

# Shaping the Environment in Land Consolidation Projects in Poland – Have the New Law Regulations Changed our Attitude to Rural Landscape?<sup>1</sup>

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**Key words:** environmental aspects, land consolidation

## SUMMARY

A characteristic feature of Polish rural areas is a very high biodiversity, evaluated as one of the highest in Europe. Its existence is caused by extensive agriculture and agrarian structure fragmentation. This fact puts a huge responsibility on surveyors and other professionals responsible for the land consolidation process in Poland, as they are to improve farming conditions with respect for the sensitive environmental structures. This paper presents the new legal regulations concerning land consolidation environmental pre-studies accomplished by surveyors' offices. The recent pro-environmental changes in land consolidation procedure are presented and discussed.

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<sup>1</sup> Research project financed by the research found for the years 2007-2009

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## 1. INTRODUCTION

Characteristic, distinguishing features of Polish rural areas are as follows:

- Small and scattered parcels forming disadvantageous rural land structure from an economic point of view. The average farm size in Poland is ca. 8 hectares, while the average area of land plot is merely 0,79 hectares<sup>3</sup>. The average farm consists of 6,79 land plots. There is a big regional diversification of farm size. The best spatial arrangement characterises farms situated in the northern and northeastern part of the country.
- High population density index – 38,2 % of the population lives in rural areas, increasing unemployment is related to this index.
- *Rural employment rate* – ca. 25% of the population works in the rural sector.
- A big regional diversification of population density index. The central and southeastern part of the country are overpopulated, while the northern part and border areas are underpopulated,
- Underdeveloped infrastructure,
- Biodiversity, estimated as one of the highest in Europe. Its existence is related to still existing extensive agriculture and small and scattered parcels, so inconvenient from an economic point of view.

After the political system changed, Polish rural areas were affected by economic crises. It results from the low profitability of agricultural production (caused by rural land fragmentation and small farm areas) and high unemployment. The long-term solution for rural areas should be non-agricultural job creation through rural development policy as well as the transformation of the spatial structure of rural areas through land consolidation and post land consolidation land management.

The body responsible for the land consolidation process is a '*starost*', which presides over the land consolidation process as a governmental administration task. The land consolidation process is coordinated and managed by provincial government with the assistance of provincial organizing bodies – Surveying and Rural Land Offices.

This paper presents the new legal regulations concerning land consolidation environmental pre-studies accomplished by surveyors' offices. The recent pro-environmental changes in land consolidation procedure are presented and discussed.

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<sup>3</sup> Woch (2006)

## 2. NEW ENVIRONMENTAL ASPECTS OF THE LAND CONSOLIDATION PROCESS IN POLAND

As mentioned above, biodiversity in Poland is one of the richest in Europe. It is caused by convenient natural conditions, as well as by specific anthropogenic pressure (irregular industrialization and urbanization of the countryside, traditional extensive agriculture, and the sustainable spread over the country's historical forests). Especially eastern and southeastern parts of the country characterize a well-preserved rural environment related to the fragmented agricultural structure. The maintenance of the traditional farm structure and extensive agriculture enabled the preservation of genetic resources. But from the year 2000, the farmland bird index indicates slow disadvantageous changes in the farmland bird population. Marginal habitat abandonment, rural landscape structure simplification and intensification of agricultural production are the main threats. Research results have shown that economically inconvenient scattered parcels forming the existing land use pattern create favorable conditions for high biodiversity. It forms habitats for farmland birds and mammals.

About two million hectares of arable land in Poland diligently require land consolidation. Financial funds (coming from European and national funds) for the period 2007-2013 will only cover the costs for 210 thousand hectares. Pressure for economically grounded land consolidation has been the chance for involving new law regulations concerning the preservation of landscape structures in the land consolidation procedure. New regulations complying with UE requirements related to environment aspects have been introduced.

## 3. NEW LEGAL REGULATIONS

Environment Protection Law (in force since 2001) and associated legal provisions<sup>4</sup>, concerning types of actions that can impact on the environment, placed land consolidation works among environment impacting projects. The land consolidation process is regulated by the Land Consolidation Act (in effect since 1982). The Ministry of Agriculture and Rural Development edited guidelines completing existing land consolidation procedure.

