

REGIONAL PROBLEMS OF SCATTERED FARMS IN THE HOMOKHÁTSÁG AREA IN HUNGARY

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Introduction

The sinking of the groundwater level in the Homokhátság area in the Danube-Tisza Interfluve and the related negative ecological, economic and social processes result in one of the most complex and most urgent environmental problems in Hungary.

The conflict of the region is extremely complex. The unfavourable hydrological changes did not only cause the drying-up of the wells and the desiccation of the lakes but also resulted in the breaking down of the ecological balance of the areas concerned, the regression of the local economy and the deterioration of the general living conditions.

It is to be regretted that no solution was found for the comprehensive treatment of these problems so far. The chief loser of the negative processes taking place in the region is the special feature of the settlement structure of the Great Plain: the world of the scattered farms.

The disadvantages of the scattered farms and rural areas and the lagging behind of the settlements in the Homokhátság area on the national level – reflected by the socio-economic development – further intensified in the past few years. The subsistence of the local population became unpredictable and the world of the scattered farms got into distress.

The landscape characteristics and values of the scattered farms – in brief

The scattered farms of the Homokhátság area in the Danube-Tisza Interfluve, in fact, occupy the remnants of the former alluvial fans of the Ancient Danube. The surface of the area is characterised by sand sheet plains, jointed rows of sand dunes and their formations divided by erosional-deflational depressions which were formerly filled by temporary saline lakes and marshlands.

The most substantial natural resources can be found on the areas of the Kiskunság National Park established in 1975. The Park includes grassy and wet habitats, forests, puszta, meadows and lawns used for agricultural purposes with a large number of considerable rare/protected species. The geomorphological forma-

tions are of outstanding importance, too: sand dune formations, diverse terrain and soil types and their combinations. Two-thirds of the area of the National Park is a Biosphere Reserve, and the saline lakes and the Lake Kolon are declared Ramsar Wetland habitats of international importance.

The cultural values of the area including 104 settlements are also unique (*Table 1*). The scattered farms themselves represent special values together with the traditional farming activities including the farming methods maintaining the genome of the primordial Hungarian domestic animals. The milieu of the scattered farms does not only make the landscape unique but has a significant role in the conservation of the natural values, the functioning of the economy and the retention of the local community as well.

Table 1

Settlements of Homokhátság and the number of inhabitants on scattered farms

County	Number of settlements	Number of inhabitants on scattered farms
Bács-Kiskun	61	58,992
Csongrád	22	25,110
Pest	21	15,917
Total	104	100,019

Source: Hungarian Central Statistical Office.

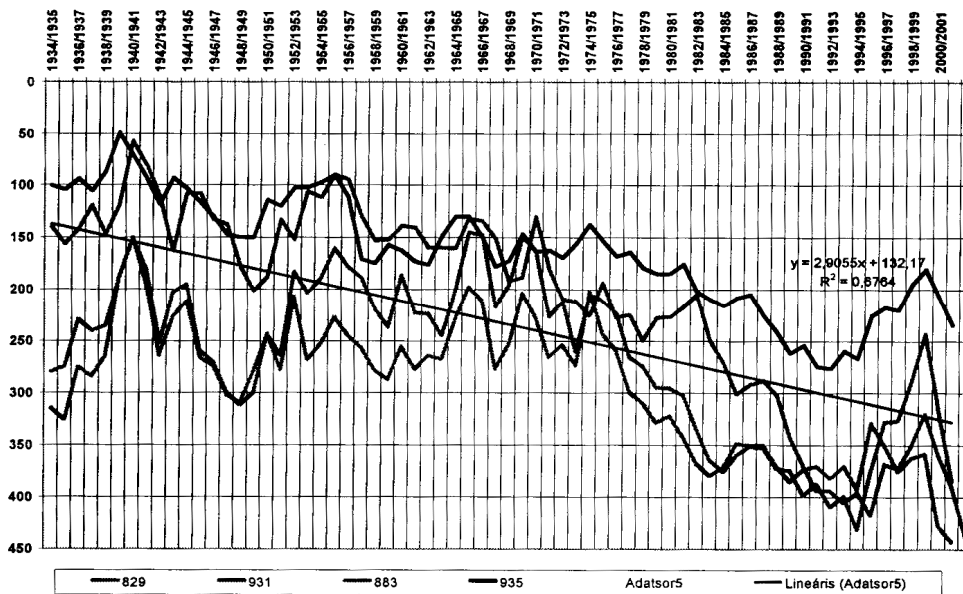
Environmental conflicts – natural environment

