

THE OUTLOOK OF LAND CONSOLIDATION IN POLAND: STAKEHOLDERS' DILEMMAS AND POLICY WEAKNESSES

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Abstract: This paper discusses the issue of farmland merging in Poland in the face of social unwillingness and a poor legal policy. The theoretical consideration was carried out on the basis of the scientific body of literature, supported by empirical examples of farmland consolidation. The intention of the work is to present a comprehensive overview of land consolidation, where special attention was paid to the unsuccessful merging efforts. As a result of the investigation, attempts were made to answer the following question: *Is land consolidation necessary to improve the condition of Polish farming?*

Keywords: farmland merging, stakeholders, policy, Poland

INTRODUCTION

The fragmentation of agricultural land involves policy-making and social aspects alike. A wide range of Polish literature on the subject is devoted to the issue including very comprehensive and multifaceted analyses from collective scientific descriptions, like, for example, that edited by Woch (2006, 2011) or Wierzbowski (2007). However, the Polish case is not an isolated one: many European countries are facing the challenge of land disintegration. The problem is especially acute in Central and Eastern Europe (van Dijk 2007). It is worth pointing out that in the majority of the countries, it results from land re-plotting resulting from the restitution or the distribution of previous national ownership among private landholders after the socio-economic transition started in the 1990s (Hartvigsen 2014). Consequently, agricultural land privatisation increased land fragmentation, with the exception of Slovakia and the Czech Republic where large-size landownership continued over the post-socialist period (Voltr 2000; Kabat & Hagedorn 1997; Bański 2011). In the long history of farmland fragmentation in Poland, landscape mosaics have been always a part of the rural settlement arrangement, agricultural land acquisition as well as a complicated distribution of assets.

In general, farmland fragmentation is closely related with undersized farms and small land plots. In relation to the Central and Eastern European countries,

van Dijk (2003) suggests the following meanings of land fragmentation: (1) ownership fragmentation, where the ownership of agricultural land is split among many owners of small and often badly shaped plots, (2) land use fragmentation, referring to the diverse use of the land, and (3) internal fragmentation, understood as fragmentation of land plots belonging to one owner. At the farm level, King & Barton (1982) suggest that land fragmentation has two distinct aspects, namely: the division of a farm into undersized plots unsuitable for farming and, on the other hand, the division of a farm into many fragmented plots spread out in the rural space. When it comes to the factors of land fragmentation, distribution of assets and densely built-up villages are among the overwhelming reasons (Markuszevska 2014).

While there is no uniform definition of land fragmentation (Hartvigsen 2014), several parameters describing land fragmentation can be distinguished: (1) the size of the holding, (2) the number of plots in one holding, the size of plots, (3) the spatial distribution of the plots, and (4) the shape characteristics of the plots (King & Burton 1982). In describing the specific chaotic distribution of land plots in farmland owned by a single farmer (in Polish literature on the subject known as 'fields patchwork'), the following determinants are typically taken into account: (1) the size of a field, (2) the number of plots in a farm, (3) the acreage of the plot, and (4) the distance between the farm and plots scattered among different landownership. The above characteristics have the following attributed numbers: 8 hectares, 8 pieces, 0.6 hectare, 1–2 kilometres, respectively (Woch et al. 2011). Statistical data indicate that, as a rule, the farmland runner in Poland is unfavourable, however, the examined features occur regionally as a consequence of diverse historical circumstances and socio-economic determinants observed especially over the last two centuries (Markuszevska 2013a). The least favourable situation is in the south-west of Poland; the most favourable – in the northern and western fringes of the country.

There is a common belief that land fragmentation restricts farm development; in particular, it is responsible for hindering production effectiveness. A reasonable way of overcoming this obstacle would be farmland consolidation, leading to land plots merging and swapping, plot exchange to forms that are better adjusted to their proper use. On the other hand, considering the profound effects of land consolidation, it seems to be puzzling that in farmland merging as a tool of improving farming efficiency is not very popular in Poland. Furthermore, the declining importance of this agro-technical treatment has been observed as, since WWII, the share of merging and exchanging work has been on a steady decrease: from about 300 thousand hectares to 15 thousand hectares annually (Woch et al. 2011). The situation did not improve after Poland's accession to the European Union when special financial support from the structural funds was offered to consolidate land. No other kind of Polish agriculture renewal has raised as much controversy as farmland merging as procedures pending for

many years have not always been successfully completed. Undoubtedly, it is the farmers' unwillingness and defective policy rules that create formidable and impenetrable barriers to the farmland merging procedures (Markuszczyńska 2014).

