

**THESES OF DOCTORAL (PhD)
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THESES OF DOKTORAL (PhD) DISSERTATION
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THE ACTUALITY OF ANIMAL PRODUCTION AND ITS
DEVELOPING POSSIBILITIS IN SZIGETKÖZ

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INTRODUCTION

From the middle of the 20th century effects could be felt in the region which have transformed the traditional near to nature farmer lifestyle of the Szigetköz. A certain stabilisation can be shown in the state of the cooperatives in the 1970's, but this was put into a completely new state by the diversion of the Danube. This was further complicated by the change in the social and political system in the 1990's, cooperative economy had weakened, and along with that the powerful change in the employment policy of villages also came along.

In agriculture animal farming was hit by the greatest transformation which came not only from the change in the production factors, but also from the change which occurred in the quantitative and qualitative requirements of product sale, what's more it was also the consequence of the modification of the structure of food industry. The multiple transformation of the traditional job- structure in the Szigetköz and the lifestyle that goes with it requires the search for those farming activities which can put the assets of the region to good use and turn it into a *sustainable settlement and regional development*.

The main regional factors which define the agriculture and within it the **animal farming of the Szigetköz are:**

- **the value** of the Szigetköz region,
- **the ecological damage** which has affected the region,
- **the animal produce based-production volume has been reduced:** the economic environment has become unfavourable for agricultural production due to the excess of industrial investments,

- **the reduction of the role of animal farming in society,**
- **the social-economic division** (Lower, Mid and Upper Szigetköz) of the Szigetköz which affects its agricultural production.

In the future the sustainable agricultural and regional development animal farming may take on a standout role through the fact that besides the traditional product producing function, the producer-provider that is, the targeted non-food-product function (preservation of traditions, taking care of the breeding culture, recreation, holidays etc) *regional production and regional farming* and it will be able to provide the conditions for it and make good use of it effectively.

The values which determine the quality of life can be created (like nearness to nature, clean environment, tranquility, local community life) with which the characteristics of the region and the useful role it plays in society is sustainable in the long term. All this means a serious chance for the exploration of the (developmental) breakout points for the region, the small regions and the settlements. The circumstances briefly outlined give reason to help to get to know and to establish and mark out the conditions to validate and sustain the conditions for **regional farming** which are missing at present.

The further drastic drop in the number of animals in the region also has to be stopped, the number of the farms have to be stabilised, both the farms and the farmers have to be supported, and a method for the actualisation of the above has to be found. Furthermore the marking out of those new-like utilisation directions in animal farming with which new types of opportunities (service provision, education, work-place creation etc) can be associated with the Szigetköz region's animal produce production.

OBJECTIVES

The basic objective of the research was the evaluation of the animal produce produced in the Mid-Szigetköz especially in the light of the changes which took place over the past one and a half decade. A further objective is to forecast the realisable development directions and the strategically to be developed areas.

The most important **objectives** for elaborating on the theme can be summed up as follows:

- To know the *traditional animal product* in Szigetköz.
- *To review the animal product comprehensive and general.*
- To show and evaluate primarily through broad spectre analytic *work the tendencies which occur in the changes (1990-2006) of the animal farming and the animal produce production of the Mid Szigetköz.*
- Besides the general economic effects pointing out and evaluating *the particular problems and effects characteristic of the region and the development of its animal farming.*
- *To explore the condition system of the animal produce production and determine the realities of farming.*
- *The examination of the regional lawn areas (1895-2002) and the judgement of their future in traditional and/or alternative animal produce production.*
- To expose and analyse the *rural developing initiations* in this region and to show *the roll of agriculture.*
- *Outline and development of developmental suggestions* which serve regional, area and village developmental purposes in the region besides the development of animal produce production

- *The development of methods, the compilation of process models, the determining the connections between the present animal produce production in the region to show the present condition system and to mark out directions for the future.*

MATERIAL AND METHODS

- The first steps in carrying out this research were the research work done in *on-site explorations, archives, libraries and in the Regional Research Centre of the Hungarian Academy of Sciences*, to which the bibliography, the sketches, the maps.

