# **Rural Landscape Planning in Poland – Surveyors and Landscape-Architects Cooperation**

## Adrianna PUŁECKA, Poland

Key words: rural landscape, land consolidation.

## SUMMARY

Rural landscape can be considered as a substantial Polish contribution to the cultural heritage of the united Europe. The rural landscape of Poland is still considerably well preserved and only slightly devastated by modern agriculture. The idea of sustainable development of rural areas in Poland is waiting for tools appropriate to preserving the rural landscapes. Land consolidation projects will have to be still executed in Poland as the farm-structure is scattered very much. The author insists in the paper that rural land development and particularly land consolidation processes performed in Poland by land-surveyors should be the most important tool for rural landscape development. Traditionally landscape issues form a set of environmental postulates to land consolidation. The paper proposes the reversal approach - considering land consolidation process as a tool for rural landscape planning.

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## **1. INTRODUCTION**

The main factor contributing features of the Polish rural areas was agriculture. During centuries of land cultivation the landscape of characteristic relations cultivated areas, rural settlements and forested lands have been created. The main factor of the village location was most often approach to the water. The axis of the village was usually a stream with roads running on its both sides, nearby cottages and farmsteads were located and farther off on slopes the expanses of cultivated in three-field system plots were spread. The central part of the village was usually used jointly by the village inhabitants. The tree-field system determined for long years the face of the rural landscape in Poland. In this system zoning of the land into long ribbon-shaped strips was formed. Such a landscape was preserved in Polish land until beginning of the 19<sup>th</sup> century. Some parts of this landscape can be met even nowadays. Geometric mosaic of cultivable land strewn with extents of forests and scattered wooden farmsteads connected by gently meandered roads can be still found in Poland. Such a picture is deeply rooted in Polish culture: in music – folk dances, in clothes – strip regional costumes (c.f. Pułecka, 2003, Rylke, 2002).

Ensuing stage of rural landscape development was influenced by industrialization. Manor houses and surrounding them parks, granges and accompanying them ponds, industrial objects: water-mills, oil-mills, sugar-mills and alcohol distilleries have created successive layer of the landscape overlapping its earlier structures.

In Poland it is still possible to find remainders of medieval settler's structure: villages layout, local roads network etc. There were survived several components of the 19<sup>th</sup> century's landscape like rail network, village parks accompanying granges and agricultural-food industry. One can meet in Poland the farms of non-specialized production and characteristic structure of land expanse as well as little towns with services and handcrafts adjusted to such primitive agriculture: villages' fairs, small brickyards and clay-pits, infield afforestation spots etc. (Rylke, 2002). Moving forward industrialisation has caused that the water is no longer drawn directly from the surface but it is distributed using pipeline. Soon after industrial development the landscape planning hardly ever was connected with natural local terrain features. Particular landscape components were used as often as not for definite functions like housing, transport, food production etc.

One should remember that the essential task of rural areas is preserving the national natural and cultural heritages. Within certain landscape the local people during centuries were relocating, settling down, cultivating land and erecting houses. As a result of these interrelations we have inherited both local culture and national identity. One should remember that farmers are owners of considerable part of the county's area. Depending them

our attempts at landscape preserving and improvement are more or less effective. Their will is indispensable to make the landscape available for the population.

The rustic area of Poland is still rich of landscape types and natural resources. On the other hand, it should be understood that hitherto role of the rural areas also in Poland has come to the end. Certain balance between food production and alternate function of the rural areas will have to be found. Such a balance is known as a doctrine of 'sustainable development' of the area. Landscape issues should play prime role in widely understood environmental planning. Some examples of such an approach can be found in Europe, e.g. in Bavaria and Holland.

# 2. TRADITIONAL APPROACH TO LAND CONSOLIDATION

Farm-structure in Poland has been formed during centuries by traditional, relatively primitive farming. Inheriting land by all children has caused considerable scattering of the farm-structure. For that land consolidation is nowadays an urgent economic necessity. Also the need of large infrastructure projects, like highways, advocate for land consolidation and land re-allotment. Land consolidation process in Poland is left on surveyors' hands.

Traditionally understood land consolidation is aimed at creation of suitable conditions for farming in agriculture and forestry through improvement of spatial structure of farms, rational formation of land expanses and adjustment of the estate-borders with infrastructure system (reclamation network, roads network etc.) as well as terrain relief.