Several international and national climatic and hydrographical researches reported changes in the climate of the Carpathian Basin in the past few years. According to the Hungarian experts and authorities, it would be an exaggeration to talk about a semi-desert state but the signs of the land turning into steppes are already definitely apparent. As a consequence of the durative dry periods of the past decades, the character of the pusztas in the Danube-Tisza Interfluve really changed: the saline habitats started to decay and there has been no water for years in certain lakes. Though there is a short rainy period in the beginning of the warm season but there has been sparsely any precipitation from July for years. Resulting from the longer and longer dry periods, the sinking of the groundwater level became global accompanied by nitrification and the gradual decay of the topsoil. Certain reviews say that the groundwater level in the region lowered by two or three meters on average in the past ten years and thus the slow desiccation is perpetual (*Figure 1*).

Although, there are remarkable differences between the notions concerning the discretion of the factors responsible for the current situation but it is obvious and accepted for all that the water regime of the area became unstable as a result of the human interventions affecting it the twentieth century.¹ The harmful effects of the human activities – particularly the inappropriate agricultural methods – have been pointed out by all studies so far. Even if the experts disagree about the degree of the negative tendencies and their causes but they all agree that in Hungary the signs of desiccation are the most intensively observed in the case of the Homokhátság areas.

Figure 1

Mean values of the sub-terrain depth of the groundwater level by hydrological years between 1934/1935 and 2001/2002 in four wells on the Homokhátság area in the Danube–Tisza Interfluve and the average trend



Source: Pálfi I.–Bogota T.–Sebesvári J. (2003).

¹Alföldi, L. 2004: Megjegyzések a Duna–Tisza köze ökohidrológiai problémáihoz In: Környezetvédelem October.

Environmental conflicts – built environment

It may be generally established with respect to the built environment of the settlements of the area and the buildings of the world of scattered farms that they are rather miscellaneous, many of them are in a deteriorated and dilapidated state. Statistics say that 55.6% of the approximately 52 thousand dwelling-houses in the outskirts in the Homokhátság were built before 1945, another 17.6% in the following one and a half decade and only hardly more than one-quarter between 1960 and 2001. Two-fifths of the külterületi houses (40.3%) are below 60 m² with one or two rooms. Almost 25% of the registered dwelling stocks in the outskirts are either temporarily inhabited or uninhabited. Based on the data of the census in 2001, water supply in the households is available only in less than half of the dwelling-houses in the peripheries (45.5%) and only one-third of them (33.3%) are equipped with flush toilets. Where the closet is available there are other basic conveniences, as well; where there is no closet, however, it is not only a technical-infrastructure deficiency but there are several other related social problems, too. Approximately 10–12% of the farms have no electricity supplies and 3–4% of the permanently habited farms do not have electricity. The ratio of houses in the peripheries connected to the sewerage network is also very low. Only 1378 of the houses in the peripheries are equipped with public sewers. Most of these can be found in the environs of Kecskemét, Kiskunfélegyháza and other middle-sized towns and they primarily function as homes.²

Chief conflicts of the social environment

The outskirts of the scattered farms involved in the research are perhaps the most typical with respect to the accumulated disadvantageous peripheral situation, the peculiarities of poverty and the characteristics of environmental degradation. Although, there are sparsely some sustainable farms and scattered settlement parts in the peripheries functioning in a relative harmony with their environment, which created long-term and favourable, conditions for living but on the whole more and more conflict factors appear. The farm zones bear most of the determining marks of the peripheral character. The farm areas characterised by low economic competitiveness, high unemployment rate and great migration loss, institutional supply below the average and population living on declining living standard roughly coincide with the districts of settlements having less developed environmental infrastructure.

