

## Historical Landscape Structures of the Agricultural Slovak Landscape



### Environment

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### ABSTRACT

*In the last period the Slovak agricultural landscape went through vivid changes, which have conditioned in arising of new problems such as agricultural subjects decomposition, changes of agricultural structure, leaving the agricultural land, declining of the intensity of agricultural production, negative influences of leaving agricultural grounds on landscape biodiversity, overmultiplying of synantropic species, increasing pressure on occupation of agricultural soil as a result of increasing pressure on enforcement of particular invested contemplations. All of these changes are also reflected on the changing landscape structure and landscape character of the agricultural landscape. The original traditional agricultural landscape is gradually changing to an artificial intensively used landscape. The paper is focused on the evaluation of the traditional agricultural landscape and specification basic landscape types of historical landscape structure of the Slovakia.*

### Introduction

The current structure of the landscape in Slovakia is the result of long historical development. Changes in society which affected the landscape have been more rapid and more variable than the continuous natural processes of landscape development. These changes in society, whether technological, demographic, socio-economic or political, are reflected in the form of use, layout and appearance of the rural landscape. Since each historical period and each stage of development imprints its specifics on the landscape, we can say that the cultural landscape is a true picture of the state and development of society. In the past, the man lived in harmony with nature. Gradually it began to change and sacking its. He creates new artificial objects, and so gradually altered the natural landscape elements in artificial anthropogenic-influenced. Nevertheless, in the agricultural slovak landscape here occur maintain a rare traditional agricultural landscape structures.

### The historical structure of the agricultural landscape of Slovakia

Traditional agricultural landscapes are described as landscapes in which primarily, traditional sustainable agricultural practices are currently carried out and where biological diversity is conserved thereby (Harrop, 2007). Traditional agricultural landscapes in Slovakia is represented by a mosaic of small-scale arable fields and permanent agricultural cultivations (grasslands, vineyards, high-trunk orchards), originated by continuous succession over centuries (Štefunková, Dobrovodská, 1998).

Traditional forms of farming are usually characterized by methods of land management regardful of natural resources. At the same time, they become model areas for ecological farming and a source of restoration of natural potential for surrounding, intensively used areas. They currently only occur sporadically, so it is necessary to pay increased attention to them as they give a specific landscape pattern and specific colouring to the Slovak countryside. Based on inventory of traditional agricultural landscape in Slovakia, the area of delimited traditional agricultural landscape was 42,085 ha, which comprises only 0.9% of the entire area of Slovakia (Špulerová et al., 2013). The most important historical types of land in Slovakia include (Izakovičová, Oszlányi, 2013):

- **Vine-growing landscape** – represents land with dominant growing and processing of grapes. The northernmost limit of the possibility of wine cultivation runs through the territory of Slovakia, which gives a special nature to viticulture (cultivation of grapes for wine) and also to wine-growing land that uses the hottest hills of various terrain modifications for wine growing. The greatest expansion of viticulture occurred at the beginning of the 17th century when

the area of vineyards in Slovakia reached about 50,000 ha. In connection with these activities, certain landscape and settlement structures were formed in the country as well as technical facilities. Picturesque vineyards, often in combination with wine cellars, are particularly valuable in terms of landscape and ecology. These sites are important not only in cultural-historical terms, but they also have a significant biological, ecological and landscape importance as they represent unique locations for the habitat of rare and endangered species and also enhance the spatial stability of the landscape. Individual wine-growing areas are characterized by typical vineyard cottages, which form the settlements of these regions, such as the wine-growing towns of Modra, Pezinok, Svätý Jur and Skalica, rural wine-growing settlements such as Brhlovce, Sebechleby, Rykynčice, Driečovo, Dolné Plachtince, Bara, Čerhov, Černochoch, Malá TČČa, Slovenské Nové Mesto, Večká TČČa and Viničky, etc., as well as regions. The most important and most attractive is the Tokaj region, which spread over the Zemplín hills and produces the well-known and popular Tokaj wine. The Tokaj region is one of the few areas in the world where it is possible to grow grapes for the production of naturally sweet wines. There are six basic wine-growing areas in Slovakia:

- Small Carpathian wine-growing region,
- Southern Slovak wine-growing region,
- Central Slovak wine-growing region,
- Nitra wine-growing region,
- Eastern Slovak wine-growing region,
- Tokaj wine-growing region..

Over the last decade, viticulture has noted a significant decline. Between 1990 and 1999, the total land surface area has reduced by 24.1% and harvest areas by 21.1%. Similarly, wine production has fallen by nearly 40%. Particularly vulnerable are the traditional small-block vineyards. A significant intervention in traditional vineyards was the years of collectivization and agricultural intensification, when small-block vineyards, from landscape-ecological point of view very valuable territories, were transformed into large-block vineyards, which were technically easier to cultivate. The planting of large-block vineyards significantly changed the character of the landscape structure of wine-growing areas.

