

## CONSOLIDATION OF TENANTS' LAND - THE PRACTICAL APPROACH IN BULGARIA

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### *Abstract*

*Land consolidation allows rational organization of farm works, proper use of agricultural machinery, land reclamation, soil conservation, and environmental protection. There are texts in Bulgarian normative framework that regulate land consolidation concerning land-use. An out-of-leases redistribution of the rights on land use into large massifs is legalized by an Agreement for Use of Land Massifs. Since the number of Participants in the Agreement can be quite large, further consolidation of the massifs is possible. The objective of the paper is to present an approach to consolidation of massifs that are under the Agreement. It is suitable for the Participants who suffer from economic and geographical compelling circumstances for cultivating their land, to manage it efficiently by cooperating with neighbour participants. The idea emerged from a sociological study through a questionnaire survey on the available machinery park and possibilities of land cultivation. This facilitates the structural design of the agricultural area under cooperation. The Law permits the participant to cooperate for joint land processing. The legal rights for establishing this cooperation are revealed. The idea is illustrated by maps of a draft land consolidation project.*

**Key words:** cooperation, land consolidation, legislation, questionnaire survey.

### INTRODUCTION

The small-sized and fragmented structure of land ownership is characteristic for the countries in transition to the market economy. Their establishment is based on historical factors but also by the legislation in force. The historical precondition in Bulgaria is that the land ownership was small-sized and fragmented still before the socialist collectivization began. This was written down in the documents for landownership, which were used for its restoration by the Agrarian Reform. After the completion of the Agrarian Reform, 26 million owners had property rights on more than over 12 mil. plots which average area was 0.4-0.5 ha. Average land ownership of 2 ha consisted of four to five plots (Rembolt, 2003). Rapid division of property rights between the heirs followed. Today the average size of landed property is 0.608 ha and varies from 0.27 to 2.03 ha (Moteva et al., 2015). Nowadays the Law still allows landed property division and the average size and fragmentation go to the worse.

While the Agrarian Reform was implemented, partial land consolidation per locality was

accomplished. Every owner had to acquire a maximum of two landed properties in a locality. When an owner possessed more than two parcels, they had to be consolidated (Newcast No. 6, 1994). Since that time, no efficient legislation against division with the consequence for the plot's area and fragmentation has been invented. The Inheritance Act (prom SG 22 of 29 Jan 1949, last am SG 47 of 23 Jun 2009) permits the actual size of a plot to fall to a minimum of 0.3 ha for the arable lands, 0.2 ha for the pastures and meadows, 0.1 ha for the perennial plantations (Art. 72). These sizes are spatially restricting with regard to operation with the land. The small-size of landed properties and fragmentation of land ownership have undesirable consequences for land use: no proper mechanization can be applied for cultivation, no meliorations can be carried out and no land protective measures can be applied. Without adequate and optimized spatial conditions the economic growth of farms is hindered because of big costs and insufficient income from agricultural production, hence agricultural sector development and social development are slowed down. As a result,

landed properties are not attractive to private investments too.

With the establishment of the land market, most of the agricultural lands are being leased and cultivated in consolidated land massifs. A small number of very large farms occurred > 50 ha each. They are 2% of all the farms but occupy 84% of the arable land in the country. This predetermines the strong polarizing of the structure of the production units. On the other pole are 67% of the farms of < 0.1 ha each and they cultivate 10% of the arable land. They are mainly subsistent and semi-subsistent farms (National Census, 2010)

A priority prerequisite for effective land management and one of the main factors for rationalizing of the agricultural production is land consolidation. Land consolidation gives the farms the possibility of structuring their space so that they can have the best conditions for the highly technological processing of the land. Land consolidation also aims at enlarging the space for production so that proper treatment and conservation of soil can be ensured, also land reclamation and environmental protection to be applied.