Land consolidation in European countries is carried out in two different manners: compulsory land consolidation and comprehensive land consolidation (Sonnenberg 2002; Vitikainen 2004). Simple land merging refers to enhancing production efficiency by land re-plotting without additional activities that could improve the quality of life and the environment. In contrast, the aim of the complex land consolidation is not only land plot grouping and swapping, but also a comprehensive renewal of rural areas as well as the landscape and environmental protection.

This paper is devoted to the issue of farmland merging in Poland. The theoretical consideration was carried out on the basis of the scientific body of literature supported with empirical examples of farmland consolidation. The intention of the work was to present a comprehensive overview of land consolidation, with special attention paid to unsuccessful merging. Having specified this issue, an attempt was made to answer the following questions: (1) *Why the existing body of law and rural spatial planning policy do not create adequate conditions for farmland merging as a tool of improving the agrarian structure?*, (2) *What kinds of circumstances refrain local stakeholders from farmland merging?*, and (3) *Is farmland merging in Poland reasonable bearing in mind the economic benefits and the natural conditions?*

LAND CONSOLIDATION AND THE RURAL SPATIAL PLANNING POLICY IN RELATION TO THE IMPROVEMENT OF THE AGRARIAN STRUCTURE

Comprehensive land consolidation is commonly regarded as a helpful tool in planning and management of rural area (FAO 2003; Miranda et al. 2006; Thomas 2006). On the other hand, many authors (like Meuser 1992) emphasise the role of farmland consolidation as a suitable instrument for the introduction of non-agricultural functions in rural areas. This view follows the idea of multi-functional countryside development, indicating the important role of land merging in rural area development. However, in Poland a complicated legal policy hampers the efficiency of consolidation as proven by the review of legal acts presented below.

With reference to the legal aspect of the land consolidation process, it is mainly regulated by the Act of 26 March 1982 on Land Consolidation and Exchange (the Act). Additionally, the Instruction on Land Consolidation (Instruction No. 1 of the Agriculture and Food Minister on land consolidation), which is a supplementary document, regulates the technical matters of merging. Since

land consolidation is carried out in accordance with certain rules of spatial planning as well as because different administrative bodies are involved in the formal procedures, some other legal acts will be mentioned in the next sections of this paper.

A brief overview of the historical background sheds light to the fact that merging-exchange in Poland has a long tradition, dating back to the Middle Ages when the process took place mostly in Church-owned properties (Wierchow-ski 2007). Also during the Partitions of Poland (1775–1918), land consolidation took place, especially in the regions incorporated into Prussia. After regaining independence in 1918, a radical move in reshaping fields pattern was prompted. In 1923, the Land Consolidation Act (Journal of Laws No. 93, item 718) was implemented with the main objective of farming modernisation. In 1968 a new Act (Journal of Laws No. 3, item 1097) came into force with the aim of creating appropriate conditions for intensifying production. Eventually, that body of law was replaced by the Act of 26 March 1982 on Land Consolidation and Exchange (Journal of Laws No. 185, item. 1097), with a subsequent amendment in 2015.

The investigation of the crucial role of the land consolidation policy in relation to land merging setbacks exposed several significant weaknesses of the Act on Land Consolidation and Exchange (Markuszevska 2013b, 2014). Many adverse law permissions led to difficulties in the merging procedures. Nonetheless, even if many experts representing land consolidation suggested that alteration of the legal rules was a must, it was not reflected in the latest amendment of the Act.

First of all, according to the legal environment, the competence of land consolidation is divided between various tiers of public administration. As a result, land consolidation procedures are conducted by local (*powiat*) and regional (*wojowodeship*) authorities (the Act of 5 June 1998 on Province Government, the Act of 8 March 1990 on Local Government, the Act on 13 October 1998 – Regulations Implementing the Act Reforming Public Administration). In fact, it does not affect the stimulation of merging process or the involvement of civil servants. For example, at landowners' formal requests, the head of the *powiat* government (*starost*) decides in favour of initiating the land consolidation process. After the decision is made, a land consolidation project can be elaborated but this is the surveyor-designer geodesy department (regional government) that is in charge of it. In spite of the fact that the project is drafted by the surveyor-designer, it is the *starost's* role to approve the document (Fig. 1).

