



# Sustainable Land Consolidation in Lithuania - The Second Wave of Land Reform

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In Lithuania land reform is essentially changing the land-use system of this country. Today many deficiencies of this system are evident. Former collective farms and large plots of land have been gradually changed into smaller ones. A result of this process has revealed various drawbacks: such as lack of roads leading to the land use, land-owner's land formed of several plots, small land areas, irregular land plots configuration.

With the growing up competition in the market, it is difficult for small farms with small plots of land to compete not only with the European Union countries but in the local Lithuanian market as well [Čaplikas J., 2002]. A number of sites aggregated for one land use, convenient access to the land use and other important economic, agricultural problems can be solved by consolidation projects.

For many years land consolidation projects have been prepared not only in European but also in Asian countries, while Lithuania is just starting to develop them. Our designers draw the ideas from foreign experts. In China land consolidation projects are being developed both in rural and urban areas, thus their designers and engineers can more effectively control their sustainable development [Manchuan Li, 2010].

In January 2011, the National Land Service under the Ministry of Agriculture informed Lithuanian society that requests for new land consolidation projects were being collected. However two questions remain open, namely, how designers will eliminate all barriers which have hindered the first projects, and whether new projects will economically be as effective as those developed in Germany, Denmark and the Netherlands.

This study involves analysis and evaluation of the consolidation project implemented in Plungė district, Šateikiai cadastral area. The respondents are participants and an organizer who has analyzed the views on the progress and results of the project. Results show that our country experts should set more ambitious objectives for the project which should become a tool for correcting land reform mistakes.

Keywords: *land consolidation project, land administration, sustainable development of rural areas, plot of land, land management.*

## 1. Introduction

Land consolidation is an important means of agricultural and rural areas development. In our country property rights in land restoration are coming to an end, and further land management policies should be obviously focused on the rational use of land management, land tenure and competitive farm development, land market development, environmental objectives - targets and public needs satisfaction [Leimontaitė G., 2008].

In order to improve agricultural land-use conditions and those for better and more beautiful living in the countryside, many European countries have accomplished land consolidation - special land management process, a comprehensive restructuring of the land, i.e. changing the land boundaries, combining small and scattered plots, improving their structure, providing access roads and other rural infrastructure as well as draining the areas to be drained. All these measures enable agriculture

specialists to implement agricultural and rural development and environmental policy objectives [Paul V., 2005].

The long-term Development Strategy of states, completion of restitution of property rights to land, forest and water resources, and land management will be further related to land consolidation.

With increasing competition in the market, many small farms may fail in operating. When Lithuania joined the European Union, her agriculture faced a challenge to integrate into the European economic system and become its equal partner. Therefore, at the current economic situation of the country, seizure of each opportunity to increase the competitiveness of farms is of great importance. One way to reduce the production cost is arrangement of the land near the production center or a closer access of it to the plots of land [Daugalienė V., 2004].

In Germany, a major challenge of land consolidation is building and updating of transportation networks.

The Netherlands have focused on regulation of floods and updating of dam constructions. Thus, it is evident that goals of land consolidation can differ greatly and its strength improves urban and rural sustainable development [Morten H. „Land...“].

If all land consolidation opportunities were properly taken and fulfilled, villages would become attractive places to live and work in. The land consolidation process may create new jobs and build roads, improve the landscape, equip resorts, and all of which may significantly improve the quality of life in rural areas. It even might be one of the causes in reducing departure of young people from villages.

The land consolidation process in Lithuania is just beginning, and this fact aggravates development of land consolidation projects due to the absence of experience in this field. In other countries land management specialists work on consolidation projects. Currently, our main organization dealing with the work in these areas is the Land-Use Department. At this stage of the process it is extremely important that alongside with land management specialists our farmers should acquire a new approach to progressive farming-based on economy, science and technology achievements.

This paper is the study on the need for land consolidation projects in Lithuania. Its objective is to examine the already approved land consolidation project judging its merits, limitations and obstacles which hinder its full implementation. Implemented tasks are

compared to the challenges posed by foreign countries. To present an accurate estimation of the project progress and results, a survey has been conducted with respondents being not only participants of the project but also its organizers.