Nowadays, land consolidation is actively applied in the sphere of land use, rather than land ownership. In order to carry out large-scale agricultural activities, Agricultural Land Ownership and Use Act (ALOUA) (prom SG, No. 17 of 1 March 1991, last am. and suppl. SG, No. 77 of 18 September 2018) by its Art. 37B gives the bearers of the tenure rights: owners and tenants in a settlement, the chance to establish "land massifs for use". Land tenants and landowners voluntarily sign an "Agreement for Land Massifs for Use". The leased land is formally consolidated in massifs and the latter are distributed among the participants of the Agreement at their request. The Agreement contains information about the participants, the acquired by them massifs and the rent due. An integral part of the agreement is the "Map for the Land Massifs for Use" that indicate their allocation. This agreement is being signed for the territory of the arable land and the territory of the perennial plantations. Analogous Agreement can be signed for pastures and meadows too.

The state and the municipalities also have the right to participate in this Agreement. The State

participates in the Agreement (Art. 24a, ALOUA, 1991) with the objective to contribute to partially overcome the small size and fragmentation of the cultivated lands. By land exchange, it supports the initiatives of the private entrepreneurs and the legal entities on land consolidation. The Municipality distributes the abandoned unclaimed or undeclared for cultivation lands between those who have signed the "Agreement for Land Massifs for Use". The income from those lands is stored in case any owner will be looking for it. If a part of it remains unclaimed, it is used for public works.

The objective of the paper is to suggest a practical approach to further consolidation of the land massifs under the regulated by Art. 37B ALOUA, 1991 "Agreement for Land Massifs for Use" for establishing economically more efficient farms and for rationalizing land operation.

## MATERIALS AND METHODS

Firstly, interviewing, analytical and synthesizing methods were used to study the processes in cooperation between the agricultural producers. A questionnaire survey of two focus groups - professionals and producers in agriculture was conducted. The data was collected from 250 respondents - 50% of professionals in agricultural land management and 50% of agricultural producers.

The questions for the professionals were divided into two thematic groups: (i) Land legislation - what is the current legal and regulatory context governing land use and are there any potential changes in the laws and regulations currently governing land consolidation?; (ii) Planning of the agricultural land use and land consolidation - is it important for solving the contemporary environmental and economic issues and for obtaining EU and national subsidies for agricultural production?

The groups of questions for the agricultural producers were: (i) Land consolidation - is there a benefit or opportunity for land consolidation planning and how would it be funded? (ii) Sustainable land use - what is important for maintaining high productivity of lands?

The data obtained were systematically recorded, organized, compiled, tabulated, computerized, and analysed in accordance with the objectives of the study. A variety of statistical analysis such as frequency, range, mean, percentage, distribution, standard deviation, categories, etc. was used to describe, represent, and explain the relationships between the variables. The data was personally collected in 2015 through face-to-face visits with all selected interviewees.

The development of the newly suggested approach to Land Consolidation is based on the knowledge of the legal regulation of land consolidation and the association of producers. The idea is illustrated by maps of a draft land consolidation project.

## RESULTS AND DISCUSSIONS

The results of the questionnaire survey definitely show that Land Consolidation Planning is essential to the creation of favorable territory conditions for farm growth and sustainable land use. Furthermore, planning

should be regulated by the state. The main results are shown in Tables 1 and 2. They show that:

- Land Consolidation in the conditions of dynamic land relationships and market-regulated income is vitally needed. This is confirmed by both professionals and farmers.
- The legislation for spatial planning and land consolidation is insufficient. The prevailing assessment of the actual land legislation by the professional respondents (50% of them) is as positive as negative. A Law on Land Consolidation would provide for overcoming the inconveniences, proceeding from the existing land legislation.
- Sustainable land use is possible only if the agricultural territory is properly planned. If this is guaranteed and regulated by the state, it will help to obtain EU financial support.
- The farmers believe that the expenses paid for a land consolidation project will be compensated by the revenue of the optimized production process.

