

**THESIS OF DOCTORAL (PHD)
DISSERTATION**

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DOCTORAL (PhD) THESIS

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**A COMPARATIVE STUDY AND EVALUATION OF
THE HUNGARIAN AND AUSTRIAN FARM
ADVISORY SYSTEMS**

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1. INTRODUCTION

The author has found it necessary to achieve the objective set out in the title of the Thesis: to analyze a comparable advisory system with the Hungarian one which is more advanced and has longer tradition. To these conditions Austria corresponded best as it has similar environmental circumstances, also it is surrounding area (Lower Austria, Burgenland) and the extension/advisory system here is well developed. The development of the two countries - though in the twentieth century the development went to different directions - in the past they related to each other in many ways.

2. BACKGROUND OF THE RESEARCH, AIMS

The aim of the research was to find a solution for the research problems by confirmation or disproval of the hypothesis and to provide a usable at the same time simple advisory system for the domestic conditions based on adaption from the Austrian experiences.

Based on the information and relations provided by the questionnaire surveys, author had outlined such a structure, which is tailored to the needs of farmers, accessible, transparent and functional.

Based on the above mentioned concept, the most important aims of the thesis are as follows:

- Review and systematic organization of the available domestic and international literature. Author pays special attention to the structure of the Austrian advisory system as well as introduction of the background institutions which provide great help for the farmers.
- Investigation of the main characteristics of the professional advisors who provides services in the

agricultural sector, as well as comparison the characteristics of the services provide in Austria and Hungary.

- Carry out a questionnaire based survey in both the farmers and the consultants/advisors in both countries and find some conclusions based on the collected data about the Hungarian advisory system.
- To make an advisory structural model, which eliminates the duplications in the currently existing advisory system, therefore it is more cost effective and also more transparent.

3. MATERIALS AND METHODS

During the research work, author have relied on the wide circle of contacts built in the University of West Hungary, Faculty of Agricultural and Food Sciences, Institute for Consultancy and Training in order to gather information both in the domestic and Austrian data available.

As a Regional Consultancy and Advisory Centre the Institute provides services for the advisors for their annual trainings and examination, therefore close professional relationship has been developed with consultants working in the region.

Due to the events organized together, the consulting partnerships, and the joint implementation projects we could built such relationships in the country level that has founded the trust for survey data collection with the farmers as well as with the professional consultants.

For the data collected abroad it was useful that the author has spent several months in the Burgenland and Tirol Chamber of Agriculture.

During the 14 weeks training fulfilled in the Innsbruck and Burgenland Chamber of Agriculture author had an opportunity to consult with the professional advisors as well as visit the

local farmers and investigate how the Austrian consultancy system works in the practice.

Due to the many interviews made with the farmers, author has first-hand information about the opinion of the farmers about the ministry, the work made by the Chambers of Agriculture and in many case the opinions about Hungary. The experiences collected during the internship were incorporated into the PhD thesis.

General data provided about the Austrian agricultural sector were partly collected during the internship, when data was available on the website of the Chamber of Agriculture, partly there were adopted from various leaflets and professional publications made by the numerous institutes.

Author has also followed the available publications in the Hungarian and foreign journals as well as he have followed the professional press releases. Author has also investigated the legislative systems in effort in Hungary as well as in Austria.

The questionnaire based survey was carried out between 2008 and 2011 depending on the form the target groups were involved in the work. In order to be able to compare the Hungarian and Austrian advisory systems, the role of the following target groups have been investigated in the advisory system:

- Farmers: both plant producers as well as forest managers, as individuals.
- Professional advisors: In Hungary those who are listed in the record of the professional advisory register, In Austria those who belong to the given regional Chamber of Advisors.

The aim was to collect minimum 100 questionnaires from both target groups (farmers and advisors), therefore the conclusions drawn would be based on 400 questionnaires and the

suggestions would be reliable and represent the opinion of the farmers.

In order to make the data collection the possible most representative in case of Hungary and Austria as well data collection was made from different locations as well as various cultural backgrounds, therefore differently developed agricultural and economical regions.

For this reason in Hungary, Budapest and the Central-Hungarian Region, and from the Eastern and Western regions one area was chosen for the research, respectively.

In the Western Transdanubian Region the data collection took place in Győr-Moson-Sopron County as well as in Zala County, in the Northern Plain Region mainly Debrecen based Regional Advisory Centre and its surroundings provided the data.