## 2. Methods

The object of the study is the Land Consolidation Project in Plungės district, Šateikių cadastre.

Research methods: literature analysis, mathematical and statistical analysis and the questionnaire survey.

Project participants and organizers have been interviewed. Respondents have remained anonymous to be free to express their views about this land consolidation project. The questionnaire had 17 questions: on the size of the land they had before and after the project, the change of the land area after the project, proposals they could give concerning the project, the sources of information on these projects, the opinion of the work of specialists, etc. Out of 16 project participants 11 have been interviewed by telephone. The obtained data have been analyzed and some information is presented graphically.

## 3. Discussion

In Germany and the Netherlands local needs take precedence over private property, and forced land consolidation is performed there [Erich W., 2004]. The voluntary nature of land consolidation is always a threat to itself, hiding complexity and completeness of the project, namely, if one or more of the land owners do not want to participate in land consolidation, they can destroy the project. In addition, a possibility to withdraw from the Project makes it fragile.

On the other hand, the law says that the mandatory participation in land consolidation, while certainly allowing a complex design and providing a guarantee to meet the project, has a long and expensive process. Let us say, in the Netherlands, the land consolidation project procedure takes from 10 to 12 years, and in Germany - even 16-17 years [Erich Weib, 2004]. Meanwhile, its first application to Plungės district, Šateikių cadastral area of land lasted from 2006-02-09 to 2006-02-24. The project was approved on May 6, 2008, thus it can be said the project was completed within two years. During this period the site area has changed several times due to the changing attitude of landowners towards the project.

It is worth to Lithuanian land management specialists to consider the possibility of forced participation in the land consolidation project.

The land to be taken by force will do benefit to the design area of land. In the land consolidation project, the parcels are to be exchanged to the equivalent, therefore the damages settlement to the land owners who enter the project by force should be taken into consideration. This kind of amendment in the law is like a fuse to protect the promoters of an unexpected exit from the planned project.

Danish land consolidation projects are being implemented on a voluntary participation of farmers. When the land consolidation project encompasses the area for construction of a new public road or any other state facility (e.g. planting the forest, taking the land for the environmental policy objectives, etc.), in the absence of a goodwill agreement of the land farmer, land can be taken by way of compensation under a special law. Each year in Denmark about 20 land consolidation projects involving about 50 land owners are undertaken [Daugalienė V., 2003]. Such large number of projects makes it possible to notice shortcomings in the system and make changes that help the project administration. Currently, Lithuania has implemented only 14 projects, but it is sufficient for land planners and land owners to see drawbacks of the system.

Who should initiate the process of land consolidation?

In Finland and Sweden, the land consolidation project initiation requires the landowner statements, while German and Netherlandish land owners are not required to initiate the project that may be done by the authorities [FAO, 2007].

Lithuania claims that the initiative should be taken by land owners and users [LRV „Dėl nacionalinės..“, 2008], however, surveyors and planners can see that through the land reform a lot of mistakes in land plots have been made. The errors are in particular associated with the shape, size, lack of access to the plots. Land consolidation projects can be a great tool for correcting various mistakes. Initiatives are taken not only by landowners but also by government representatives, notwithstanding it land consolidation projects may be applied to large areas without solving the problems with land boundaries.

The examined consolidation project area covers 147.69 hectares owned by 15 landowners including the Mišupės stream which covers 0.68 ha.

In Lithuania the subject of planning the rural residential area in the private and public

land group is being considered. The objectives of the project are the following:

- rational formation of the size and shape of agricultural land and forest land;
- land use consolidation;
- reduction of the distance between the land plots;
- renovation of disused buildings;
- local internal roads and drainage layout planning;
- areas to be the subject to environmental safeguards detection;
- reform of the proposed recreational areas, rural tourism, aesthetic resources;
- land reservation for the public needs.

All these tasks differ slightly from those pledged by other countries and are dealt with by project participants. Nevertheless, in Lithuania people have become frustrated by the project as they did not receive what expected before its application. Participants have failed to understand that the funds are allocated only for design work and did not suffice to implement it.