Table 1. Distribution of the opinions on main problematic questions on land consolidation among the professionals (%)

Question	yes	as yes as no	no		
Is Land Legislation sufficient for land management in Bulgaria?	14	50	29		
Does Land Legislation need changes?	85		8		
Does Land Consolidation contribute for improvement of land productivity?	71		29		
Does land ownership in Bulgaria need land consolidation?	64		21		
Does Land Consolidation contribute to sustainable development?	86		14		
Does Land Consolidation contribute to obtaining EU subsidies?	53	14	23		
Is it appropriate to put limitations to the maximum size of land ownership?	71		23		
What must the maximum size (ha) of land ownership?	1000	500	300	100	50
	14	14	14	44	14

Table 2. Distribution of the opinions on main problematic questions on land consolidation among the agricultural producers (%)

Question	yes	as yes as no	no
Do you suffer from deficiency of funds?	92		8
Is the procedure of adoption of EU fund difficult?	58		42
Do you cope with the territorial organization of the farm?	67		33
Does Land Consolidation contribute to the increase of your income?	67		33
Will the costs of a Land Consolidation Project be reimbursed because of improved land use and production?	50	30	20
Is it important to apply antierosion measures?	50		50
Is it important to apply other measures for improvement of soil fertility?	100		

- The interviewees believe that land consolidation will contribute to the following: increase of the arable land,

compact arrangement of the crop rotations, the irrigation for vegetable and fodder crops, minimum lost area for field roads, anti-erosion disposition of the field roads,

minimum transportation expenses, proper sizes and configuration of the fields, applying measures against wind and water erosion etc.

- The opinions in favour of the maximum size of land ownership and the land-use area in the country pool around 100 ha. The range, though, is quite wide - from 50 to 1,000 ha. The major factor for its size is the specialization of the farm..

The expected restructuring of the small-sized and fragmented landed property with the means of the land market didn't take place and nowadays reality does not cover the expectation of the Transition. Implementation Land Massifs for Use (Art. 37B ALOUA, 1991) is a good practical solution for making possible mechanized and large-scale cultivation of land and for applying good practices.

Regardless that this is a positive step, such redistribution cannot be enough efficient when there is a great number of Participants in the Agreement for Land Massifs for Use. In some big settlements, there are more than a hundred of them. Then the average size of a massif that is included in the Agreement can be small and the massifs of one Participant can be dispersed in many locations, which is actually the general case. Assuming that a Participant in the Agreement has more than 5-6 massifs, then fragmentation can be considered great (Ejek et al., 2014). This is a precondition for the inefficiency of farm production. The fundamentals of this approach are that the tenants/bearers of tenure rights perform a voluntary consolidation - they agree among themselves on the location of the massifs they will cultivate (use). This approach is very approximate regarding the principles of land consolidation. The first problem is that in this exchange, they evaluate the quality of the land in the massifs approximately. No one calculates the equivalent of the exchanged landed properties. Their idea of land quality is based on their practical experience. This undoubtedly harms the efficiency of agricultural production for some or for all of them. The second one is that this step towards consolidation improves but still does not guarantee the potential of the agricultural production efficiency. At this stage, overcoming the fragmentation and dispersal of leased agricultural land is achieved but there is

still potential for its improvement. The territorial criteria for highly efficient organization of farm work, the use of the machine and tractor fleet and the implementation of environmental measures for the production zone are far from being met. There is a need for further development of land consolidation, continuing the process of consolidating the massifs of some participants in the Agreement.

The need for consolidation between Participants after the signing of the Agreement arises both because of the lack of agricultural equipment in many of them, as well as because their homes can be far from the rented land. The association of Participants allows the rational use of the available equipment of some of them, as well as to assist the smaller tenants in cultivating soil, growing crops and harvesting. We discussed these ideas with real tenants in the country. It turned out that our views are correct. This is their practice. The Constitution of Bulgaria (prom SG 56 of 13 Jul 1991), Art. 19, para 4 gives the full right "for cooperatives and other forms of association of citizens and legal entities to achieve economic and social progress". And the Land-Lease Act (prom SG 82 of 27 Sept 1996, last amend and suppl SG 55 of 3 Jul 2018) Art. 11, para 1 noted that if it is agreed in the contract, a Participant has the right to re-lease a part of or the entire object of the contract but he is not exempt from his obligations to the lessor.

