

Methodology of designing rural areas development projects on the example of the village of Mielnik

**WARSAW UNIVERSITY OF TECHNOLOGY
Faculty of Geodesy and Cartography**

Katarzyna Sobolewska-Mikulska, Eng. Ph.D.

RURAL AREAS DEVELOPMENT PROJECTS IN POLAND

A Rural Areas Development Project should, in the first place, cover those areas in a municipality which require land consolidation for the following reasons:

1. factors related to the principles of the protection of the environment, its resources, and nature protection,
2. areas to be developed for public purposes with projects of local and trans-local scale,
3. areas where the structure of farms shows a large number of small plots and an unfavourable localisation of these plots in relation to the farmsteads.

**METHODS FOR DESIGNING A RURAL AREAS
DEVELOPMENT PROJECT ON THE EXAMPLE OF A
MUNICIPALITY - MIELNIK**

- 1. The main nature-related criteria which include:**
 - classification potential of arable land soils,
 - environmental protection with elements of landscape shaping and cultural heritage protection,
- 2. Design and technical criteria which include studies in the localisation of nature objects.**
- 3. Economic analysis of the implementation of a rural areas development project**
- 4. Legislation-related criteria .**

**The implementation of tasks
mentioned should comprise the
following detailed solutions:**

1. proposal of shaping agricultural and forest production space,
2. proposal of locating areas which require recultivation and land management,
3. localisation of protected areas and protection zones for flowing and impounded waters,
4. localisation of areas for village housing construction which where land consolidation and division of properties has to be done,
5. farm tourism development programme as a contemporary source of farmer's income.

SHAPING AGRICULTURAL AND FOREST PRODUCTION SPACE ACCORDING TO SOIL

BONITATION POTENTIAL

Area used for integrated farm production

- These areas include soils of the categories IIIa-IV b which fall into the 4th and 5th
- to make the lots larger and to create orchard blocks adjacent to the existing orchard. The planned new orchards will cover the area of about 40 ha

Plans for the area also envisage:

- replenishing the missing vegetation (trees and brush) along hedges (ecological corridors). The project allocates about 25 ha of land for this purpose;
- modernisation of the existing dirt roads. The project also includes planting 24 km of trees along some local roads. These strips will perform protective functions and improve attractiveness of the landscape.



Areas used for temporary farm production

1. This area includes cropland class V and VI, bonitation category—6 and 9
2. Plans for the area under study speak of creating grassland blocks whose larger area is better for the development of ecological farming. This area covers altogether about 80 ha at lower parts of the Bug valley, while the project itself allocated some 70 ha for the purpose. The selected area will allow the operation of farms producing ecological food.

The solution is an example of an ecological use of the natural soil potential which, in addition, offers good conditions for ecological farming and new jobs

Area used for intensive forest production

The main directions in developing forest areas at Mielnik include:

1. Protection of natural and economic values.
2. Preserving the continuity in time and space of forests which are part of the municipality's ecological system and ensuring their rational use for business and recreational purposes.

Water protection and management

The directions in surface and underground water protection include:

1. Obtaining and preserving appropriate surface water quality class:
 - river Bug—quality class I ,
 - other rivers in the municipality (a number of river valleys)—class II.
2. Protection of underground waters against municipal and industrial pollution.
3. Preserving untouched biological flows in the main rivers



Farm tourism development as farmers' contemporary income source

The above facilities are possible owing to the localisation of the following in the project:

- a land reserve to be used for the spa facilities in Mielnik,
- ecological, educational, and recreational paths promoting the main attractions of the area, among them a working chalk quarry. The plans are to have about 35 km of such paths,
- horse riding trails (ca 29 km) with markings of the biggest landscape and historical attractions,
- camping sites and public baths with sports and water equipment rental.



SUMMARY

In terms of land management, the Mielnik Municipality Development Project takes full advantage of the local economic and ecological potential.

Thank you for your attention