What further complicates the procedures is the separation of the merging-exchange activity from the post re-plotting development. This involves splitting up the competencies of coordination and implementation of merging into two different levels of administration. Consequently, a land consolidation project revolving around land plots merging and relocation is completed by the geodesy department (the regional level). In contrast, post-consolidation management is

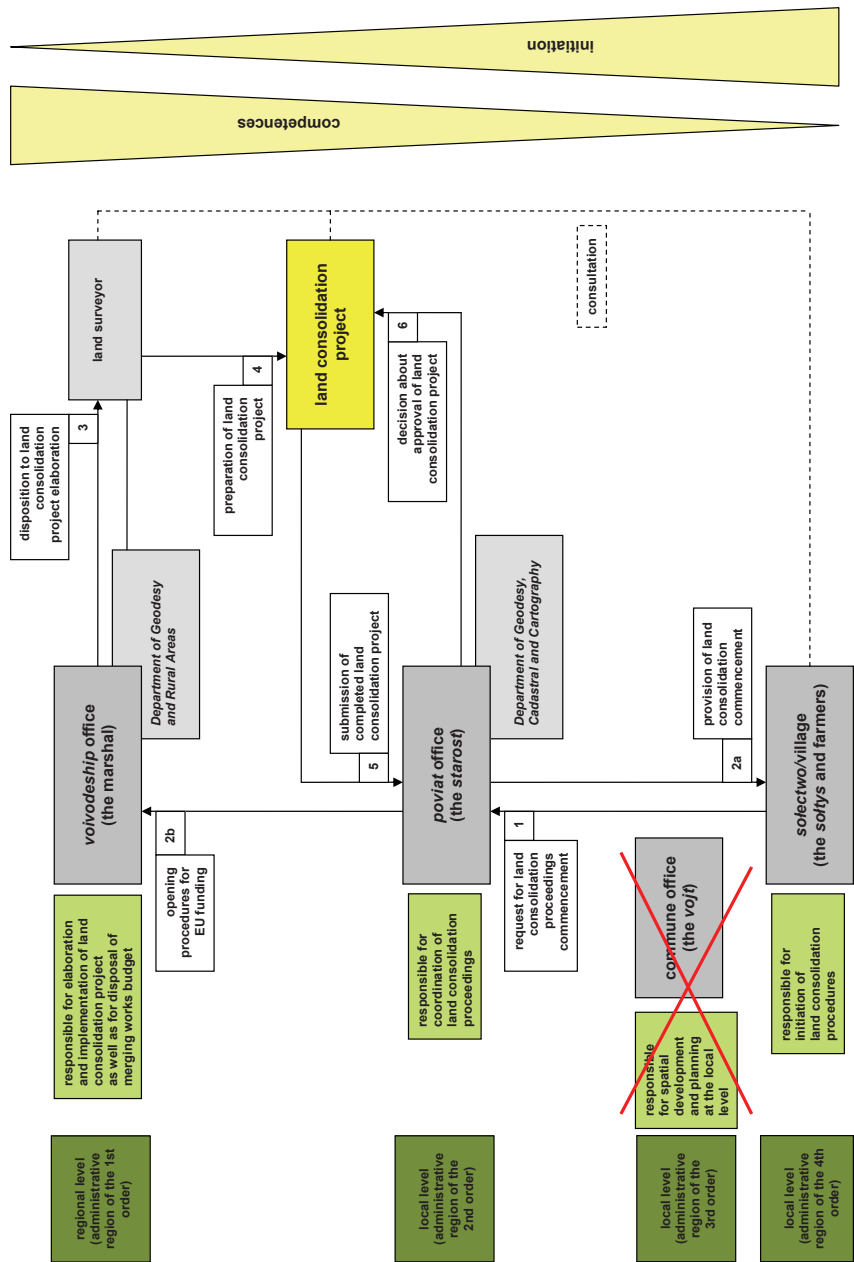


Fig. 1. Farmland merging procedures and responsibilities of different administrative bodies, presented step by step. Source: the author's compilation

under a *starost*'s supervision (the local level) who selects a contractor in a tender procedure. Here, problems occur when merging-exchange is extended because it prevents implementation of post-consolidation tasks.

Another aspect of faulty legal provisions is disregarded by commune authorities for the decision-making of land consolidation. While it does not call for a lengthy discussion, landscape planning and development at the local level are within the communes' responsibilities. It should be emphasised that until 1998, before the transition of Poland's administrative system, land consolidation was conducted by *vojts*, heads of the commune authorities, and after reorganization the competence was taken over *starosts* (the Act of 13 October 1998 – Regulations Implementing the Act Reforming the Public Administration).