- The actuality of the animal products the author make the annual reports of the co-ops, the reports of the village economist were added, and collected and filed accordingly. The collection of data has also been extended by using the method of interviewing, and the knowledge, experiences opinions, and recommendations of the experts on the topic were also recorded.

- To know the developing aims and possibilities were examined the national improvement tendency, the developing programs of the comitat, the rehabilitative conceptions of Szigetköz. The autor elaborated the „Szigetközösen” idea collecting competition to discover the specific possibilities in the animal production.

The methods used to evaluate the filed data were:

Statistical method: The showing of the varying of the lawn areas with variant coefficient, the location of the lawn areas within the Szigetköz with divisive relative number, the cycle-effect examination of the issued animal produce products.

SWOT analysis: The grouping of the most important characteristics of the examined region's animal farming within the four categories of the traditional SWOT analysis. The application of the further developed version of SWOT analysis to establish the developmental recommendations.

Modell-creating methods: The author has developed and adapted her own model-creating method to fit the theme. With the new method the author developed the situation evaluation model which summarizes the condition system of the present economy as well as the model which showcases the developmental recommendations and objectives regarding the animal produce production in the region.

RESEARCH RESULTS AND THEIR EVALUATION

It can be verified and shown with the results of the research that in the agriculture of the Szigetköz and within it animal farming, the effect of the natural traits, regional characteristics which have resulted in heterogenousness, differentiated production structure, and that these have influenced unique values in the production of animal produce.

The results from the analysis of the division and location of the Mid Szigetköz's lawn areas in the 1. analysis area:

1.1. Another national tendency which can be deduced regarding the use of agricultural areas in the Szigetköz region, and in the comparative ratio between the development of the cultivation branches is that the areas which have been taken out from ploughing and cultivation have increased, or that the lawn areas and the orchards have decreased respectively.

1.2. The Szigetköz region cannot be regarded as unified from the aspect of the division of the cultivation branches either. The agricultural cultivation branches of the Lower, Upper, and Middle Szigetköz represent a differing ratio and are exceptionally varied (the variation coefficient is above 30% in every case).

1.3. It can be verified with the researches that the lawn areas, are represented in the greatest ratio in the area of the Mid Szigetköz villages (Ásványráró, Hédervár, Darnózseli, Püski, Kisbodak).

The following results can be drawn from the evaluation of the changes which occurred in its animal farming systems, and economic situation conditions in the 2. analysis area:

2.1. In the livestock and the produced animal produce cycles, and mid-term fluctuations can be observed. The research results have verified that with favourable economic conditions even the increase in production is possible in the animal produce production in the examined region.

2.2. Having examined the activities of the processing plants which produce the animal produce products of the region, it can be concluded that the local product path of animal produce is defragmented. Due to the decreased number of livestock, the amount and concentratedness of the issued animal produce products, there are few role players on the product path of the animal produce products from the region, a lack of supply in basic materials and non-exploitation of slaughter capacity occurs.

2.3. It can be concluded that the nationally valid negative tendencies (decrease in livestock, the liquidation of a large number of the farms, the worsening of the technical and technological conditions of production, the cancellation of investments and upgrades, the reduction in the number of animal products produce issued, the non-exploitation of the possibilities of lawn farming) can also be detected in the samples examined between 1990-2006.

2.4. The factors which have shaped and analyzed the region's animal produce production in the region, arranged in a **situation-evaluating model** by SWOT analysis based on the referred to literature and obtained from research results are as follows:

- 2.4.1. Decrease in livestock and farms
- 2.4.2. Outdated techniques and technology
- 2.4.3. The decrease in the number of animal produce products issued
- 2.4.4. The shortcomings of the vertical product path
- 2.4.5. The non-exploitation of the possibilities of lawn farming provided by nature in the Szigetköz region
- 2.4.6. The lack of production motivation on the part of farmers.

