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PRESERVED EUROPEAN CULTURAL HERITAGE IN AGRARIAN LANDSCAPE OF SLOVAKIA

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Summary: The integral part of the cultural heritage in Europe are agricultural historical landscape structures. In Slovakia they represent well preserved historical landscape structures. They are the results of the interaction between natural conditions, geographical position, cultural-historical and economic development. Their recent existence is caused by the marginal position and low natural potential for intensive agriculture. Their origin and being are is necessarily linked to specific human agricultural activity. At present, their preservation is very complicated and it requires a multi-functional approach to landscape utilization. In our paper we have aimed at analysis of the agricultural landscape development in Slovakia in general as the territory crossing western and eastern European culture and at characterization of natural and cultural settings of preserved agricultural HLS as well as the possibilities of their preservation and maintenance in the selected 3 model areas – Svätý Jur, a town near the Bratislava capital city, Liptovská Teplička, a village in the Low Tatras Mts. and Osturňa, a village in the Spišská Magura Mts., with regard to sustainable development and multi-functional landscape utilization.

Introduction

The European Landscape Convention defines landscape as area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors". According to the Convention "landscapes in law is an essential component of people's surroundings, an expression of the diversity of their shared cultural and natural heritage, and a foundation of their identity". Special attention should be given to agricultural landscape, because all people are connected to it whether they live directly in an agrarian landscape or not. Up to now a great deal of agrarian cultural values in the European landscape has been destroyed. Slovakia represents Europe particularity in terms of its well-preserved cultural values. In particular, in the mountain areas, as a consequence of worse natural conditions for agriculture and the smaller societal interest in utilization – or interest in socialistic farming – there have been petrified many agricultural demonstrations characteristic of the first half of the 20th century.

Materials and methods

Landscape agricultural values can be of tangible character (historical landscape structures – land-use) or intangible character (agricultural skills, handcrafting, knowledge, etc.). We concentrate on agricultural historical landscape structures (HLS). They represent semi-natural landscape structures. They are the result of interactions between natural conditions, geographical position, cultural-historical and economic development. They've been created by a continuous process over several centuries. They are a visible outcome

of a mutual coexistence between humans and the landscape (Dobrovodská 2006). Their external signs have not yet been removed or covered by forms of current land use of intensive agriculture, industry, mining and construction. They concern various archaic types of land-use, in the form of narrow-striped small-block fields, semi-natural grasslands, small-block pin vineyards and orchard meadows. Some of the mentioned land-use forms are utilized up to now by traditional techniques (Štefunková and Dobrovodská 1997). Their integral parts are often agricultural forms of relief – balks – preserved as diverse terrace types, stone walls, mounds and heaps, with characteristic biotope structures, which increase biodiversity very significantly (Ružičková and Dobrovodská and Valachovič 1999). Agricultural HLS with balks also play an important role in water retention and the prevention of soil erosion – both important with respect to climatic changes. In addition to the balks, the main sources of local biodiversity are linked to margins of cross field's tracks, original meadows and pastures, after collectivization abandoned grass-grown former arable fields, small wetlands or other low production or unfavourable areas. Their origin and being are necessarily linked to specific human agricultural activity. They are doomed to extinction without it.

The most material evidencing agricultural technologies, cultures, traditions, systems of land division have been preserved only vicariously within various chronicles, land registers and archives. Therefore any evidence about agricultural historical landscape, preserved directly in landscape, are very valuable and they require systematic investigation.

In our paper we have aimed at analysis of agricultural landscape development in Slovakia in general (Tibenský et al. 1971, Lukniš et al. 1975, Demo et al. 2001) and at the characterization of natural and cultural settings of preserved agricultural HLS as well as the possibilities of their preservation and maintenance in the selected 3 model areas (Figure 1) – Svätý Jur. a town near Bratislava capital city, Liptovská Teplička, a village in the Low Tatras Mts. and Osturňa, a village in the Spišská Magura Mts. In the studied areas the agricultural HLSs have been preserved very well.