In the case of spatial planning in rural areas it should be noted that local authorities do not elaborate any documents concerning agrarian space. While spatial planning at the local level is regulated by a Study of conditions and directions of spatial development of a commune (the Study) and by local zoning plans, only the Study includes guidelines concerning management of rural area. This indicates that agricultural production space is not of interest to planning policy-makers. It is worth pointing out that local zoning plans are elaborated only before new non-agricultural investments (the Act of 27 March 2003 on Spatial Planning and Development).

However, more and more frequently arranging agrarian plans of communes (AAPC) and arranging agrarian projects of villages (AAPV) serve as surrogate documents in rural landscape planning. Owing to a wide range of multidimensional characteristics, the AAPCs and the AAPVs are appropriate tools for transforming the countryside. Nevertheless, both the AAPCs and the AAPVs are strategy-focused and not planning documents; their usefulness in organising arranging-agrarian work is undeniable but, at the same time, their usefulness to spatial planning decision-making is rather disappointing. Furthermore, the *voivode* geodesy department is in charge of developing the AAPCs and AAPVs (the Act of 17 May 1989 on the Geodesic and Cartographic Law) which again excludes the local authorities. Until now, no legal principles have been adopted for these documents. Moreover, no obligation to draw up plans or projects has been imposed. But when the AAPCs and AAPVs become local normative acts (accepted by the commune council), their provisions shall be adopted for implementation.

The AAPCs are mentioned here because they constitute the basis for evaluating the demand for land consolidation in the Lower Silesia Voivodeship (the Analysis of demand..., 2010). The AAPCs provide a wide range of data concerning the plot distribution pattern. However, the AAPCs are a suitable tool in assessing the land consolidation demand and can also be helpful in evaluating the implementation of non-farming activities related to multifunctional development of rural areas.

Finally, the responsibility of analysing the demand for land consolidation by an administrative body, be it the national, regional or even local level, should be required by the law. Now, the existing provision of the legislation only authorizes this option.

The above findings show that land consolidation as a tool of managing and developing rural areas in Poland is still neglected unlike in most Western European countries where land consolidation is an integral part of complex countryside development (Thomas 2006). This is because land consolidation is related to an extensive array of legal regulations such as land use and planning, environmental protection (Meuser 1992). What is more, they are incorporated into the Common Agricultural Policy as part of co-financing the national rural development programme (Pasakarnis & Maliene 2010).

STAKEHOLDERS' UNWILLINGNESS TOWARDS FARMLAND MERGING

In the recent decades, following harsh criticism, traditional land consolidation was replaced with environmentally friendly comprehensive land merging (Grossman & Brussaard 1992). It was also a response to farmers' demand for improvement of the living conditions in the countryside (Woch et al. 2011). The latter was also a result of adopting the Common Agricultural Policy guidelines as well as adjusting the requirements in order to benefit from the EU subsidies (the Act of 7 March of 2007 on Rural Development Support involving the European Agricultural Fund for Rural Development).

As it has already been mentioned, to satisfy farmers' demands, it is no longer enough to carry out simple land consolidation as it was the case in the past (re-plotting). However, according to research (for example: Wierzchowski 2007; Markuszewska 2013b), farmers are hardly aware of the complex nature of land merging. This is the reason why they are unwilling to have farmland re-plotted. However, this is only one thing that puts farmers in opposition to land consolidation.

The fact that farmers are not convinced that they will not have to bear the costs of merging-replacement works may also come as a surprise. However, this legal provision seems to be highly controversial and debatable because the merged land belongs to private owners. Moreover, both previously mentioned acts of land consolidation from 1923 and 1968, incurred the obligation of cost-sharing of all land consolidation by the beneficiaries, proportionally to the area for consolidation. Furthermore, even the landowners who broke off the negotiations are not subject to any financial penalties.

Another issue is the age of landowners: farmers aged under 35 are usually more in favour of land consolidation (Woch et al. 2011). However, another

research (Markuszevska 2014) revealed that agrarian structure reorganization is not affected by the farmers' age but rather their attitude to land utilisation. The unwillingness towards farmland merging is expressed by farmers at various ages. Furthermore, hobby-farmers are less interested in enlarging their fields. On the other hand, owners of commercially-oriented holdings are definitely more in favour of plot merging because a good arrangement of fields boosts economic benefits.