The following results can be drawn from the work of the developing establishment, from the examine of the area LEADER+ support and from the analysis of the rural developing progressionism in the 3. analysis area:

3.1. The aim of the area developing establishment to better the live conditions in Szigetköz. The support activity in the region:

- (1) Action: To save and present the nature value
- (2) Action: To increase the civil organism
- (3) Action: To better the physiognomy of the villages
- (4) Action: To develop the tourism system
- (5) Action: Alternative income

3.2. The most support LEADER+ applications belong to Action of „To develop the tourism system”, „To better the physiognomy of the villages” and „To save and present the nature value”.

3.3. The support of the training, the community developing, the co-operative aims, the tradition attention, the multi faceted role which agriculture can play in the preservation of the region as well as the development of the country and the village were not abort.

3.4. The examines were determined, the area developing establishment want to use the agricultural products and services in the rural developing.

CONCLUSIONS AND RECOMMENDATIONS

The **recommendations** regarding the transformation of the agricultural structure based on the results of this research can be as follows:

1. Based on the analytical factors filed in the situation evaluating **project specification model** the author has marked out the future developmental directions of animal farming in the region. To actualise the best implementable recommendation the author suggests the gradual validation of the developed programs. **(diagram 1):**

1.1. The stabilization of livestock and entertainment

1.2. Technological, technical development

1.3. The living up of the range of animal products issued

1.4. Harmonization of vertical product path

1.5. Increase of farming motivation on farmers part

2. It analyzes the rural developing initiatives in the area and elaborates the **improvement areas (table 1)** of the animal products in Mid Szigetköz. Developed by the application of the further developed version of the SWOT analysis the nominee makes a **proposition** on the animal produce production's developmental areas of the region and **recommends** the strategic and tactical steps which can be successfully applied in their materialization.