According to the land consolidation project preparation and implementation procedures for land consolidation project has been implemented by the land consolidation project designed to marked area of land and signature the treaty of a land consolidation. However, the final implementation of the projects should be linked to land consolidation project currently implementation solutions. According to the 2004-2006 Lithuanian Single Programming Document for Rural Development and Fisheries of priority measures „Rural Adaptation and Development Activities of Land redistribution“ is not intended to fund these solutions (road construction, etc.) implementation, so in the future should be planned from where will be taken it (for state, local budget funds).

In Plungės district, the most popular suggestions by respondents of the survey were: access road to the planned area, repair of drainage, soil analysis, soil liming. Few demands were made for homestead projects, construction of power lines and site relocation (see Figure 1).

The percentage of requests implemented is the following. 9 different tasks were offered to 16 project participants. Out of received 70 requests only 33 were implemented, thus it makes just 47 %.

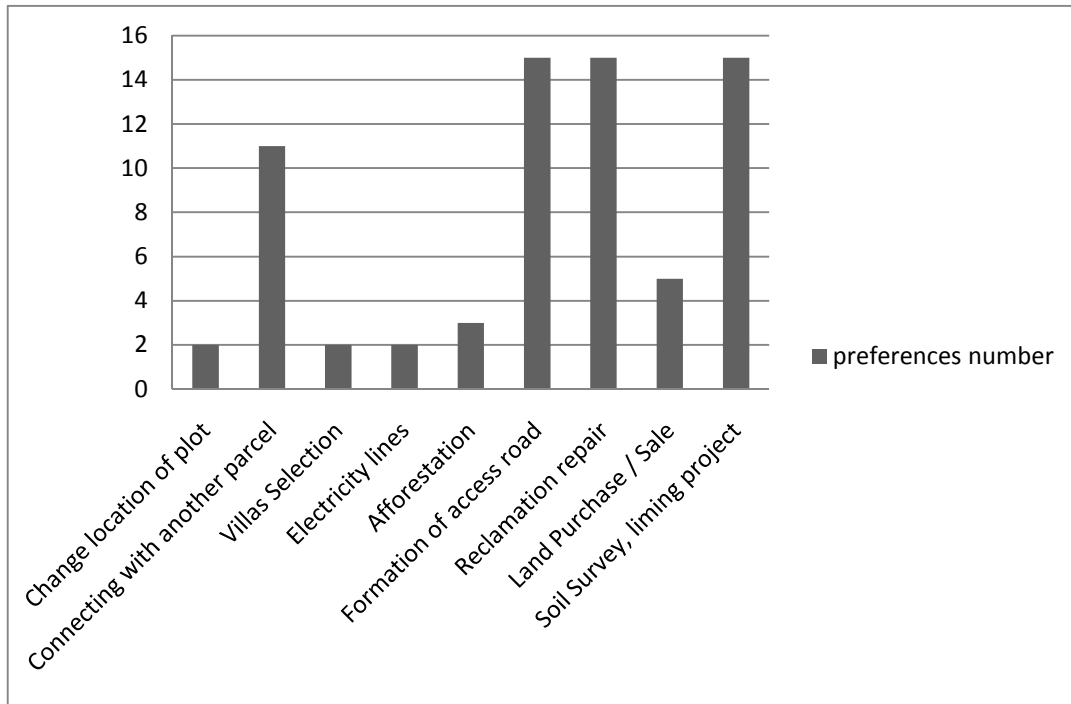


Fig. 1. Šateikiai cadastral area questionnaire survey results

Drafters have seen no preference over other institutions involved in land consolidation project. Some authorities have even refused to adapt it. The laws concerned should include the changes in the land consolidation projects which would gain more importance then. Besides land managers other employees as road builders, foresters, drainage specialists would expect to face more challenges in the project and all of them would find the opportunities to implement them. Today only the cadastral measurements and plot connection are dealt with.

A very important issue in land consolidation projects is the land area size and the number of plots before and after the project. The survey

results showed that before the project there were 24 sites and after it - 11 plots. It can be argued whether the land consolidation was successful (see Figures 2 - 4). Summing up, it is clear that the sites have decreased by 54 % and the average size of land plots has increased by 114 %.

Another problem is lack of access means to the land. Land management officials are aware that servitude access roads to the sites cause dissatisfaction among the users of the land, but this project has failed to solve this problem. After the implementation of the Project not all land owners enjoy access roads and those who have them the latter are only just servitude roads.

