – Grodzisko Dolne and the district road no. 1271 R from Grodzisko Dolne – Chałupki Dębniańskie. Moreover, through the precinct also run the district roads no. 1268 R from Kopanie Żołyńskie – Grodzisko Górne – Grodzisko Dolne, 1269 R from Zmysłówka – Grodzisko Dolne, and 1970 R from Żołyńsk – Zmysłówka – Grodzisko Dolne. The Przeworsk – Rozwadów railway line runs through the north-eastern part of the precinct.

The landscape of the village of Grodzisko Dolne is varied. The flat plains of the lower Wisłok river and lower San river valleys contrast with the hills of the Kolbuszowa Plateau stretching in the western part of the village. The area is crossed by the Leszczyńska river, a left-bank tributary of Wisłok. The village of Grodzisko Dolne features numerous post-glacial depressions, which form characteristic lakes and ponds. The largest of them is the lake 'Czyste', which was once natural, but has been artificially enlarged to serve as a retention reservoir with an area of 9.88 ha, as well as a recreational facility. The surroundings of the reservoir are included in the local spatial development plan approved by the Resolution of the Grodzisko Dolne Municipality Council no. XX VII/172/08 of 02.10.2008 with the change approved by the Resolution of the Municipality Council no. VII/40/2015 of 23.04.2015. Most of the soils found in the village of Grodzisko Dolne are of good quality belonging to classes III–IV. Taking into account the arable land, classes from IIIa to IVb cover the area of 1558.39 ha, which is 89.44% of the total arable land within the precinct, while soils of classes V and VI cover the area of 183.93 ha, which is 10.56% of the arable land. A similar percentage share of good quality land is in grasslands.

Based on the data obtained in the District Administration in Leżajsk for the consolidation project developed by the Podkarpackie Office for Geodesy and Agricultural Areas in Rzeszów, it was found that in the structure of land use, agricultural land constitutes 82.6% of the total area of the district, with the actual agricultural use of 1726.79 ha of land, which constitutes 64.2% of the rural area. The remaining non-agricultural land constitutes 17.4% of the total area of the precinct.

The private sector dominates the ownership structure, covering an area of 2481.33 ha, which accounts for 92.3% of the total area of the precinct. Lands owned by the public and the cooperatives occupy the area of 208.79 ha, which is 7.7% of the total area of the precinct. There are 478 farms with an area between 1.00–1.99 ha, amounting to 674.26 ha, which is the highest in the structure of agricultural holdings. In the range of 2.00–4.99 ha, there are 274 farms with a total area of 794.05 ha. These two groups of farms together constitute 90.36% of the total area of farms within the precinct. Farms over 5.00 ha cover an area of 156.70 ha, which is 9.64% of the total area of agricultural holdings.

Grodzisko Dolne precinct is characterized by significant land fragmentation. The average area of a parcel within the precinct is 0.30 ha, while the average number of parcels in a farm is 7. Some parcels have no access or restricted access due to the width of roads and their technical condition. There is 16.6 km of district roads in the village of Grodzisko Dolne, as described above, and 115.9 km of municipal roads. District roads have a hardened surface, while municipal roads consist of 19.3 km of the asphalt surface and 14.1 km of gravel surface, which gives a total of 33.4 km. The remaining roads used directly for agricultural transport are dirt roads, often not exceeding 3.0 m in width. They often lack culverts and drainage ditches. The consolidation project assumes the construction and modernization of municipal roads on a length of 136.68 km. It will cover 97.95 ha. The missing area should be provided by municipal lands or the agricultural property of the State Treasury. Groundwater is discharged through a network of open ditches of land reclamation with a total length of 21.50 km, which require 100% reconstruction and maintenance as part of post-consolidation management.

Part of the Grodzisko Dolne precinct with an area of approx. 1067.13 ha is covered by the Zmysłówka Protected Landscape Area, which was established pursuant to the Regulation of the Rzeszów Voivodeship Governor no. 35/92 of 14.07.1992 on the principles of management of protected landscape areas in the Rzeszów Voivodeship (Dz. Urz. Woj. Rzeszowskiego Nr 7, poz. 74) [Journal of Laws of Rzeszów No. 7, item 74]. Currently, its legal status is determined by the Regulation of the Podkarpackie Voivodeship Governor no. 82/05 of 31.10.2005 on the Zmysłówka Protected Landscape Area (Dz. Urz. Woj. Podkarpackiego Nr 138, poz. 2108 z późn. zm.) [Journal of Laws of the Podkarpackie Province No. 138, item 2108, as amended].

In the area of the Zmysłów Protected Landscape Area, it is forbidden, among others, to:

- implement projects that may have a significantly adverse impact on the environment,
- remove buffer strips or roadside and waterside trees,
- carry out earthworks that permanently distort the terrain,
- change water conditions,
- eliminate natural water reservoirs.

Taking into account the described existing state of agriculture, to improve the functionality of the agricultural production space, the owners of the land located in the Grodzisko Dolne precinct (which constitutes 63.00% of the total area of the precinct) submitted applications to the Chair of Leżajsk District to initiate the consolidation procedure.