According to the guidelines, an environmental pre-study should be prepared in every case where the land consolidation area exceeds 300 hectares. The environmental pre-study consists of two parts: graphic and descriptive. The graphic part should be prepared to the scale of 5000 or 10000 with marked borders of occurring zones:

- wet and waterlogged zones
- coastal zones
- mountainous or sylvan zones
- protected zones, including water intake zones and protected zones of water reservoirs,
- protected habitat zones, including Natura 2000,

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<sup>4</sup> Rozporządzenie RM w sprawie określania rodzajów przedsięwzięć mogących znacząco oddziaływać na środowisko oraz szczegółowych kryteriów związanych z kwalifikowaniem przedsięwzięć do sporządzania raportu o oddziaływaniu na środowisko

- zones with exceeded environmental standards,
- populated zones,
- zones with significant historical, cultural and archeological landscapes.

The environmental pre-study is carried out by surveyors elaborating the land consolidation project at the time of preparing the preliminary land consolidation project. The descriptive part of the pre-study contains the predicted impact of planning structures on the environment. The environmental pre-study with the preliminary land consolidation project are verified by the environmental office of the proper administrative district. Then, the environmental impact assessment procedure can be imposed by that office. Land consolidation projects containing Natura 2000 zones are excluded from this procedure. According to Environment Protection Law, all actions possibly influencing Natura 2000 zones have to be approved by provincial authorities.

Legal provisions<sup>5</sup>, concerning the rules of financial support admission for land consolidation projects within the framework of the Rural Areas Development Programme 2007-2013, disable the financial funding for actions taken in environmental sensitive zones and protected areas (including Natura 2000 zones) if they disturb their functions.

The preparation of an environment impact report can be handled by different bodies, such as: universities and other research centers which deal with environmental subject-matter, surveyors' offices employing professionals in landscape planning/protection and ecology, the Rural Development Society, and individuals having professional experience in environmental planning and protection. There are no legal regulations concerning possible licenses for professionals dealing with this matter.

The content of an environmental impact report is specified in the Environment Protection Law:

The environmental impact report of a project shall contain:

1. a description of the proposed project, in particular:
  - the characteristics of the whole project and the conditions for site use at the stage of construction and operation,
  - the main characteristic features of production processes,
  - the envisaged types and amounts of pollutants caused by the operation of the project,
2. a description of the natural elements of the environment exposed to the likely environmental impact of the proposed project,
3. a description of the alternatives of the project analyzed, including the alternative:
  - which consists in the resignation from undertaking the project,
  - which is most favorable for the environment, along with reasons for the choice,

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<sup>5</sup> Rozporządzenie MRiRW w sprawie szczegółowych warunków i trybu przyznawania pomocy finansowej w ramach działania „Poprawianie i rozwijanie infrastruktury związanej z rozwojem i dostosowywaniem rolnictwa i leśnictwa przez scalanie gruntów”, objętego Programem Rozwoju Obszarów wiejskich na lata 2007-2013

4. an assessment of the expected environmental impact for alternatives analyzed, including the impact occurring should an emergency hazard to the environment arise as well as the possible transboundary impact on the environment,
5. the reasons for the alternative chosen by the applicant, indicating its impact on the environment, in particular on human beings, fauna, flora, land, water, air, climate, material assets, cultural heritage and landscape as well as interactions between these factors,
6. a description of possible significant environmental effects of the proposed project, including direct, indirect, secondary, cumulative, short-term, medium-term and long-term, permanent and temporary environmental effects caused by:
  - the existence of the project,
  - the use of natural resources,
  - pollution,
 and a description of the assessment methods applied by the applicant,
7. a description of the measures envisaged to prevent, reduce or remedy the adverse effects on the environment,
8. where the proposed project involves the use of machinery and other technical equipment, a comparison of the proposed technological solutions with other available solutions applied in national or world practice from the point of view of cleaner production
9. an indication as to whether the project requires the designation of a restricted use area in the understanding of the regulations on the protection and management of the environment as well as the delineation of the boundaries of such an area, the imposition of restrictions on the range of use of the area and technical requirements for built structures and their uses,
10. the presentation of issues in graphic form,
11. analysis of potential social conflicts in relation to the project,
12. the proposed monitoring of the effects of the proposed project at the stages of construction and operation,
13. an indication of difficulties caused by technical deficiencies or gaps in current knowledge as encountered in preparing the report,
14. a summary of the information contained in the report in non-technical language,
15. the name(s) of the person(s) who has(have) prepared the report,
16. sources of information providing the basis for the report.