In the process of land surveys, we drew attention on the map of the Land Massifs for Use of several settlements to the fact that the same group of Participants in the Agreement for Land Massifs for Use have selected neighbouring massifs. This repeated for several locations in the village area and for several groups of Participants. Even such grouped massifs in a locality represent parts of bigger massifs with natural borders on the field. So the idea of consolidating massifs of groups of Participants logically arose. In this way, the size of the cultivated area increases and also the natural terrain conditions for land cultivation are used. If creating groups of massifs of one and the same group of Participants in different localities, all of them together can be considered a farm. This farm can have massifs of only one method of permanent use, i.g.

arable land or can be of different methods of permanent use, such as arable land, orchards, vineyards, pastures, and meadows. The farm may include the whole or a part of the leased land of the Participants in the Agreement: those which are suitable for land consolidation. If the terrain conditions allow, on the newly

consolidated massifs a crop rotation (s) or/and a joint orchard or/and rotational grazing can be implemented. The income of the affiliated farm will be distributed among the affiliated farmers in accordance with the percentage of their lands of a certain quality.

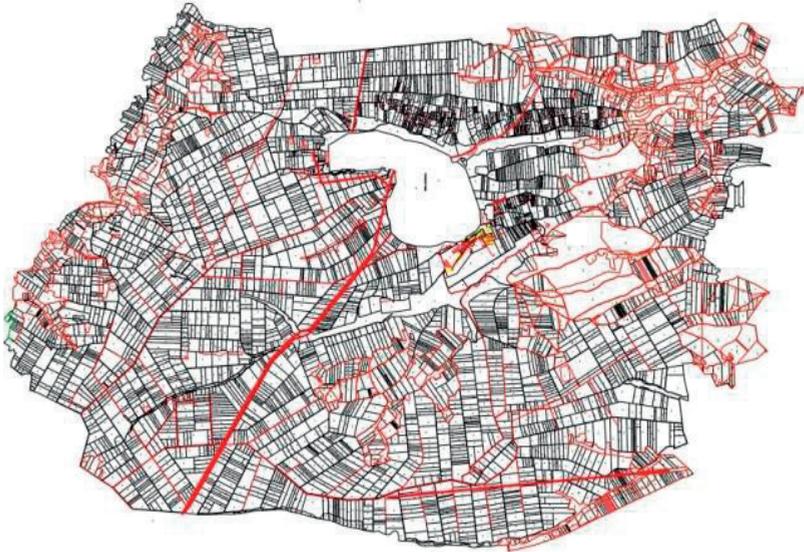


Figure 1. Map of land ownership in the village of Tsar Petrovo, the city of Vidin (Source: Vidin Municipality database)



Figure 2. Additional consolidation of land massifs of three Participants (coloured in red, blue or green, respectively) in the Agreement for Land Massifs for Use (Art. 37B ALOUA, 1991) (Source: own study)

In Figure 1 a map of the landed properties in the village of Tsar Petrovo, the city of Vidin is presented.

In Figure 2 the map of the massifs of three participants after land consolidation, subsequent the Agreement of Landed Massifs for Use, is presented. The massifs are apparently located nearby in every locality of the village area. Thus, instead of 31 landed massifs with a total area of 684.928 ha, 14 massifs with nearly the same area - 680.410 ha were formed. As a result of this land consolidation, 4.518 ha of agricultural roads were added to the arable land and the average area of one massif increased from 22.904 ha to 48.601 ha. This consolidation can be legally issued, it can also be a result of mutual understanding, but in all cases, it leads to the more rational use of the agricultural land - the application of crop rotations and other measures that are subsidized by the European Union. Thus, the farmers get an additional opportunity to financially support their activities.

## CONCLUSIONS

Land consolidation is essential for ensuring proper territorial conditions for sustainable social and individual development. The idea of developing land consolidation after signing the Agreement for Land Massifs for Use (Art. 37b of Agricultural Land Ownership and Use Act, 1991) is useful for creating better conditions for rational space use, protection of land natural properties, efficient use of the agricultural

machinery, economic growth of the farms. Cooperation of the Participants in the Agreement is regulated by Bulgarian legislation. It is actually applied in practice because of hindering circumstances for some of the land tenure bearers for cultivating their land. By a questionnaire survey was established that amendments and supplements of the normative frame work is needed to support the process of land consolidation in the country.

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