The peripheral situation conveys real problems: chronic shortage of capital, acute employment crisis, social troubles. Most of the farms are located in microre-

²CSO database on peripheries.

gions with a foredoomed “marginal situation” lagging behind in the economic competition accompanied by aged inhabitants, depopulation, decline in the public standards of living and drastic deterioration of the state of the natural and built environment. The regional disparities and the accumulation of the disadvantageous situation might become stable and the farm settlements and the farms themselves will be less and less able to move from their current state.

Ways out

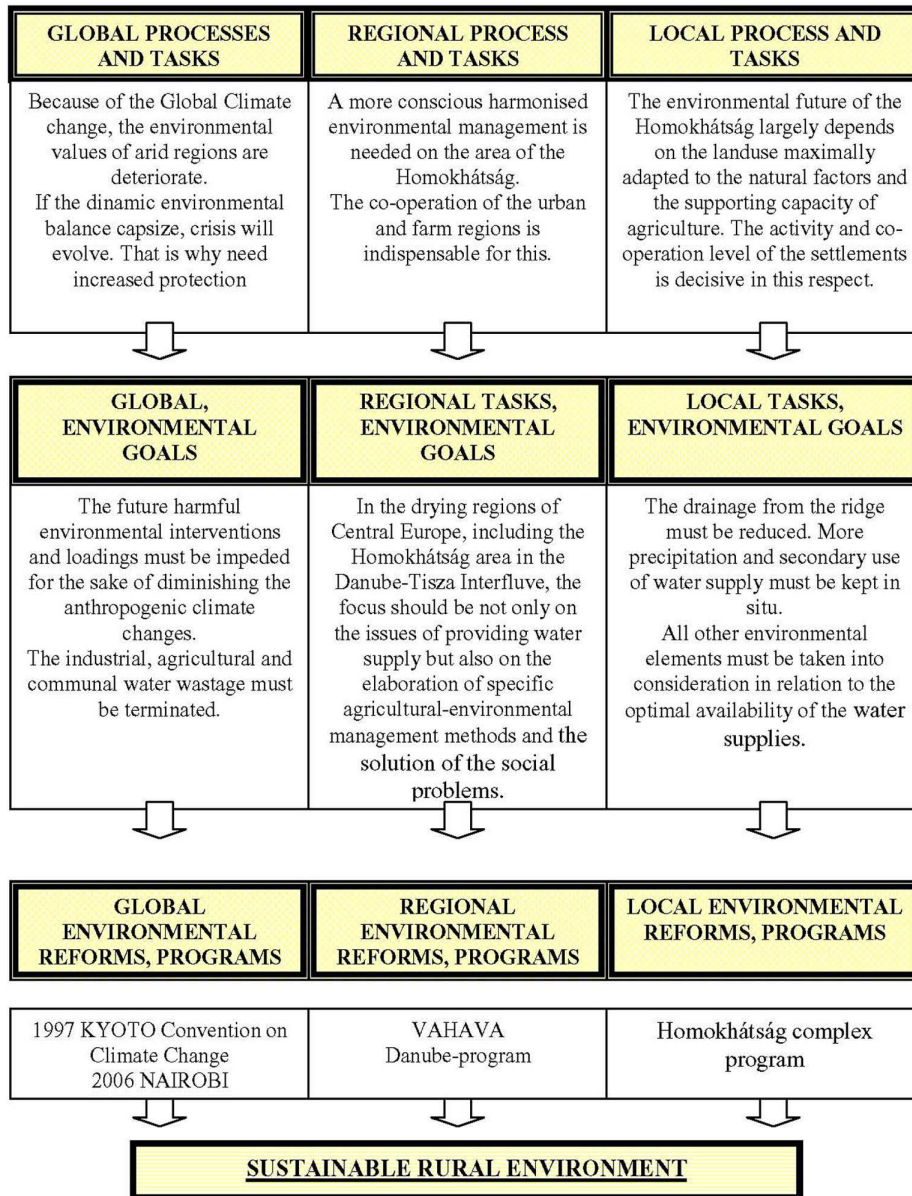
The scattered farms in the Homokhátság area are characterised by anachronistic and imperfectly constructed infrastructure, low economic competitive power, high unemployment rate, great migration loss, institutional supply below the average, and consequently declining living standards. Unfortunately, there are plenty of signs supporting that the socio-economic processes do not facilitate the closing-up of the Homokhátság area to the more developed regions. If the existing regional differences continue growing then the areas in question may lose their population. This process may have an influence on the entire country since the termination of the special landscape sustaining, economic and cultural functions characterising the scattered settlements may result in a regional environmental crisis. The support for the specific Hungarian settlement form and the help for the communities living in the outskirts are important for the entire society since those who live on the farms work on extensive areas and manage the environment. The conservation of the scattered farms in the Homokhátság, therefore, is a significant national task and the sustaining of the traditional farming methods and the peculiar landscape values are “vital matters” for thousands of families on the area of the Great Plain.