Since several years ecological issues in land consolidation have been trendy very much also in Poland. Such consolidation is aimed at adjustment of property borders with eco-outlines contributing environment protection. It means that such an approach resolves itself into postulate to consider ecological issues in general plan of land consolidation.

Landscape architect is asking if such an approach is sufficient. Whether rural landscape, its planning and protection should be superior aims of action in which land consolidation should play the role of the tool for achieving such aims. Such an approach is also justified by the consciousness that the Polish rural landscape is one of valuable Polish contribution to the EU.

## 3. THE NEED OF SURVEYOR AND LANDSCAPE-ARCHITECT COOPERATION

## 3.1 Surveyor's point of view

The local physical plans in Poland comprise only general recommendation concerning landscape development. Such recommendations are obligatory also for general plan of land consolidation. Polish act on consolidation and exchange of lands (came into force in 1982) authorises the land surveyor who develops the concept of rural areas management for creating the "sustainable agricultural landscape".

Location of the areas having the following functions should be indicated in land consolidation project (c.f. Wilkowski, Pułecka, 2002):

- areas of intensive agricultural production,
- areas, which are periodically used for agricultural purposes,
- areas of intensive forest production,
- future built-up areas,
- areas planned for recreation,
- areas of particular protection due to their high ecological values,
- areas planned for future infrastructure investments (motorways, railways, gas and oil piping etc.).

## 3.2 Landscape-architect's approach

Landscape-architect is obliged to remember that results of implementation of the land consolidation project and planned investments will impact specifically on the landscape. As the landscape creates an organisational unity, therefore it is recommended considering all of its components, i.e.: forests, forested areas, bushes, arable lands, meadows, pastures, orchards, surface waters and technical infrastructure elements as an integrity. Ensuring appropriate relations between those elements is the condition of appropriate 'functioning of the landscape'. Proportions of areas, as well as spatial relations between particular areas are very important. Rational arrangement of agricultural landscape is based on the optimum land use structure considering different functions: economic (functional), aesthetic, historical, ecological (environmental). The following two main factors should be taken into account (c.f. Reenberg, 1991):

- the influence of various land use forms on changes of landscape components, and
- the past, historical landscape forms in the course of development of scenarios of future changes.

There are several remarks worthy to be mentioned when looking at the landscape transformation from the point of view of the landscape architect (c.f. Tałałaj, 2000):

- the landscape capacity is limited with respect to a monotonous, agricultural land use,
- arable lands, being the unnatural, i.e. temporary form of land use, tolerate negative impacts to the very limited level only,
- in the case of intensively developed agricultural landscape (uniform as regards the biological-and-ecological and view aspects) it is necessary to preserve or arrange natural or similar elements (point, linear, surface) inside the landscape,
- the measure of the level of progress of transformation of the agricultural landscape is, among others, disproportion between the area of arable lands and the area of such components as: forests, green areas, waters, forested areas etc.,
- the capability indicator of 'the biological arrangement of the landscape' by means of introduction additional forested areas is the presence of such elements, as: roads, streams, ditches, settlements, water reservoirs, peat-bogs, barren-lands, surface-mining-excavations etc.

## 3.3 How the Polish legal system is supporting landscape-oriented projects

There are several acts in Poland influencing the management of landscape in the course of land consolidation e.g.:

- the act on destination of arable lands for afforestation (came into force in 2002),
- the act on ecological agriculture (came into force in 2001),
- the act on consolidation and exchange of lands (came into force in 1982),
- the act on the protection of nature (environment).

The most important are the first and the last of mentioned acts. The act on destination of arable lands for afforestation authorises the owners of arable lands to afforest those lands if certain criteria are met. The most important of them concern the following arable lands:

- characterised by low production values (V and VI soil quality classes),
- located on slopes of average inclination higher than 15%,
- periodically flooded,
- being degraded

The act on the protection of the nature concerns the fields being important for preservation of unique resources of genes and types of habitats.

## 4. CONCLUSION

Particular attention during land consolidation process should be paid in Poland to the following factors:

- close cooperation of land surveyors and landscape architects is indispensable to preserve rural landscape in Poland,
- there is a need of proper legal regulations,
- extra financial means are indispensable for realization of such landscape-oriented projects,
- rural society education in pro-landscape issues is very important, but it would be a very long-lasted process,
- the foreign experiences and patterns should be used in Poland paying attention to their proper adoption to the specific country's conditions,
- fulfilling the above mentioned factors will help using land consolidation in Poland as a tool for rural landscape development.

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#### **BIOGRAPHICAL NOTES**

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