After a positive consideration of the submitted applications, the Chair of Leżajsk District issued a decision no. GN.661.28.2015 of 29.10.2015 initiated the consolidation procedure for land located in the village of Grodzisko Dolne in the Grodzisko Dolne municipality with a total area of 2,689.82 ha.

Then, on 04.10.2016, after prior submission of an application for financial aid, an agreement on granting aid no. 00007-6502-UMI 0900001/16 between the Local Government of the Podkarpackie Voivodeship and the Leżajsk District. The Leżajsk

District as the Beneficiary was granted financial aid of PLN 27,477,891.22, which constitutes 100% of eligible costs of the operation, of which aid from the European Agricultural Fund for Rural Development in the form of reimbursement was PLN 17,484,182.00. The costs of technical activities for consolidation of land amounted to PLN 8 055 911.00, and the costs of post-consolidation development are PLN 19 421 980.22.

Pursuant to the applicable provisions of the law in the field of land consolidation, the land consolidation contractor is the Podkarpackie Office of Geodesy and Agricultural Areas in Rzeszów. On the basis of the administrative agreement of 11.10.2016 concluded between the Chair of Leżajsk District and the Voivodship Board with the participation of the Podkarpackie Office of Geodesy and Agricultural Areas as the 'Contractor'. The expected date of completion of technical activities were planned for 2021, and the entire project with the post-consolidation management, including:

- construction or reconstruction of post-consolidation roads with culverts under the roads and exits to the plots,
- renovation of drainage ditches,
- land reclamation through a tender by a selected contractor is scheduled for 2023.

5. Analysis of social demand for land consolidation in individual precincts of the Leżajsk district

The preliminary forecast of the consolidation works carried out in the Leżajsk district under the RDP 2014–2020 provided for the inclusion of the remaining part of the Grodzisko Dolne municipality in the consolidation procedure, so in addition to the village of Grodzisko Dolne, it was planned to include the following precincts in the consolidation: Chodaczów, Laszczyny, Opaleniska, Zmysłówka.

In these precincts, there was adequate social demand for consolidation works. The information obtained in the Grodzisko Dolne Municipal Office and the District Administration in Leżajsk shows that after collecting the applications of landowners for their consolidation, the percentage share of this land to the total area of the precinct is as follows: Chodaczów precinct – 59.31%, Laszczyna precinct – 63.01%, Opaleniska precinct – 56.27%, Zmysłówka precinct – 50.46%.

Although more than half of the land area of these precincts was declared for consolidation by their owners, so far these precincts have not undergone any consolidation due to the lack of financial resources for the Podkarpackie voivodeship in the RDP programme 2014–2020. The envisaged funds were distributed among the districts applying for consolidation works.

Efforts were also made to include in the consolidation under the RDP 2014–2020 two cadastral precincts from the area of the Leżajsk municipality, i.e. Biedaczów and Gwizdów. An attempt was made to collect applications for inclusion in the consolidation from the landowners. The information obtained in the Municipal Office of Leżajsk and the District Administration in Leżajsk shows that applications obtained in the

village of Biedaczów concerned about 36% of the total area of the precinct, and the village of Gwizdów – about 30% of the total area of the precinct. Such a state did not allow for the submission of an application for the initiation of consolidation proceedings because the criteria provided for in the act on land consolidation and exchange were not met in these areas.

In the precincts of Łętownia and Wólka Łętowska, no attempt was made to collect applications because at the village meetings organised for this purpose, there was no public interest in carrying out land consolidations at present.

6. Conclusions

Leżajsk district is one of the few districts of the Podkarpackie voivodeship with the most land consolidations. They began just after World War II and continue to this day. So far, land consolidations have been performed in 29 cadastral precincts, totalling 46 113 ha, which is 79.0% of the total area of the district.

Consolidations were carried out at different periods and so:

- in the years 1945–1968 – 4 precincts with a total area of 4488 ha, which constitutes 7.69% of the total area of the district,
- in the years 1969–1982 – 14 precincts with a total area of 22 804 ha, which constitutes 39.07% of the total area of the district,
- in the years 1983–1989 – 3 cadastral precincts with a total area of 3322 ha, which constitutes 5.69% of the total area of the village,
- in the years 1990–2005 – 6 precincts with a total area of 13 509 ha, which constitutes 23.14% of the total area of the district,
- in the years 2006–2013 – 2 precincts with a total area of 1990 ha, which constitutes 3.41% of the total area of the district,

During the implementation under the Rural Development Programme 2014–2020, the only consolidation realised was in one cadastral area with an area of 2689.82 ha, which constitutes another 4.61% of the district's area. Together with the previously performed consolidations, this constitutes 83.61% of the total area of the district.

8 cadastral precincts remain to be consolidated – rural areas covering 6605 ha, which is 11.32% of the total area of the district. The other two precincts are the town of Leżajsk and the town of Nowa Sarzyna.

However, the social demand for land consolidation within the areas covered by the study may change dramatically, as the completed consolidations in the precincts covered by the RDP 2007–2013 programme, where land consolidation has already been carried out together with post-consolidation development and the technical infrastructure has been significantly improved, in particular the network of roads and drainage ditches, which has had a very positive impact on the management conditions.

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