PhD Dissertation Theses

DESERTS – VINEYARDS – FARMSTEADS

WAYS OF UTILIZING THE FIELDS THAT HAS SHAPE THE ENVIRONMENT IN BIHAR COUNTY IN THE 18TH - 20TH CENTURY

by Bihari-Horváth László M. A.

Supervisor: Dr. Lovas Kiss Antal

UNIVERSITY OF DEBRECEN

Doctoral School of History and Ethography

Debrecen, 2014.
Content

I. The objective of the PhD thesis, the limitation of its subject
II. The outline of the used methods
III. The list of the scholarly results and achievements
IV. The scholarly works published on the subject of the dissertation
V. Conference papers on the subject of the dissertation
VI. Further publications by the author
VII. Further conference by the author
I. The objective of the PhD thesis, the limitation of its subject

In this dissertation, which is the result of a five-year research carried out from 2008 to 2012, I examine the ways of utilising the fields that have changed the environment. In the beginning of my research I had a historical-ecological approach to the topic, which helped me recognize that the settlements in the northern part of the former Bihar County have similar ecological conditions. After this discovery I consciously began to concentrate my attention to the Northern Bihar region, where I carried out my doctoral research. I examined the changes in the natural environment, the collected knowledge on the natural environment, and the strategies of using the natural environment based on it.

My research focuses on three ways of using the fields, and my basic aim is to define the connection between nature and human culture. Based on this, my research was motivated by a double purpose. On the one hand, I looked into how the natural environment influenced the ways of utilising the fields. On the other hand, I examined how the different ways of using the fields shaped the natural environment. First I studied the ecological factors – the ground, the soil, the hydrography, the flora and the fauna of the region, which influenced the ways of using the fields. Thus, I began my research with an exploration of the Northern Bihar region. The knowledge of the ecological factors has greatly contributed to understanding the reasons why certain economic activities developed here while others disappeared at given points in history.

The use of the pusztas in the Sárrét region, the plantation of vine in the Northern Bihar region, and the establishment of farmsteads in the Southern Nyírség region lead to the transformation of the natural environment as well, and generated further changes that have affected the culture of the local communities. These factors influenced the growth of the population, the settlement structure, the economic strategies and even the ways of entertainment. The aim of my dissertation is to explore – with respect to the historical background and the natural
environment – the various ways of utilising the fields that have transformed the natural environment of the Northern Bihar region in the course of the 18-20th centuries.

II. The outline of the used methods

In the course of my research, instead of a synchronic study, which would only have given superficial results, I applied a diachronic approach to reveal the deep structure, which allowed the examination of long term processes and their effects. This basically historical-ecological approach made it possible to explore the ways of utilising the fields and their effects on the natural environment throughout the centuries (18-20th centuries). I searched the answer for some basic ecological-anthropological questions: how did the natural environment and society co-exist and affect each other in the given period? To what extent could the region provide for its inhabitants and how this changed? How did people exploit the natural resources and how this influenced the number of inhabitants and the settlement structure?

Answering these questions required a holistic approach. Therefore, I applied both sociological and natural-scientific methods, which paved the way to a basically interdisciplinary research. In my research I applied the tools of historical scholarship, ethnography, and geography. Apart from studying the archival materials, empirical exploration, deep interviews, studying manuscript maps and topographical analyses of military surveys were also important tools in completing my dissertation. I greatly relied on statistical analyses, data from censuses, as well as on the results of geographical (geological and hydrological) and biological (botanical and zoological) studies. As ways of using the environment are conditioned by an intricate network of tradition, social experience, knowledge, need, pressure, and interest, it was essential to use the above mentioned tools and methods together, comparing and synthesising their various results. From the
nature of my study it follows that certain parts of the chapters are descriptive, but on the whole, my dissertation can be seen as an analytical exploration, a structured interpretation aiming to understand the interconnection of nature and society.

III. The list of the scholarly achievements

1. My dissertation discusses the results of an ecological-anthropological research of three methods for using the fields. First, I describe the results of my research focusing on the utilisation of the *pusztas* that is the cultivation of deserted allotments (the so-called “prediums”) by peasant communities compelled to pay socage to their landlords (Chapter 4). The legal framework for this is the communal farming lease of the feudal lands (belonging to the treasury, to private landlords, or to the Church). Peasant communities needed to lease lands because of the scarcity of the fields surrounding the village. My research focuses on the long-term use of a chosen *puszta*. To choose this *puszta*, I took stock of the *pusztas* used by peasant communities during the 18\textsuperscript{th} and 19\textsuperscript{th} centuries. Eventually, my choice fell on the *Fejértó puszta* used by the inhabitants of the settlement *Konyár*, where I studied the formation and the utilisation of the *puszta*, aiming to analyse processes and changes. To control my results, I compared them with another study focusing on the utilisation of the *puszta* in Bakonszeg and I drew three important conclusions. First, both communities were driven by natural conditions to use the *puszta*. As they could not protect their fields from the floods, they could not benefit from the whole expanse of the fields surrounding their village. They only cultivated a part of this area, which could not support the needs of the growing population. These circumstances urged them to put the nearby *pusztas* to use. However, I also ascertained that it was not the taming of the natural environment that resulted in the abandonment of the *pusztas*, but the economic strategies of the *puszta*-owners. While the expansion of the feudal
lands in Bakonszeg began as early as at the beginning of the 1770s, in Konyár it only began after the 1810s. The first achievements in flood prevention are attributed to feudal workers’ organizations. The utilization of the *pusztas* by peasant communities was dominated not by the transformation of the natural environment but by its greatest possible exploitation. Third, it is also important to note that the ways of using the *puszta* are not only influenced by the ecological conditions of the natural environment but also by the culture of the local community. Although the conditions in the flood area were excellent for raising large animals, this opportunity was only grasped by the people of Konyár, who are of Haiduk origin, while the inhabitants of Bakonszeg leased the *puszta* mainly to get the plough-lands. This supports the possibilistic argument applied by anthropologists claiming that nature can pose restrictions and offer opportunities, but the methods of using the fields are eventually determined by human decisions (encoded in culture).