- **Landscape with different forms of scattered settlements** scattered settlements represent one of the few preserved historical landscape structures of Slovakia. They represent a certain, specific type of exploitation of land and also a specific type of settlement. Scattered settlements have different names in different regions, such as lazy, štále, rale, p ace, kl oviská, kopánky, nivky, vrchy, etc. Different names are based on regional specifics, such as the method of obtaining and farming new land, etc. The

bases for scattered settlements are foothills and highlands the height of which mostly varies between 500 – 800 m. The formation of scattered settlements was associated with a large amount of land which was barely accessible from the mother areas. This agricultural land represented some potential for feeding the population, especially the poorer. The formation of scattered settlements (known as “kopanice”) in Slovakia was associated with three waves of colonization – Wallachian, Highlander (both were shepherds) and Kopanice:

- Wallachian colonization meant the settlement of the mountain areas of northern and central Slovakia by the pastoral population mostly in the 15th and 17th centuries. Wallachian colonization spread in the northern parts of Zemplín, Šariš, Spiša, Orava and Trenčín and in central Slovakia in the Gemer and Upper-Hron regions.
- Highlander colonization is younger and falls within the 17th and 18th centuries. Highlanders settled the areas of Upper Kysuce, Upper Orava and part of Northern Spiš.
- Kopanice colonization meant the internal settlement of the mountain and foothill areas of Slovakia by the native population between the 16th and 19th centuries. This colonization culminated in the 18th century and the first half of the 19th century, when the majority of settlements were formed. This colonization gave rise to settlements in the areas of Kysuce and Orava, Detva, the Small and White Carpathians, Pohronský Inovec, Trbeč and Vtáčnik.

**There are five main areas of scattered settlements in Slovakia, which are divided into the following sub-areas:**

- Kopanice settlement area in the Slovak Ore Mountains and the surrounding mountains of the Slovak Central Highlands (Detvianska laznícka area)
- Javorníky-Beskydy settlement area
- Settlement area of the White Carpathians and the Myjava Uplands.
- Nová Bača settlement (štálová) area
- Settlement area in the Strážovské hills (Wallachian-belianska area).

Each of these areas has its own specific and unique features.

**• Meadow and grassland landscape –**

this landscape represents an area that was previously unaffected by strong anthropic pressure, and therefore it has kept its original character. Forms of meadow and grassland landscapes have mostly been preserved in marginal areas or areas difficult to access, areas that are outside economic centres, often lacking infrastructure. From a historical perspective it can be concluded that the meadow-grassland economy was one of the traditional livelihoods of our ancestors. In the 13th – 14th centuries, in addition to crafts and trade, higher situated areas and more remote valleys began to be more economically used. Mountain meadows and grassy uplands began to be used by shepherds, who built the first shelters, huts and barns which later grew into small settlements. Terraced fields were formed with belts of trees and shrubs in climatically more favourable areas. This formed mosaic landscape structures – complexes consisting of narrow-strip arable land, meadows, pastures, vegetation of trees and shrubs with scattered dwellings. Historical forms of meadow-grassland landscape are characterized by the following fea-

tures:

- low degree of intensification
- high landscape diversity
- preserved traditional form of wooden and other original dwellings
- preserved traditional forms of agricultural use with complexes of forests with traditional folk architecture
- significant social as well as ecological value of the area and preserved bio- landscape value of the area
- harmonization of functions of agriculture, forestry and water management, recreation, tourism and nature protection with landscape and ecology values of the area.

The issue of the preservation of the traditional meadow-grassland landscape is difficult because land which is not extensively used for livestock or hay making is subject to a gradual succession process, which results in overgrowth and thus the disappearance of abundant flora and fauna. Many valuable sites were subject to intensification processes during collectivization, which resulted in irreplaceable loss and damage not only to nature but also in the disappearance of the historical legacy of our ancestors. Therefore, the preservation of this jewel of our history will require considerable investment. The most important sites of meadow-grassland landscape in Slovakia include the following:

- Kostolany - Lehota region: Jedčové Kostolany - Malá a Večká Lehota
- Upper Hron region: Hečpa – Telgárt
- Bocianska Valley: Malužiná - Nižná Boca - Vyšná Boca
- Turiec region: Sklabiča- Belá – Blatnica
- Podpolianska region: Strelníky – Poníky – Hrochoč – Hričová - Očová
- Orava region: Podbiel – Zuberec – Zázrivá – Terchová
- Zamagurie region: Ždiar – Osturča – Večká Franková – Malá Franková – Jezersko
- Liptovská Teplička
- Jakubany

Many of these sites overlap with other historically valuable landscape structures, especially with sites of scattered settlements.

**Conclusion**

The historical landscape structures have in addition to the significant cultural and historical significance as well as ecological importance. They are significant as the unique islands of species-rich plant and animal communities. They also bring benefits for society. For example, they play an important role in water retention and the prevention of soil erosion – both important with respect to climatic changes (Špulerová et. All., 2013). From this aspect, it is necessary to pay due attention to them and provide them the necessary protection. At the present time these areas are not subject to special protection and trends of declining management and abandonment is apparent.

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