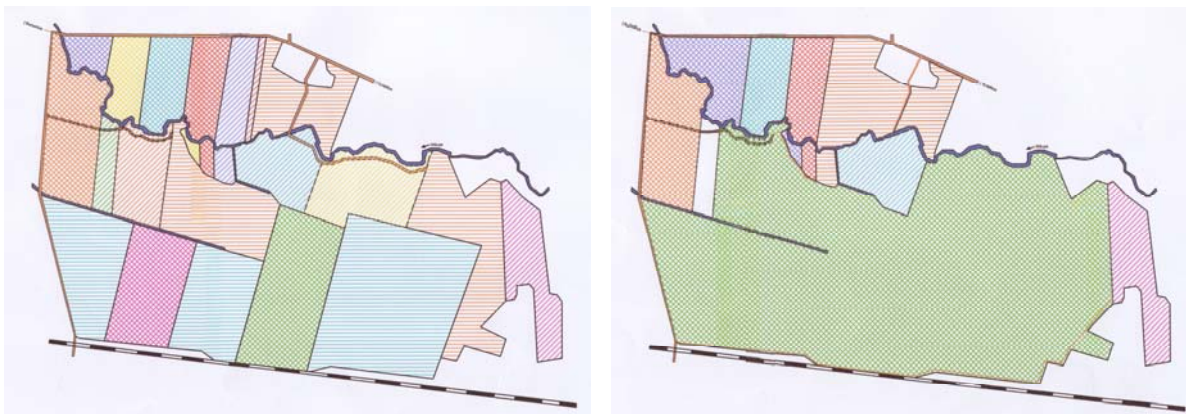


Fig. 2. Land distribution before and after the project

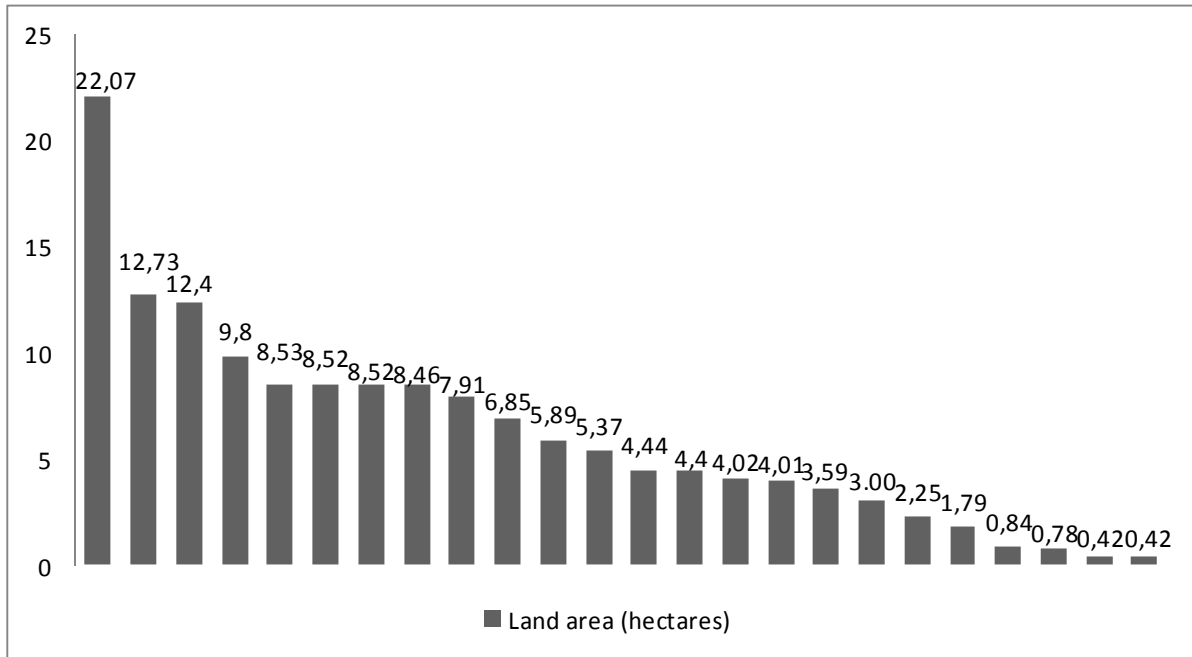


Fig. 3. Land areas size before the project

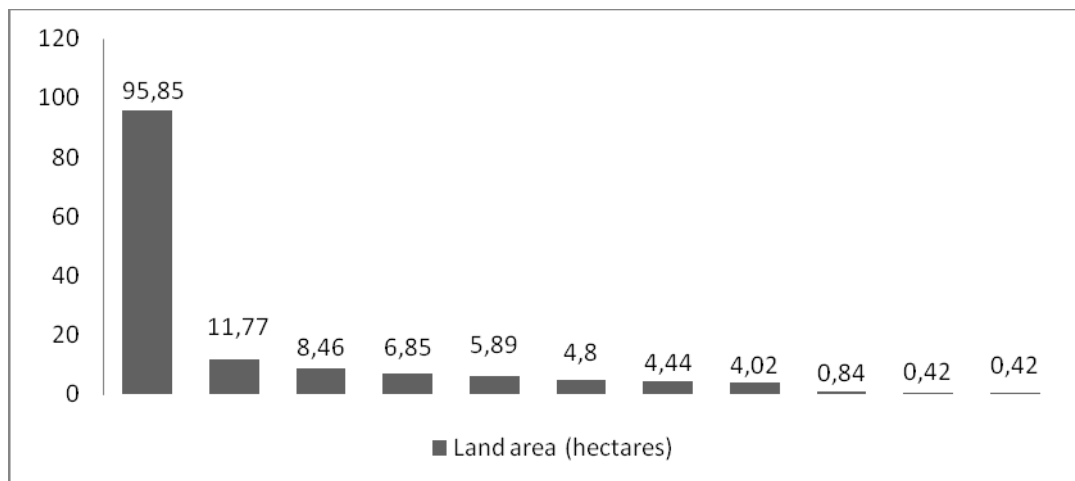


Fig. 4. Land areas size after the project

Government representatives can not answer whether the funds will be allocated to implement other tasks of the project (electrical input, afforestation, upgrading of land reclamation facilities, etc.), but in case it is intended, how long it will take to renew technical training and project coordination.

Land consolidation is a several year long and costly process. In many European countries farmers and landowners financially contribute to this process, whereas in our country it is believed that for Lithuanian farmers it would be too expensive, therefore the consolidation projects are financed by the EU funds.

It may also be pointed out that in Lithuania the project was carried out in just over two years, while in other countries it was performed in 5-10

years. Consequently, our specialists should take into consideration the project maturity extension and financial farmers contributions to it. Then, greater challenges to the project may be set and financial opportunities gained to implement them. The end of the project may yield not only economic but social benefits as well. At present the situation in Lithuanian countryside is complicated due to ecological problems, worn-out land reclamation, large areas of uncultivated land, and also due to want of young workers. The experience of other countries demonstrates that land consolidation comes to assistance in such a situation.

Germany and other European countries have set up land banks for giving support to the projects [Leimontaitė G., 2008]. In December

2010, Lithuania established the Land Fund to work closely with the land consolidation project developers and project participants. The Land Fund monitors the state free land and abandoned plots of private land by including them into the land consolidation projects.

In some countries administrative measures are taken for setting a minimum area of the plot which cannot be split, and in case it is done after the land consolidation project, a fine is to be paid. A similar technique can be also adapted in Lithuania, for example, the Records Center should label the parcels involved in the land consolidation projects, and set the time how long the owners could not dispose of them.

The preparation of the said land consolidation project has been done in three meetings, but many experts and participants in the project suggest simplifying the design process by reducing the number of meetings, because land owners find it difficult to have time to participate actively in the design process. It should not be forgotten that the land consolidation project is developed exactly according to the wishes of landowners. Various options for design solutions are to be estimated, therefore one meeting cannot cope with all relevant points. To achieve positive results related to the design work, specialists have to interact with customers constantly and take into consideration their wishes and proposals.

