

RECREATIONAL POTENTIAL OF COMMON FACILITIES IN LAND CONSOLIDATION

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Abstract

As part of land consolidation, "common facilities" are designed and implemented, in this context are proposed measures to protect soil and water, to improve the ecological stability of the landscape and field roads that increase the permeability of area. Land consolidations are increasingly focused not only on the rational use of the land fund, but mainly on proposals for multifunctional measures, ensuring consistency between farmers, residents and visitors in the area. To popularize the hard work of designers, land offices and construction contractors, a competition for the best common facility called Living the Landscape is held every year. Through it, the implemented measures are evaluated and their polyfunctionality and contribution to the improvement of the landscape are appreciated. Just in the year 2020, 271 buildings were built as part of land consolidation, of which ecological (greenery) in the number of 33, water management in the number of 62, anti-erosion in the number of 18 and the most represented were field roads by the number of 158. The aim of the paper is to present several common facilities appreciated in previous years of competition, their purpose and importance for increasing the recreational potential of the area and its attractiveness.

Key words: Landscape, tourism, soil and water conservation, landscape permeability

Introduction

The Czech landscape has historically undergone a complex development, given by the power, political and economic influences, especially in the twentieth century due to drastic changes in the way of farming on agricultural land. The legacy of this process is the disturbed landscape, unable to fully ensure its ecosystem functions (Sklenička et al. 2014). The way to remedy this situation is not easy or short. Restoring landscape functions requires a comprehensive approach, based on both knowledge of historical contexts and modern approaches to landscape creation and protection, while respecting land ownership rights. Land consolidation is an important tool for applying these principles and achieving a balanced state of the landscape, including its ecological, economic and social functions. As part of land consolidation, "common facilities" are designed and implemented, which form the framework in landscaping, in this context are proposed measures to protect soil and water, to improve the ecological stability of the landscape and, finally, a network of roads to increase permeability of the area. The term "common facility" can be imagined, for example, like field roads, water reservoirs, grassy broadchannels, or planted elements of greenery (Papoušek, 2011).

Land consolidations are more and more focused not only on the rational use of the land fund, but mainly on proposals for multifunctional measures, ensuring consistency between farmers, residents and visitors to the area (Janečková et al. 2017). To popularize the difficult work of designers, land offices and suppliers, a competition for the best common facility called "Living the Landscape" is held every year. Through it, the implemented measures are evaluated and their polyfunctionality and contribution to the improvement of the landscape are appreciated. Last year alone, 271 building structures were implemented as part of landscaping, of which ecological (greenery) in the number of 33, water management in the number of 62, anti-erosion in the number of 18 and field roads were represented by the number 158. (SPU CR)

Key words: Landscape; tourism; soil and water protection; landscape permeability

Material and methods

The main goal of the competition is to acquaint the widest professional and laic public with the scope and level of implementation of common facilities proposed in land consolidation and thus contribute to increasing the prestige of the field. The competition supports projects that, by their nature, meet the requirements for a comprehensive landscape solution or part thereof (SLA CR).

Common facilities are evaluated in two categories:

1. Green and transport infrastructure (Ecological network elements, field roads)
2. Landscape creation and protection (anti-erosion and water management measures)

The aim of the paper is to present several winning common facilities, their purpose and importance increasing the recreational potential of the area and its attractiveness. They are:

- educational trails and pools in cadastral area Růžová (district Děčín),
- windbreak in cadastral area Vrbovec (district Znojmo),
- local biocentre in cadastral area Čejč (Hodonín District),
- wine routes in cadastral area Mikulov (district Břeclav).

Nature trails and pools in cadastral area Růžová

It is a set of consecutive common facilities implemented based on the results of complex land consolidation in cadastral area Růžová. With the construction of the main field road and the side field road, stable field roads with farming slips were built from dangerous muddy access to agricultural land. As these backbone roads crossed the landscape across the tourist site, the village used them for sightseeing tours and supplemented with furniture and educational panels. Planted pears and apple trees form the Fruit Trail, the Health Trail encourages walks with beautiful views. Small pools have attracted water-loving animals and helped increase biodiversity. The project returned natural water areas to the landscape and increased biodiversity, improved water management conditions and at the same time increased the overall ecological stability in the affected locality (Fig. 1., 2.).



Fig. 1: Landscape before the construction



Fig. 2: Pools with the field road

Shelterbelt in cadastral area Vrbovec

The project is based on the common interest of the Municipality of Vrbovec and the owners of the affected lands to actively strengthen the protection of the municipality from wind erosion, reduce dust in the village and strengthen the functionality of selected Ecological network components by restoring ecosystems and subsequently developing their functionality (Fig.3.,4.). The selection of woody plants for planting was made so that it corresponded as much as possible to the potential natural vegetation in the solved locality. Znojmo is one of the driest areas in the Czech Republic. A hydrogel was used on the plant roots when planting the plants. In addition to the planting itself, the implementation also included a three- year aftercare.