It is worth adding that formal proceedings of land consolidation are under strict control on the part of the beneficiaries. While this provision stems from the Act on Land Consolidation, one of the consequences may be lengthening the procedures. Fortunately, the latest amendment to the Act introduces a time restriction of 5 years. It opens up an opportunity to accelerate the farmland merging process yet fails to solve another problem, namely land consolidation interruption. They result from usually unreasonable arguments between neighbours about allegedly inaccurate estimates of land value or dissatisfaction with the new farmlands. However, the farmers' disappointment is rarely justified. It seems that an aversion to losing land that has been owned by the family for years is stronger than rational arguments.

When a land consolidation project is being drafted, it is the farmers who have the final word unlike in the light of the previous law from 1968 where the role of the landowners was marginalised. This significantly improved the effectiveness of land condensation. That approach changed together with the social and economic transformation which empowered farmers.

In land consolidation projects, the land consolidation committee plays the leading role. It consists of members appointed by farmers as well as representatives of various organisations and authorities. The committee is entitled to provide unlimited comments on the draft version of a land consolidation project. Moreover, the *starost's* decision can be annulled by the committee at any time, not to mention the procedures or decisions that can be ordered by the administrative court. Interestingly, these actions were limited in the past. For example, according to the Act of 1923, the land consolidation authority was entitled to intervene when the merging committee's actions were deemed harmful. In such circumstances, it was possible to dismiss all the members and to appoint new ones selected from officials rather than farmers. At present that would be impossible, even if the advisory group misuses its power. Most importantly, in the past interruption of a course of land consolidation was hindered and only possible if rejected by two-thirds of the participants. Moreover, in such cases the landowners had to bear the related costs. At present, the procedure can be suspended or altogether stopped at the request of only one farmer, regardless of the advancement of the merging work, with no financial consequences.

Equally debatable is the fact that the consolidated farmland can be easily plotted out, almost immediately after the completion of land merging. In fact,

there is no legal ban on land fragmentation for inheritance or commercial purposes. Even if legal restrictions were adopted, enforcing this rule would be virtually impossible. What is more, this injunction contradicts the fundamental rights of landowners to dispose of their own land according to their will. Instead, two suggestions can be taken into consideration. One of them is imposing a high tax on inherited land as suggested by Manjunathaa et al. (2013) and others. This would discourage farmers from land subdivision. Another suggestion is participation of landowners in the land consolidation costs; for example in west European countries limiting land fragmentation is common practise (van Dijk 2007).

Bearing in mind the provisions of the Act of Land Consolidation, land consolidation procedures are initiated by landowners who have little knowledge about their role in initiating merging procedures. Therefore, formal proceedings do not give good grounds for encouraging land merging. What is more, Poland is ranked among the former communist countries where the involvement of the local stakeholders in decision-making used to be insignificant. This inexperience is reflected in the farmers' marginal interest in active participation in rural areas management.

On the other hand, representatives of different administrative bodies, involved in land consolidation procedures, are not obliged to carry out information campaigns among farmers to promote the idea of farmland merging. However, farmers are suspicious of officials who try to persuade them to relocate land. Therefore, providing a solution to this issue may be the role of the *sołtys* (head of a village) who can encourage farmers to merge farmland owing to his/her close relations with the local community.

FARMLAND MERGING IN RELATION TO THE INCREASE OF PROFITS AND MAINTENANCE OF NATURAL CONDITIONS

The justification for farmland merging in Poland should be commented in the light of financial benefits and the natural environment.

Obviously, a large number of largely scattered land plots has an adverse influence on production. The main reason for reshaping the agrarian structure is to create a land pattern which ensures a higher income and facilitates implementation of modern farming methods. Because reducing the number of small land plots poses the biggest challenge, the idea of land merging and exchange is to result in a possibly smallest number of fields in a farm. The issue of the most favourable number is still open. Following the Instruction on land consolidation, it is recommended to join a farmland owned by one farmer, representing one plot. However, in practice it is hardly possible, not to mention the fact that it is very rarely reasonable.

According to Surowiec (1985), from the point of view of production efficiency, there is no point in concentrating farmland in one plot. The main argument in favour of this statement is the fact that it does not limit the commuting nor does it reduce the fieldwork: agricultural treatments are applied in different vegetation times and each time, diverse cultivation equipment is used. Therefore, the commuting between the household and the fields as well as the labour required in a single-plot farmland would be the same as in a three-plot farmland.