Survey respondents had no fear to say the truth and expressed their dissatisfaction with the project outcomes. Many respondents praised the brilliant idea of rural management, and their disappointment appeared when their expectations failed. One of the main reasons which led landowners to the project was the European Union financial support. All respondents were satisfied because they did not have to invest their funds.

One respondent expressed his outrage at those individuals who wished to adopt the electric line or access road. In his opinion there are more significant areas where they could invest the money received from the EU, namely, around the village the roads should be mended first and after that new ones built. All respondents were satisfied with allocation of the European Union funds not only for this project, but also for the benefit of our country.

#### 4. Conclusions

1. Land consolidation projects are useful not only as a site management tool, but also as an

- important means in our country economy, especially in the agricultural sector for promoting sustainable rural development;
2. Lithuanian laws concerning the land consolidation project contain some bugs, because such project is a novelty in this country. With more experience gained all obstacles are to be removed, otherwise the confidence in these projects and specialists may be soon lost;
3. Farmers should invest their money to the land consolidation projects, because only in this way more goals may be set and fully implemented;
4. Before the project the average land area size in these fields was 6.12 h, but after the project it became 13.07 h., showing a successful solution of the territory consolidation;
5. The mistakes made in the land reform should be recognized and all of them should be corrected in the further implementation of the project;
6. Many more problems connected with the land consolidation are already solved in other countries, thus paving the way to our projects which will contain more challenges in the future.

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## Darni žemės konsolidacija Lietuvoje – antroji žemės reformos banga

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*(gauta 2011 m. gegužės mėn.; atiduota spaudai 2011 m. rugsėjo mėn.)*

Vykstant žemės reformai, pakito žemės naudojimo sistema šalyje. Šiandien aptinkame daug trūkumų, kurie atsirado šio proceso metu. Buvusius didelius žemės sklypus palaipsniui pakeitė smulkūs žemės sklypai. Dėl to atsirado dar kitų trūkumų: privažiavimo prie naudojamo sklypo nebuvimas, žemės savininko sklypų suformavimas toli vienas nuo kito, netaisyklinga ir nepatogi žemės sklypų konfigūracija.

Didėjant konkurencijai rinkoje, smulkių ūkių savininkams tapo sunku konkuruoti ne tik Europos Sąjungos šalyse, bet ir vietinėje rinkoje [J. Čaplikas, 2002]. Todėl aktualu išspręsti keletos sklypų sujungimo į vieną žemėvaldą ir patogaus privažiavimo prie žemėvaldos suprojektavimo problemas. Būtent šios ir kitos ekonomiškai svarbios žemės ūkiui problemos gali būti sprendžiamos taikant žemės konsolidacijos projektus.

Daugelį metų žemės konsolidacijos projektai rengiami ne tik Europos, bet ir Azijos šalyse. Lietuva tik pradeda vykdyti šiuos projektus, todėl mūsų žemėtvarkininkai semiasi idėjų iš užsienio ekspertų. Kinijoje žemės konsolidacijos projektai kuriami ne tik kaimo vietovėse, bet ir miestų teritorijose, todėl aplinkos inžinieriai ir kraštotvarkos specialistai gali veiksmingiau kontroliuoti darnią teritorijų plėtrą [Manchuan Li, 2010].

Nacionalinė žemės tarnyba prie Žemės ūkio ministerijos 2011 m. sausį informavo visuomenę, kad pradeda rinkti prašymus naujiems žemės konsolidacijos projektams rengti. Tačiau kyla keletas klausimų. Visų pirma, ar mūsų šalies specialistai pašalino visas kliūtis, su kuriomis buvo susidurta per pirmuosius projektus? Antra, ar naujieji projektai bus ekonomiškai efektyvūs, kaip Vokietijoje, Danijoje ar Olandijoje?

Straipsnyje nagrinėjamas jau patvirtintas Plungės rajono Šateikių kadastro vietovės žemės konsolidacijos projektas. Respondentai buvo projekto dalyviai ir organizatoriai, kurie pateikė nuomonę apie šio projekto eigą ir rezultatus. Tyrimo rezultatai parodė, kad mūsų šalies ekspertai turėtų nustatyti ambicingesnius konsolidacijos projektų tikslus, kurie taip pat gali tapti priemonė žemės reformos klaidoms taisyti.