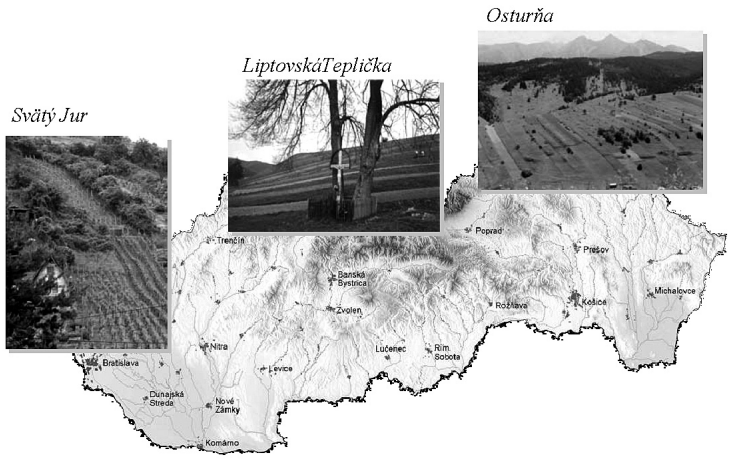

Figure 1. Location of 3 model areas
1. ábra A három modellterület elhelyezkedése

Results and discussion

Development of agricultural landscape in Slovakia

The variableness, uniqueness and degree of conservation of agrarian cultural values as well as the present character of the agricultural landscape of Slovakia results from its position in the centre of Europe, which has been designated the territory crossing western and eastern European culture with elements of lowland and mountain cultural forms, against a background of central European history within the interaction of several ethnic groups. With regard to this situation, we can consider it European cultural heritage. The first more advanced agrarian culture in the territory of Slovakia was created by Celts and Illyrians and later by the Romans. Mostly in the south-western part of Slovakia, the population started to breed cattle and grow vines in addition to crop cultivation. The first Slav inhabitants gradually brought further agriculture development, culminating at that time during the period of the Great Moravia Empire. In the next periods, Slovakia was part of the feudal Ugrian Kingdom, where agriculture was an economic basis. The agricultural development and agricultural land area in Slovak territory were significantly supported by several stages of colonization of domestic and foreign origination. Farm colonization, was partly carried out by the German population, until the Wallachian colonization, which caused massive forest reduction in favour of meadows and pastures in the mountain areas. Further revival and extension of cultivated areas took place in the 2nd half of the 19th century. Under a technological process of intensification and innovation, the agricultural land area has been increasing, but the plots are being disintegrated by the effects of population growth and the Ugrian hereditary law, which was the important driving force of the Slovakian agricultural landscape. During the heritage process, it protected plot division in aequali jure to all heirs. It led to huge plot disintegration and it pressed an immutable character into the agricultural landscape within the Austro-Hungarian Kingdom and later in the first half of the 20th century, as well as when the land reforms leading to the particularization of big land property supported plot disintegration further.

The period of socialism was the period of the biggest changes during the whole history of agriculture in the Slovak territory. The progressive elimination of land ownership was realized and therefore several centuries of developing relations between farmers and the landscape were interrupted. This fact has still been influencing the negative attitude of the present generation toward agriculture and the landscape. Another weak point, from the agrarian cultural conservation point of view, was the massive intensification of production, which led to the non-recurring devastation of many cultural values in the agricultural landscape - the balks were ploughed-up, mosaic plot structures were destroyed, and also traditional farm buildings. On the other hand, the huge increase in agricultural production, mostly in animal production, was noticed due to modern technological processes. The beginning of democracy and the free market in 1990 meant the admission of claims to the original land property law and the possibility of privatization, but also the decline of prosperous agricultural production. It led to significant production regress, to increases of unutilized and overgrown lands and agricultural unemployment. After EU entry, with regard to the financial support to the smaller farmers, some activation of agricultural production and land revival has been gradually observed.