For the sake of the liquidation of the current situation and the safekeeping of the farms in the future, a new light must be thrown upon the changes affecting the conditions of the scattered farms. The environmental conflicts of the farms cannot be studied exclusively in the classic system of environmental protection focusing on infrastructure. The rehabilitation of the scattered farms on the Great Plain – following modern European style integrated rural development solutions – requires joint measures. The farms are the structural and functional components of the landscapes and settlement environmental complex systems whose sustainability is the function of several factors.

The ecological reconstruction of the area has become compelling due to the earlier developed water management problems and the still weltering deterioration of state. In addition to the further study of the liable causes and the role of the human interventions, immediate action is needed to change the land use structure, to increase water retrenchment, and to provide more intensive support for the endeavours to present water supply. This requires incessant analysis, monitoring and

Figure 2

The most important factors of sustainability of Homokhátság from local and global aspects



Source: Edited by the author.

management of all human active components affecting the state of the water supply. When searching for the environmental-strategic breakouts, the comprehensive modernisation of the technical infrastructure, the development of the public lighting, road network in the peripheries, gas, telephone and sewage networks and the management of the communal waste must be given priority.

The settlements of the area need a joint long-term environmental, infrastructural, agricultural and sylvicultural strategy for the more balanced development and the intensification of the environmental security. Thus, another precondition for the more effective action is the local and regional co-operation through which the settlements (taking into consideration the capabilities and the limits) “may share” the environmental management duties. The environment-conform solutions of the agriculture may become rewarding within the framework of the co-operations. Besides the above listed developments, of course, a modern programme with a social approach is also needed. The self-governments must join the EU and national programmes (e.g. LEADER) and they should fully exploit the supports. This necessitates the improvement of the standard of the preparedness and attainments of the inhabitants and self-governments. The environmental-conscious behaviour on an improving social level could form the basis of the local and regional environmental culture.

The authors assume that the region – as it had been outlined above – can only proceed towards sustainability through the closing-up of the scattered farms. Auspicious living conditions and a live economy could be created for the inhabitants partly by relying on the natural potentials, traditions and local knowledge and partly by exploiting the EU support systems through the modernisation of the inner resources of the Danube-Tisza Interfluve. This calls for the support of the full construction of the environmental infrastructures, the spread of the environment-conform solutions in the agriculture, the harmonisation of nature conservation and tourism and the creation of an environment-conscious behaviour on all levels.

The conservation of the landscape values and the development of the settlements, the support of the agricultural production fitting the supporting-ability of the landscape and the creation of the related investment and service activities is a token of the future for the scattered farms and the entire area.

References

- Farkas, J. Zs.–Kovács A. D. 2006: A homokhátsági tanyás térségek vizsgálata [Research of scattered farms of the Homokhátság area] *Gazdálkodás*. 50. 1. 72–80. p.
- Pálfai, I.–Bogota, T.–Sebesvári, J. 2003: Vízháztartási változások a Duna–Tisza közti Homokhátságon [Hydrological changes in Danube–Tisza Interfluve]. In *Magyar Hidrológiai Társaság XXI. Országos Vándorgyűlés CD*, Szolnok.
<http://www.alfoldinfo.hu/tanyakutatas/>.