2. In my research I also examined the use of the *Fejértó puszta* in the 19th century. At the beginning of the century, granges were established on the *puszta*, which were monocultural grain plantations. Cultivating these lands required a great deal of manual labour, and the number of workers was increasing up to the middle of the 20th century. As in the 1730s the *puszta* became part of Hosszúpályi, the workers of the grange added to the population of Hosszúpályi. The agricultural workers in the *puszta* were moved to the village during the time of the restructuring of the agriculture in the socialist era. This settlement, together with the building of new houses, has considerably increased the size of inner-Hosszúpályi, and thus the current structure of the village has developed. The expansion of granges, and the fact that they became the predominant forms of utilising the *puszta*, thus generated phenomena such as demographic growth, and the change in the settlement structure (Chapter 4.2.3). To examine these processes and to
understand the complex relationship among them, I once again applied the methods of historical scholarship.

3. While examining various ways of using the *pusztas* that have shaped the environment, I discovered a special form of using the *pusztas*, the collection of natron. According to historical data, natron was bought by the soap manufacturers of Debrecen. It can also be proved that natron collection in the *Fejértó puszta* ended not because of the changes in the natural environment but because of the decline of soap manufacturing. However, we can assume that the practice of natron collection changed the shape of sodic ponds, as the most natron could be found on the shores of the wide and shallow ponds, where water could easily evaporate. It is also possible that the maintenance of these ponds has left its traces in the natural environment. It is difficult, however, to draw definite conclusions, as sources rarely mention the maintenance of sodic ponds. Therefore, I decided to look for an analogy and examine another special way of using the *puszta* that is still practiced today. After a long research, I found the practice of snail gathering in Szarvaskő. Szarvaskő, a village at the foot of the Bükk mountains, is only surrounded by a small area of fields and seemed to be appropriate for modelling the *puszta* environment. Moreover, the practice of snail gathering proved to be an excellent model to demonstrate the micro- and macroeconomic, as well as the ecological conditions of special uses of the *pusztas* (Chapter 4.2.4). Snail gathering was introduced in Szarvaskő by people specialized in foraging, picking rosehip, and gathering mushrooms, who knew the surrounding woods well. In the case of natron collection, we can also assume that the people who introduced this practice were those who often visited the surrounding areas and knew even those parts of the *puszta* that could not be put to agricultural use. It is possible that the first natron collectors were among the poorer people who supported themselves by fishing, gathering food in the marshes,
and foraging. Just as snails became part of the diet of the people of Szarvaskő, so did natron, in the form of home-made soap, become part of the culture of the people living in Konyár. This, eventually, affected their habits connected to personal hygiene. As a result of snail gathering, the diameter of snail shells decreased, as snail gatherers always took the snails with large shells out of the population – a change, however small, which is generated by human behaviour. Similarly, natron collection must have lead to changes in the natural environment. Extracting natron from the soil must have increased its fertility, which must have contributed to the spreading of farming. Examining the cases of natron collection and snail gathering calls our attention to the fact that the local communities representing traditional peasant culture were able to adapt even the smallest and least significant elements of nature to their own traditional ecological knowledge.