What is more, splitting up farmland owned by one farmer into more than several plots is necessary for natural conditions like soil quality and relief. As for diverse soil quality, especially in areas affected by the last glaciation, the differences in soil richness make farmland partitions necessary, subsequently to adjusting soil quality to the plant requirements. In addition, soil variability affects tillage difficulties as well as the method of plant cultivation, which again proves imperative to keeping land disintegration. In the case of terrain variation so characteristic of the mountainous regions where areas with strongly sloping hillsides are prone to soil and water erosion, maintenance of the land mosaic is highly justified. In this case, land consolidation would be harmful to landscape shaping because of the erosion intensification (Boardman & Poesen 2006) as a consequence of removing the existing barriers such as field margins or middle-field paths. As a consequence, instead of larger profits from agrarian operations, farmers would lose money because of running out humus resources.

Furthermore, enlargement of arable plots by removal of small biotopes results in declining biodiversity, not to mention the poor aesthetic values of the landscape (Herzog 1998; Di Falco & Perrings 2005; Miranda et al. 2006; Sklenicka 2006; Pasakarnis et al. 2013). Fortunately, in the agricultural conditions as we know today in Poland, it is impossible to form large-scale fields. On the one hand, a large number of farmers manage relatively small acreages and varied soil conditions or diversified land relief effectively restrict these opportunities. Therefore, the concern about a huge loss of biodiversity as a consequence of farmland merging is questionable.

It should also be noted that dense development of villages is a reason of spatial dispersion of fields and sometimes also their remote location from the village. Therefore the distance between the farmstead and farmland influences financial performance. At a considerable farm-field distance, a detrimental effect of remote farmland cultivation has a twofold meaning: on the one hand, higher costs are incurred because of the far-off transit, on the other hand, distant fields are usually sown with less demanding plants giving in turn lower profits. There are many followers of the presupposition, supported by practical experiences, that land consolidation reduces transport costs of great importance to farmers (Miranda et al. 2006; Woch 2006). Therefore, it is astonishing that despite the fact of remoteness being the most imperative aspect of the poor agrarian structure,

this aspect is almost never taken into account in land consolidation projects in Poland (Woch 2001).

Certain experts like for example Woch (2001), Wierzechowski (2007), Di Falco et al. (2010) are concerned about the results of the existing studies which do not confirm a particularly significant increase in income after land readjustment. It needs to be noted that reducing the number of plots as well as adjusting the shapes of the fields to the cultivated work allows to save labour and working time. However, it is not always possible to eliminate the most adverse factor: the distance between the farms and the fields. Despite plots grouping and relocating, the mileage may still remain significant. Another major observation from the research relates to agriculture backwardness: if agrarian mechanisation is not coordinated with the improvement of the agrarian structure, the effects of land re-plotting effects will be lost.

Finally, the results of research (Markuszczyńska 2014) conducted in the southern part of the Wielkopolska Region may come as a surprise. The research revealed that in the region with prevailing small-scale family farms and considerable land fragmentation, the farmers generate handsome profits, sometimes even bigger than commercially oriented holdings. This is because the region enjoys a long tradition of privately operated farms and the resulting efficient production. On the basis of the above findings, the following conclusion can be drawn: farmland fragmentation is not necessarily an obstacle to high economic efficiency. The study carried out by Woch et al. (2011) corroborates the statement: production expenditures were classified as the most considerable factor influencing the economic results while the plot distribution pattern was ranked second.

CONCLUSION

The farmland merging proceedings in Poland is a rather complicated issue including social and policy-related issues. Even if frequent attempts were made in the past to dismantle the awkward agrarian pattern, the problem of the field chessboard still exists. Furthermore, the rate of re-fragmentation of the previously merged farmland, and, as a consequence, creation of a secondary field pattern, exceeds the pace of the preliminary land consolidation (Woch 2006). Bearing in mind all these circumstances, the problem of farmland consolidation seems to be a vicious circle. For this reason, the crucial question should be re-considered: is land consolidation necessary in the Polish farming conditions?

The fragmented agriculture structure results mostly from the prevail ace of self-sufficient family farms, usually not market-oriented. In fact, this highly socially-gearred dimension of agriculture makes the economic aspect of production less important than hobby-farming activities.

Finally, the issue of farm sizes should be noted; Woch et al. (2011) point out that the average area of farms within the whole country grows systematically, irrespective of whether a given area is under land consolidation or not. However, farmland merging should not be mistaken for farmland with farm enlargement. Obviously, land consolidation does not contribute to enlarging farm setting. On the contrary, farm enlargement is not achieved owing to land re-plotting. Last but not least, farm growth usually leads to increase in land fragmentation through purchasing or renting of additional land not adjacent to the existing farm.

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