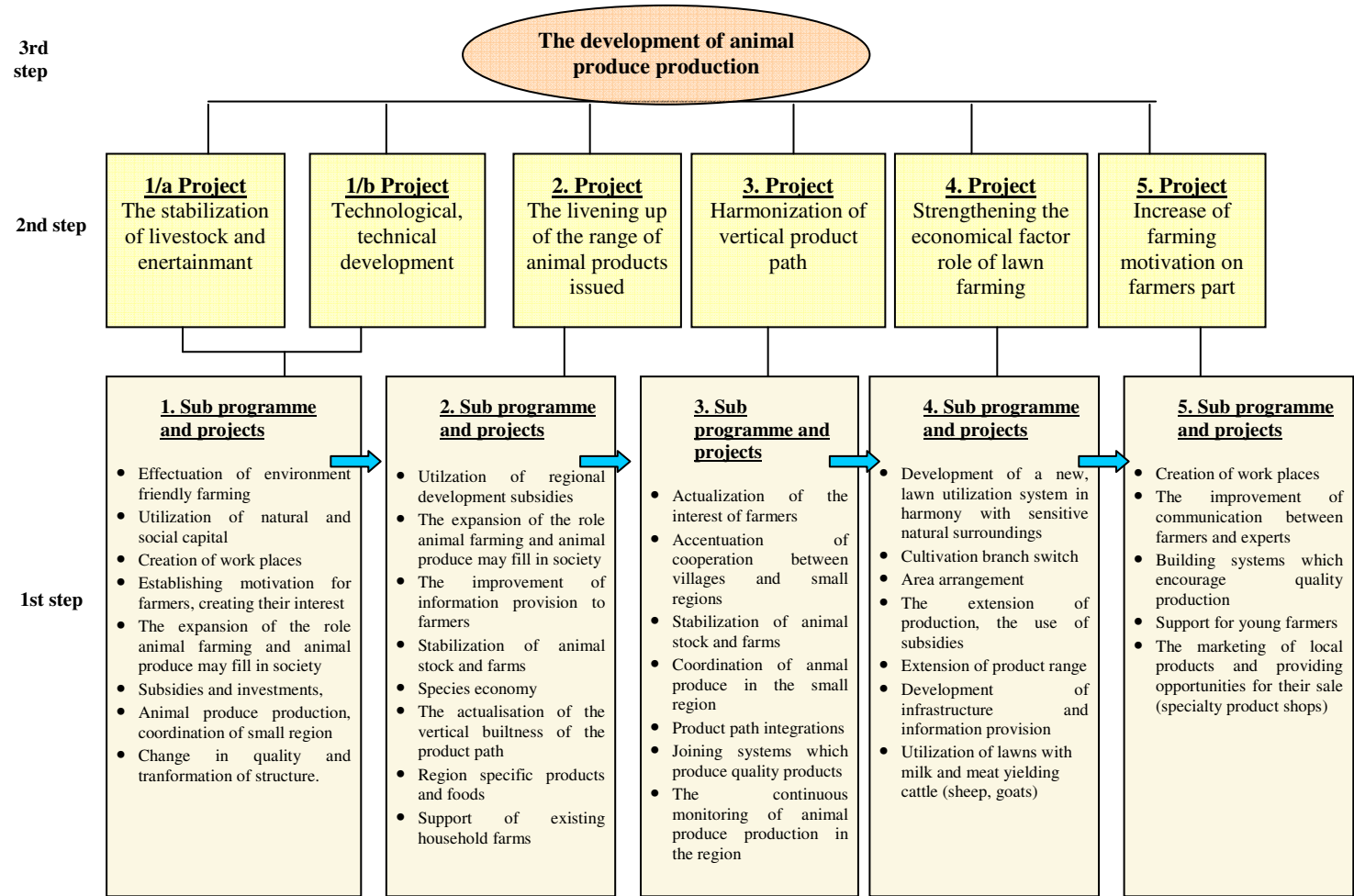
The recommend improvement areas:

- (1) The stabilisation of the number of farms and the volume of livestock
- (2) The exploitation of the gifts of animal farming culture
- (3) Change in product production
- (4) Product path integrations
- (5) Development of animal produce products based on lawn
- (6) Change of paradigm in the use of area
- (7) Expansion of regional product range
- (8) The information provision necessary for farming
- (9) Distribution system of regional animal product paths

3. The author recommends the taking into account and gradual realisation of the aspects applied in the strategy when developing future developmental programs for the Szigetköz. It can be deducted that the elements can successfully be applied to the development of developmental programs for the regional district as well.

4. Based on the results the author makes a **suggestion** about applying the applied research method, the model developing and applying method as well as the four factor research method developed in this thesis in the research of the agricultural development opportunities of similar region districts.

Diagram 1- The model for development objectives of animal produce production in the Mid-Szigetköz



(Source: own research)

Table 1. - The improvement areas model of animal produce production in Mid-Szigetköz and its connect system