Natural and cultural-historical condition of agricultural HLS in model areas

The basic information about the character of HLS in model areas and natural and cultural-historical conditions of their formation are shown in Table 1 (Dobrovodská 1997, 2006, Štefunková 1997).

Table 1. Analysis of agricultural HLS, natural and cultural-historical conditions in model areas
1. táblázat Mezőgazdasági HLÉS analízise, természetes és kultúrtörténeti feltételek a modellterületeken

Model areas	*Svätý Jur*	*Liptovská Teplička*	*Osturňa*
Character of preserved agri-cultural HLS	▪ original strip-like, terraced vineyards, oriented along the fall line, with several centuries old stone hedges and stonewalls ▪ preserved chestnut or oak groves, brushy and herbaceous vegetation with high biodiversity ▪ preserved urban structure of medieval fortificated town with traditional bourgeois houses and the houses of the vintners (Sv. Jur town became a free royal town in 16th century) ▪ attractive frame of forests of the Small Carpathians Mts and lowland boggy forest of Jurský Šúr	▪ original strip-like structure of small scale arable fields and semi-natural mesophilous meadows and poor pastures with forms of anthropogenic relief - balks (terraces, mounds and heaps, etc.) ▪ still used traditional practices in agriculture ▪ typical wooden architecture – dwelling houses, complex of barns; complex of 350 log cabin cellars ▪ attractive frame of the forested the Low Tatras Mts.	▪ original strip-like and small-block arable fields and semi-natural mesophilous meadows and pastures and fallows with forms of anthropogenic relief - balks (terraces, rocky mounds and heaps, etc.) ▪ still used traditional practices in agriculture in small areas, big proportion of fallows ▪ typical architecture of Goral wooden houses protected as the Folk architecture historical reserve ▪ attractive frame of the forested Spišská Magura Mts. and the Belanské Tatras Mts.
Geo-political position	**Inner Western Carpathians– Fatra-Tatra region** ▪ small Carpathians foothill ▪ altitude 130–370 m ▪ situated in the western Slovakia about 15 km from the capital town of Bratislava - belongs to the satellite towns of Bratislava	**Inner Western Carpathians – Fatra -Tatra region** ▪ the inner part of the Low Tatras Mts. ▪ altitude 846 –1429 m ▪ situated in the northern Slovakia about 350 km from the capital town of Bratislava	**Outer Western Carpathians– Region of Podhale – Magura** ▪ marginal position on the Poland boundary ▪ altitude 645 – 1295 m ▪ situated in the northern Slovakia about 390 km from the capital town of Bratislava

Site and natural conditions	▪ alluvial cones in the Malé Karpaty Mts. ▪ faulted slopes and plains ▪ prevailingly on crystalline subsoil ▪ cambisols and rankers ▪ moderately warm climatic region – mean July temperature over ▪ 16 °C, mean annual precipitation 600–850 mm.	▪ small basin surrounded by mostly steep (12°–17°) or moderate slopes in the Low Tatras Mts. ▪ mostly carbonate pad ▪ rendzinas, cambisols ▪ cool climatic region - mean July temperature 12–16°C, mean annual precipitation 800–1100 mm	▪ 9 km long valley with mostly steep slopes (12°–17°) in the Spišská Magura Mts. ▪ flysch pad ▪ cambisols and rankers ▪ cool climatic region - mean July temperature 12–16°C, mean annual precipitation 800–1100 mm
Colonisation	▪ settled by Slavonians in the 9th -11th century ▪ winegrowing in the Middle Ages one of the most productive economic sectors ▪ influence of German colonisation in 13th and 16th century	▪ colonised in the 17th century by Goral settlers within the scholties colonization on walachian law	• colonised in 16th century by Ruthenians within the scholties colonization on walachian law
Collectivisation	▪ agricultural cooperative was based in 1950 ▪ large part of the traditional small-structured vineyard landscape was destroyed ▪ to intensify the vine production the large block – vineyards were created ▪ the new big terraces, oriented along the contour line were created on steep slopes during the 1970–1980	▪ carried out in 1975 ▪ reclamations made in some more suitable areas for arable land ▪ mainly abandonment of HLS – original arable fields were grassed ▪ after 1989 farmers have rented the land to a cooperative which uses agro environmental schemes to cut the grass on the preserved HLS	• wasn't implemented