4. An ecological approach made it possible to examine the viniculture of the northern Bihar region from a point of view that – unlike previous research on this topic – allowed for creating an authentic interpretive framework. The ecological factors I examined support the argument that the vineyards in the northern Bihar region are built on the shifting sand of the Nyírség area, the surface of which is covered with the typical parabola-shaped dunes and rim-dunes. This diverse sandy landscape stretching through the settlements of Derecske, Hajdúbagos, Hosszúpályi, Monostorpályi, and Létavértes distinctly stands out from the plain area between the river Berettyó and the Kálló brook (the ethnographic subregion of the Bihar plain). In between the dunes there are depressions and valleys stretching from the northeast to the southwest, which were hollowed out partly by prehistoric rivers, partly by the wind. From the 18\textsuperscript{th} century on (and mainly from the turn of the 19\textsuperscript{th} and the 20\textsuperscript{th} century), vine growing gradually erased the indigenous vegetation of the sandy puszta. Viniculture gained further ground in the course of the 19\textsuperscript{th}
century, when the flood-prevention companies in the Nyírség area, who were responsible for regulating the rivers, created channels running across the sands. Moreover, some resourceful vinegrowers even cultivated the valleys between the dunes, which previously had no water outlets. Here, they grew various sorts of vegetables, which by the 20th century made the settlements of this region well-known in the markets of Debrecen. (Among these are celery from Monostorpályi, horseradish from Nagyléta, melon from Hajdúbagos, etc.) Thus, the economic strategies of the settlements in the northern Bihar region are similar not only in the case of vine-growing but also in the case of growing certain vegetables. This similarity provides further proof for the fact that in order to understand the viniculture of the northern Bihar region, we need to know those ecological conditions of this vine-growing region that distinguish it both from the Érmellék and from the Berettyó-valley and lead further scholarly attention to the larger Nyírség region. We can find an example for this in the history of the viniculture of Hosszúpályi, which is described in Chapter 5.2.

5. In describing the use of the pusztá as well as the use of the fields for vinegrowing purposes, my aim is to explore not only a given historical period but the whole history of the given phenomenon. A separate chapter discusses the decline of vineyards and its ecological consequences (Chapter 5.3). Due to the economic and social changes in the second half of the 20th century the viniculture of vineyards has almost completely disappeared. Today, vine is only grown in a small fraction of the vineyards, which is negligible compared to their previous expanse. Among the settlements of this region, it is only in Létavértés where vine-growing is still significant. From the 200 hectares of vineyards in Hosszúpályi (1966) only 16 rows are left. Vineyards continue to decline today, their size is constantly decreasing. However, the decline of vineyards does not go together with the expansion of the pusztas. The sandy
area of the vineyards has not gone wild, even though it is not as organized as it was before with the well-structured network of tracks, sheds and plots. Recently, forests have appeared on the sands of the vineyards. This is not by chance, as soil conditions here are favourable for the plantation of forests. All this calls our attention to the fact that natural conditions do not determine the way of utilising the natural environment. It much more depends on the interests and economic strategies of the local community. Following from this, the ways of utilising the environment can change from time to time, even if the ecological conditions remain the same. A proof for this argument is the development and the decline of the vineyards in the northern Bihar region.

6. The examination of the farmsteads around Létavértes led me to similar conclusions. Here, the development of farmsteads in the surrounding fields began in the 19th century. First, the farmsteads and granges belonging to the noblemen’s estates were established in the fields that were suitable for ploughing. At this point, no farmsteads were established on plough-lands of poorer quality, such as the extensive green wood on the northern village boundary, and the sandy desert situated between the green wood (the so-called Liget-erdő) and the inner part of the village. Both of these fields were situated on the sandy area of the southern Nyírség region. They were first shared by the landlords and the peasant communities, but following the state regulation of socage, they fell under the control of the estate. When the owners ran into debt, the forest and the desert were parcelled out and sold. This was the time of the establishment of the farmsteads around the northern village boundary, which were populated by more and more families. In 1930 the population of the Liget was as many as 750. Due the increasing exploitation of the fields, a significant expanse of forestland disappeared. The changes in the vegetation lead to sand movement, which made it even more difficult to cultivate the poor-quality soil. The restructuring of the economy in
the socialist era restricted the possibilities for using the fields, which lead to the migration of the population of the farmsteads. The small farmsteads around Létavértés were gradually deserted. Following the democratic transformation in Hungary, farmsteads were replaced by forestries. Even today, newer and newer forests are planted in this area. Based on this, we can draw the conclusion that the agricultural activity of the farmsteads has transformed the natural environment to a great extent. Although it supported a great number of communities, it did not support the ecological balance in the area. After the disappearance of farmsteads and the establishment of forestries, this balance has been restored.

7. The main achievement of my dissertation is describing the ecological balance prevailing between the peasant communities of the northern Bihar region and their natural environment in the past centuries. In my dissertation I prove that this balance was initially regulated by tradition. In the course of the 19\textsuperscript{th} century, however, tradition was gradually replaced by scientific knowledge. At the same time, farming on a large scale was spreading and the exploitation of nature was rapidly intensifying. The growing needs of the increasing population resulted in the large-scale exploitation and intensive cultivation of the previously unused fields, which lead to the loss of the ecological balance.

The micro- and macroecological phenomena examined in my research are characteristic to the ecological system of the northern Bihar region. In this system, the workings of nature, the accumulated ecological knowledge, and, based on this, the various strategies for using the natural environment are connected. To examine this, a holistic approach is required. A diachronic study is especially important, as without this, the research focusing on the reasons for the changes in the natural environment cannot be successful. My discussion of the results of my research carried out in the northern Bihar region is an example for this.
IV. The scholarly works published on the subject of the dissertation


V. Conference papers on the subject of the dissertation


VI. Further publications by the author


VII. Further conference by the author