The improvement areas in the animal products in Mid Szigetköz	Analogy with the Action of the Rural Developing Project in O+M Szigetköz	Expected effect and result
1. The stabilisation of the number of farms and the volume of livestock	To popularize the ecological farming To produce and market the regional product	Improving of technics, changing of economic structure in agriculture, alternate products, better the ability of population sustentative in this region
2. The exploitation of the gifts of animal farming culture	To save and present the nature value in Szigetköz To entrench and research the traditions To improve the tourism infrastructure To produce and market the regional product To educate the passing jobs	Amplify of tourism system, support of the environmental consciousness on the education, popularize of the environmental saving technics
3. Change in product quality	To save and present the nature value in Szigetköz To popularize the ecological farming To produce and market the regional product	Changing in product quality, broading in product choice, improving of technics and technology
4. Product path integrations	To increase the civil organism To produce and market the regional product	Better of product marketing, better of the farming conditions, increasing in areas products processing
5. Development of animal produce products based on lawn	To save and present the nature value in Szigetköz To get around the environmental consciousness To produce and market the regional product	Protection of the environment, rehabilitation of the landscape, broading in product choice, increasing in tourism value, roll in education
6. Change of paradigm in the use of area	To save and present the nature value in Szigetköz To get around the environmental consciousness To produce and market the regional product	To get around the environmental consciousness, changeing in product quality, increasing of competitive
7. Expansion of regional product range	Alternative income To improve the tourism infrastructure To improve the tourism marketing	Broading in product choice, better of product marketing, creating of work places, profit, enlarging in tourism value
8. The information provision necessary for farming	To save and present the nature value in Szigetköz To popularize the ecological farming Training in country tourism	Improving of the tourism infrastructure, modernity farming technics getting round, creating of work places
9. Distribution system of regional animal product paths	To produce and MARKET the regional product Alternative income	Better of product marketing, changing in product quality, broading in product choice, creating of work places

(Source: own research)

NEW AND NOVEL NEW SCIENTIFIC RESULTS

1. To examine the regional district theme new statistical methods combined with document analysis were worked out, further developed and successfully adapted the elaborated **project specification model and improvement areas.**

2. Developed self-devised summary-type model systems to help actualize environment friendly economy and quality food production with the objective to help regional development.

3. Has defined the occurring cyclicalness and the declining process trend in the time lines of animal stock and **animal produce products by using the cycle effect examination method** on the animal produce production of the region's agricultural co-ops in the period between 1990 and 2006.

4. (a) Has shown with statistical methods that the Szigetköz cannot be regarded as unified from an agricultural and land usage point of view, cultivation branches of the particular area units (Lower, Upper and Mid Szigetköz) are extremely varied, the variant coefficient is above 30% in the case of each cultivation branch.

4. (b) Has verified with research that the lawn areas suitable for grazing are found in the region of the Mid Szigetköz settlements in the greatest ratio, **and based on this finding has developed** the animal produce production model for the Mid Szigetköz lawn areas.

5. Has shown with the statistical analysis of **meat yielding pig and meat yielding cow product paths that their continuity within the Szigetköz breaks**, its vertical establishment is deficient, the balance between the participants of the product path and the related products paths is broken down.

6. Has **compiled a new analysis factor system with the help of the situation evaluating model**, which enables the definition the given situation of the region's animal produce production, as well as the expert development of developmental directions and actualization programmes.

7. **In the dissertation were modeled the improvement areas and its connecting system.** The author demaonstrated the harmonization between the elaborated improvement areas and the aims of the areas developing establishment.

**LIST OF PUBLIKATIONS IN THE TOPIC OF THE
DISSERTATION**

Scientific paper published in Hungarian language is supervised professional periodical:

1. **Horváth E.** (2007): KÖZÉP-SZIGETKÖZI TELEPÜLÉSEK ÁLLATTENYÉSZTÉSÉBEN BEKÖVETKEZETT VÁLTOZÁSOK (1990-2006), Gazdálkodás 2007. 51. évfolyam. 2. szám 60-67. p.
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7. **Horváth E.** (2004): MEZŐGAZDASÁGI TEVÉKENYSÉG VÁLTOZÁSA ÁSVÁNYRÁRÓ TÉRSÉGÉBEN, Konferencia elnevezése: MTA VEAB Konferencia, „Magyarország és a 21. Század kihívásai az Európai Unióban”, Komárom (II. kötet, 260. p.), 2004. április 29.

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9. **Horváth E.** (2006): KÖZÉP-SZIGETKÖZI TELEPÜLÉSEK ÁLLATI TERMÉK KIBOCSÁTÁSA, XXXI. Óvári Tudományos Napok, NYME-MÉK Mosonmagyaróvár, 2006. október 5.

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