The possibilities of agricultural HLS preservation and maintenance

In the **Svätý Jur model area** the positive developmental trend is connected with the application of territorial developmental regulation in accordance with the protection of the surrounding cultural landscape and the support of ecological awareness by the inhabitants, which would provide a balance between a desire for dwelling comfort and demands for environmental quality. The development of agro tourism oriented to viniculture and an increase in using the agro environmental schemes in the field of ecological farming, grassland and non-forest wood vegetation protection, soil protection from erosion in vineyards etc. would contribute to sustainable development utilization of historical agricultural structures of landscape.

In the **Liptovská Teplička model area** the positive developmental trend depends mostly on agro environmental schemes used by the agricultural cooperative that helps to maintain all unused overgrown parcels rented from owners by cutting the grasslands. It also depends on sustaining a favourable demographic condition, a relatively high share of productive and pre-productive inhabitants, and favourable economic conditions, job opportunities in close towns which would provide residents with primary living and supplementary possibilities to cultivate land for food crops. The development of agro tourism and skiing in a semi intensive way, the protection of still unprotected folk architecture which increases the cultural-historical potential of the territory and which are connected with agricultural land utilization are also essential for the survival of the mosaic.

The positive developmental trend in **Osturňa model area** is possible, if the cutting of grass mosaic lands or cultivation of arable land on mosaics through agro environmental schemes is facilitated or there would be financial aid for outside farmers to start cultivation and development of agro tourism since it has a Folk architecture historical reserve. Because there is no agricultural cooperative, the agro environmental scheme should be used by local or neighbouring agricultural associations.

Conclusion

The example of historical agricultural landscape structures within the model areas in Slovakia has shown that the results of land use development and the natural and socio-economic conditions can be different and unique in each region. The question is: how to save the historical agricultural landscape and how to stop the decrease of it? In general, we would like to stress several points which should be done or improved:

- the active involvement of community life within the sustainable development and the rise of ecological awareness and education
- respecting the necessity of the preservation of original agricultural landscapes in territorial planning documentation
- renewing the old traditions, agricultural technologies and old forms of agricultural land utilisation in relationship with tourism development
- regional and agro-environmental policies that will support the maintenance of the cultural landscape.

To make sure the agricultural HLS will be preserved in the future it is necessary to carry out detailed research focused on:

- database of localities with occurrence of agricultural HLS, united terminology, typology
- relationships between land use and natural, cultural, socio-economic and sociological conditions
- database of historical forms of anthropogenic relief (stone deposits, stone walls, terraces, mounds), their typology, cultural, economic and natural determination
- anthropogenic conditioned biodiversity of the historical agricultural landscape
- resources of landscape visual quality – visibility analysis, aesthetic value of historical agricultural landscape.

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A SZLOVÁKIA AGRÁRTÁJAIN MEGŐRZŐDÖTT EURÓPAI KULTURÁLIS ÖRÖKSÉG

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Kulcsszavak: történelmi agrártájak, megőrzés

Összefoglalás: A történelmi agrártájak az európai kulturális örökség integráns részei. Szlovákiában jól megőrzött történelmi tájszerkezeteket őriztek meg. A természeti viszonyok, a földrajzi helyzet, a kulturális, történelmi és gazdasági fejlődés kölcsönhatásainak eredményei. Jelenlegi létük oka a marginális helyzet és az, hogy kevéssé alkalmasak intenzív mezőgazdasági hasznosításra. Kialakulásuk és fennmaradásuk szorosan összefügg az emberi (mezőgazdasági) tevékenységgel. Megőrzésük jelenleg nagy nehézségekbe ütközik és a tájhasználat multifunkcionális megközelítést igényel.