According to EU regulations and national law, the proper authority enacting an administrative decision concerning environmental conditions should provide public participation in the environmental impact report preparation procedure. District authorities enact an administrative decision following the EIA report conclusions. There are three possibilities of decision resulting from report:

The unconditional acceptance of the land consolidation project, as fully according to the law; which is the equivalent of the acceptance of the realization of the land consolidation project without any restrictions,

The partial acceptance of the land consolidation project, as partially according to the law; which is the equivalent of the acceptance of the realization of the land consolidation project's tasks, after revisions,

The rejection of the land consolidation project, as inconsistent with the law; which is the equivalent of the lack of acceptance for the realization of the land consolidation project's tasks. In this case the party concerned can appeal to the provincial revocatory board.

#### 4. CONCLUSION

Areas with special landscape values, which could be threatened by the land consolidation process, are tentatively discussed by the professionals dealing with land consolidation and environmental protection. In the case of a denial of the coordinating body for the land consolidation process (due to a threat to special ecological, cultural or other values of the landscape), farmers should be entitled to financial compensation for the loss of possible farm structure improvement. The value of lost profits should be defined by licensed appraisers. The surveys in the southeastern part of Poland showed that the losses in farmers' incomes caused by the defective spatial structure of farms amount to 20-30%. Financial compensation could be accomplished by Agri-Environmental Programmes, which are part of Rural Areas Development Programme. However, complex legal regulation of financial compensation for a loss of possible farm structure improvement is under discussion.

#### REFERENCES

Woch F., 2006, Perspektywy zmian strukturalnych na obszarach wiejskich, in: Kompleksowe scalanie gruntów rolnych i leśnych oraz jego wpływ na środowisko, materiały szkoleniowe nr 93, pp. 5-22, Puławy, Wyd. IUNG

Legal Acts:

- Ustawa z dnia 27 kwietnia 2001 r. Prawo ochrony środowiska (tekst jednolity: Dz. U. Nr 25 z 2008 r., poz.150 ) - Environment Protection Law
- Ustawa z dnia 26 marca 1982 r. o scalaniu i wymianie gruntów (Dz. U. Nr 178 z 2003 r., poz. 1749 ze zm.) – Land Consolidation Act
- Rozporządzenie RM z dnia 9 listopada 2004 r. w sprawie określania rodzajów przedsięwzięć mogących znacząco oddziaływać na środowisko oraz szczegółowych kryteriów związanych z kwalifikowaniem przedsięwzięć do sporządzania raportu o oddziaływaniu na środowisko (Dz. U. Nr 257 z 2004 r., poz. 2573, ze zm.)
- Rozporządzenie MRiRW w sprawie szczegółowych warunków i trybu przyznawania pomocy finansowej w ramach działania „Poprawianie i rozwijanie infrastruktury związanej z rozwojem i dostosowywaniem rolnictwa i leśnictwa przez scalanie gruntów”, objętego Programem Rozwoju Obszarów wiejskich na lata 2007-2013 (in the course of the legislation process)

## **BIOGRAPHICAL NOTES**

**Adrianna Pulecka** graduated from the Faculty of Landscape Architecture at the Agricultural University in Warsaw. She completed her doctor thesis on management and protection of the rural landscape in the course of transformation of spatial structure of rural areas in Poland. At present, she works at the Warsaw University of Technology, Faculty of Geodesy and Cartography.

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