Fig. 3: Area before construction



Fig. 4: Shelterbelt after planting

Local biocentre in cadastral area Čejč

The project of restoring the water area in the landscape originated in places where, based on the first written mention from 1464, Lake Čejčské was located. The water in it was brackish (half-salty) and there were salt marshes in the vicinity. However, it probably already existed in the Holocene. It disappeared through human activity between 1823 and 1824 through targeted drying. The last of its local remains were devastated by the "economy leaders" through a thorough amelioration after the year 1965. The new intention was to sensitively revitalize this area. A local biocentre of a combined type was created on the partially wetted soil area, one of the last, which was used for many years due to its remote location for a black dump, looking unfriendly into the surroundings (Fig.5.). It is a creation of a multifunctional measure in the form of 2 shallow, drying ponds and one with a constant water surface, including numerous plantings of deciduous trees and shrubs. The littoral zone around the water area provides a natural place for the development of wetland vegetation, waterfowl and amphibians. Through the implementation of the project, natural water areas were returned to the landscape and biodiversity and ecological stability were significantly increased (Fig.46.). The overall measure thus fulfils an anti-erosion, soil protection, ecological, aesthetic and recreational function. The efforts made gave rise to an important water management, eco-stabilizing and landscape-creating element with societal significance, which further follows the bio corridor of the Čejčský potok floodplain.



Fig. 5: Area before creation the bio-center



Fig. 6: Local bio-center Čejč

Wine routes in cadastral area Mikulov

This is the construction of two field roads in the protection zone of the Pálava Protected Landscape Area in the locality of Holly hill (Svatý kopeček). A compromise solution was chosen to strengthen the roads, which would meet the requirements of the AOPK. The construction was carried out in the form of paving made of quarry stone laid on a sheet pile. The performed method of consolidation will allow partial infiltration of water in order to prevent its rapid outflow. Paved roads make agricultural and forest land accessible and at the same time they are widely used by local citizens and tourists for walks around the Holy Hill (Fig. 7.,8.,9.).



Fig. 7: The original road



Fig. 8: New field road

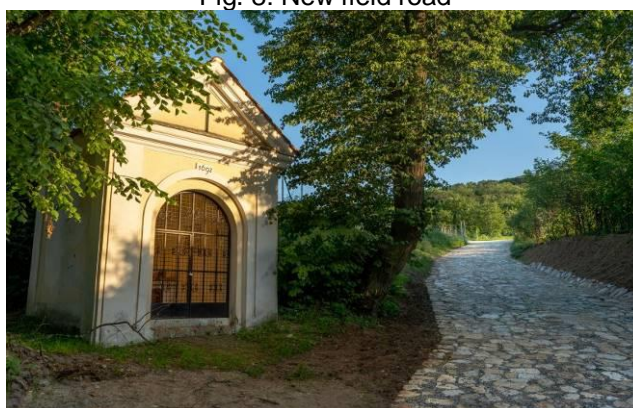


Fig. 9: Detail of the road

Conclusion

All these common facilities are just a small example of the results of land consolidations in the Czech and Moravian landscape. They serve both residents and farmers and visitors, sensitively combine the needs of protection and rational use of agricultural land, protection of water, nature and landscape and are aimed at aesthetic and recreational function and contribute to the restoration of the picturesque character of our landscape.

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Souhrn

Pozemkové úpravy se stále více soustřeďují nejen na racionální využití půdního fondu, ale hlavně na návrhy multifunkčních opatření, zajišťujících soulad mezi hospodáři, obyvateli i návštěvníky řešeného území. Státní pozemkový úřad každoročně oceňuje nejlepší realizovaná společná zařízení nejen z hlediska technického (kvalita a provedení staveb), ale zejména také pro jejich polyfunkčnost a přínos pro zvelebení krajiny. Jen v loňském roce bylo realizováno v rámci pozemkových úprav 271 stavebních objektů, z nich ekologická (zeleň) v počtu 33, vodohospodářská v počtu 62, protierozní v počtu 18 a nejvíce byly zastoupeny polní cesty počtem 158 (SPU CR). Cílem příspěvku je představit několik vítězných společných zařízení, jejich účel a význam zvyšující rekreační potenciál území a jeho

atraktivitu. Jsou to: Naučné stezky tůně v k.ú. Růžová v okrese Děčín, Větrolam v k.ú. Vrbovec v okrese Znojmo, a Vinařské cesty v k.ú. Mikulov v okrese Břeclav.

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