Landscape Planning – A Contribution to the Rural Land Development

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SUMMARY

Land consolidation in Poland is forced by extremely scattered spatial structure of farms. On the other hand, land consolidation may threaten the unique cultural and aesthetic values of the landscape. The paper presents a system of landscape studies proposed for rural land development. Besides of routine inventory of landscape resources, a study of view aspects and study of landscape accessibility are proposed to produce the map of view-connections, viewaxes, view-points etc. Such studies are contributing the concept of landscape planning. Another studies important for the land consolidation procedure are proposed in the paper, namely: a study of preserving and transformation of landscape components, study of the landscape use including the limits of ownership rights, and study of value of the landscape components. The last study is of exceptional importance as far as land re-allotment procedure concerns.

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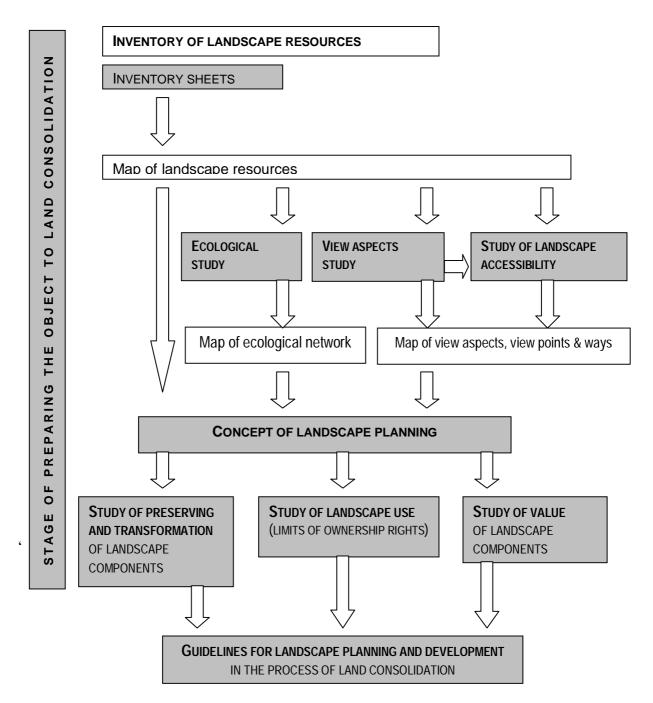
Rural landscape planning in Poland have a chance to be effective if it is combined with land consolidation. Landscape architects and other professionals are able to make proper studies and prepare guidelines for rural land development fulfilling requirements of preserving and developing unique cultural and aesthetic values of the Polish rural landscape.

Inventory of landscape resources. Natural and anthropogenic landscape elements and structures such as characteristic plant communities, monument buildings and structures, objects of tourist interests, terrain topographic and geological features and uniqueness, tourist infrastructure, etc. should be explored during the course of inventory. Inventory process should be the source of characteristics and locations of particular landscape components. Proper inventory documentation should be done in the field. Object locations should be plotted at the cadastral or topographic map. It is advisable to register coordinates of the objects in the field important for their precise location during the consolidation procedure. Nowadays the simplest location method is GPS. Inspecting the objects in the field, first approach to their valuation could be done. The area of inventory should be wider than the limits of the area under land consolidation. It should be rather limited by natural landscape borders generally broader than the administrative borders.

Ecological study. Following the Dutch, German and French patterns, ecological study in Poland should be done by interdisciplinary teams of experts in ecology, phytosociology, hydrology, physiography and other natural sciences. Ecological elements of the landscape structure should be identified during the course of the study. Relationship with the network NATURA 2000 pre-designed in the territory of Poland should be observed. The standard study should provide us with information concerning particularly:

- terrain devoted for preserving landscape, natural heritage and habitats of unique and deleted species,
- water relations as concerned to water-courses, erosion and sedimentation areas, wetlands, swamps, flooded areas etc.,
- terrain configuration.

A map of the ecological network of the area is compiled as a result of the studies. Such a map is to be a basis to recover ecological network of the area and to develop new system of patches and corridors. Land consolidation creates opportunity for obtaining land for landscape aims.



Scheme of the process of landscape planning in the course of land consolidation

View-aspects study. Identifying of the 'particular spots' in the landscape is a start point to the study. The following particulars should be taken into account:

- spatial dominants – objects attracting observer's attention, dominating the landscape because of their dimension or location (e.g. church towers standing out the surroundings,

FIG Working Week 2004 Athens, Greece, May 22-27, 2004 water-towers and other objects, old solitary trees, manor-houses and parks, their remainders, graveyards etc.),

particular spots – small objects having some historic or cultural value (e.g. monuments, chapels, wayside shrines, insurrection graveyards, erratic boulders etc.), attracting observer's attention. They are usually situated at the important space-parts, such as: country-way-crosses, entering villages, by bridges, dykes etc.,

The following stage is definition of 'visual junctions', 'directions' (views, view-axes, panoramas) and 'functional junctions' (roads) between particular spots. Depending on observer state, whether he is stationary or moving, the 'observer spots' and 'observer lines' should be specified. The view-structure should be defined, i.e. what landscape elements will appear to the observer from particular spots and observer points or lines (e.g. view of church tower, solitary tree, village panorama etc.).

All those data are the basis to compile a map of view-connections, view-axes, view-points¹ etc. The map is a reference for guidelines concerning landscape architecture and landscape protection. A map should contain existing observer points and lines as well as directions on which panoramas and view-axes are unfolded. Specific terms to preserve a certain view should be determined (e.g. preventing from covering a lake-view by building development in the foreground). The map will be helpful for further designing the footways, bridle paths, cycle tracks etc. during the land consolidation project.

Study of landscape accessibility. Sooner then latter the major question of the rural landscape also in Poland will be a necessity to balance between landscape protection, the use of landscape components by the land owners and putting landscape within society's reach. The landscape understood as a borderless common good, visual property of everybody who go through it may create a sort of conflict between its common accessibility and preserved by Polish Constitution private property rights. The law is in Poland not as much restrictive as in UK or USA. However walking across the country, through Polish villages, particularly those at suburban or tourist-attractive areas, one can see notices "private, no entrance". A problem escalation is expected soon. In the regions of attractive landscape, in the spots of exceptional view-aspects, land plots are retired, fenced and therefore excluded from public access. More and more common problem can be found in lake- and river-sides where summer plots and summer houses with fences prevent public from access to water.

Considering landscape as a common good, in the '*study of landscape accessibility*' preceding land consolidation project proposals of public footways, bridle paths, cycle tracks and other point and lines of landscape observation and access to the objects should be scheduled². That is a way to prevent from fencing and closing the access to the landscape.

² compare with UK 'The Act on the Right of Way"

¹ view-points – the specific spots on which a particular view can be observed: panorama or point of view-axis while observer is stationary (unmoving),

view-axes – the roads, tracks on which a moving observer is able to look around continuously for panoramas, goals of view-axes etc.

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Study of landscape use; limits of ownership rights. The study is aimed at identification of those landscape structures and elements which exceptional value from ecological, historical/cultural or visual point of view require a special way of use. The limits resulting from the above mentioned reasons should be included to the guidelines of post-consolidation land management. As examples: the area on which existing plants should be protected, area of plants habitats important for bio-diversity of the region, extreme line of forestation (compact, linear etc.), limits in building development to prevent from screening the landscape view, etc. The limit of ownership rights may be highly differentiated. It may be only servitudes of passage to get the lake- or river-side. A pathway for walking or cycling. Entrance to the wooden-made platform to observe or make photos of wild animals. To mow meadow only on certain time due to the nestles of some birds; to scythe down a bog meadow (excluding use of any machinery) etc., etc.

All the limits should be displayed at the map of use limits and should be taken into account while preparing the project of land consolidation and land re-allotment. The limits may contribute the value of the certain land plot.

Study of value of landscape components. Land consolidation is based on re-allotment procedure. To accomplish such re-allotment some kind of value of land plots mast be estimated. In traditional approach a set of renewable values was worked out in such a way to comprise particulars of the plots. Among those particulars soil quality and distance from village settlement were the main factors of the land value. Nowadays a market value is proposed at least for the plots of permanent crops including orchards and other perennial crops³. The landscape issues are strongly supporting the use of market value for re-allotment procedure. The problem is how to estimate the market value of the landscape components. On the other hand, the market value is the only value enabling us to consider mentioned above limits in ownership rights. All property valuation methods have found their role in landscape valuation procedures.

Study of preserving and transformation of landscape components. The studies reported before were to define and recognise the features of the area under land consolidation important from the landscape architect point of view. Each of landscape components performs its function effecting other components and being influenced by them. Any changes of an attribute of a landscape component resulting from designer decision will have to produce changes of other components of the landscape structure.

The study of preserving and transformation of landscape components is aimed at working out alternative scenarios of potential future landscape development dependent on changes in the structure of land use and land ownership. Time range of the scenarios is the interval between consecutive land consolidation. Landscape architect should consider conditions of landscape development resulting from other studies. The following problems should be taken into account:

- relations between natural and cultural landscape forms,

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³ see WILKOWSKI, 2002

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- connection of settlement forms and terrain natural features,
- restoring possibilities of historical landscape structures,
- counteraction against landscape globalisation and decay of regional landscape forms.

Potential conflicts between different functions (ecological, economic, utilitarian, cultural, aesthetic etc.) should be minimised.

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BIOGRAPHICAL NOTES

Adrianna Pulecka graduated from the Faculty of Landscape Architecture at the Agricultural University in Warsaw. At present, she is a student of the 3rd year of PhD-studies at the Faculty of Geodesy and Cartography of the Warsaw University of Technology. She is preparing her doctor thesis on management and protection of landscape in the course of processes of transformation of spatial structure of rural areas in Poland.

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