In case of Austria the main focus of the research was: Burgenland, because this province is the less developed economically, at the same time this is a plain area, therefore it provides the majority of the agricultural goods in Austria; Lower-Austria, because it is also in a plain area and includes the capital furthermore Tirol, which is located in a mountainous area. The differing natural and economical characteristics of the three provinces offer the opportunity to receive a representative opinion about the agricultural advisory system that works in Austria.

4. RESULTS AND DISCUSSION

The thesis introduces the general characteristics of the farming associated groups in Hungary as well as in Austria based on a questionnaire survey. The survey was carried out in both countries with the aim of investigating the future plans of the groups taking the advice from the consultants, companies

engaged in the agricultural sector, and farmers directly participating in the production.

According to the assumption of the author the need for the professional advisory system from the point of the farmers are depending on the time the farmer spent in the agricultural sector, therefore the experience level the farmer engaged during the years. For this reason the time spent in the agricultural sector in both countries was part of the questionnaire. In Austria the percentage of the farmers who are working in the agricultural sector for more than ten years is much higher than in Hungary. The majority (92%) of the Austrian farmers are belonging to this category, which can be described – based on the survey talks with the locals – be the reliable and calculable, stable economic circumstances, as well as the reliable economic and legal system, moreover the higher profitability and social recognition of the farming activity.

It is visible during the comparison that in Austria 2%, in Hungary 7% is the share of those farmers, who have joined to the agricultural activities within the last year. Furthermore, the percentage of those who are engaged in the agricultural activities for 1-10 years in Hungary are 54% in Austria this figure is only 5%. The share of those who are involved in the agriculture for more than 10 years in Hungary is 39% (7% of the farmers did not give a reply to this question), in Austria 92% of the farmers are belonging to this group. This proves that in Austria decent living standard is provided permanently by being involved in agricultural activities. At the same time this also lead to the conclusion that in Austria family based farms have a long tradition, which also means in case someone starts farming (in many cases continues the inherited farm from his/her parents) most probably will carry on working in the agricultural sector for decades.

In order to make the two country comparable, author have pointed such categories from the information source and

collection methods, those in spite of the different systems are comparable (Fig. 1).

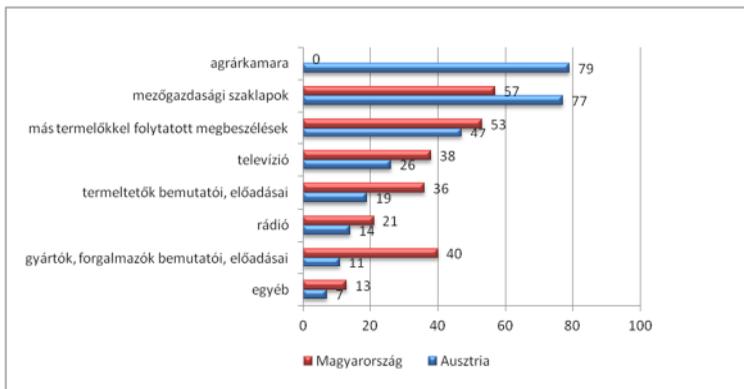


Figure 1. Information sources of the questioned Hungarian and Austrian farmers

Source: own investigation, 2011

It is clearly visible that in both countries the most important and dominant information source is the printed press. In Hungary the share of this source for collecting information is 57%, in Austria it stands on the second place (however it is larger share than in Hungary: 77%). In Hungary even nowadays the individual – neglecting the service of the professional advisors – information collecting is dominant (expert journals, information collection from other farmers, television). In Austria, the majority of the farmers (79%) collect their information from chambers of agriculture professional advisors, where one can consult with the expert of a given field, or alternatively he or she can collect information in a group advisory meeting. Comparing the category of the “producers, and distributors presentations and road shows”, it is clearly visible that in Hungary 40% of the farmers, in Austria 11% of the farmers indicated this category as the main

source of information. Since this activity can be described as a commercial based information providing activity (profit based “professional advice in a package”) the possibility and danger that these companies are simply providing information for their own profitability increase by this service. Furthermore, the smaller enterprises or smaller farms are not included in the primer target group, or for the lower input technologies they pay less attention. At the same time it can be also concluded that the commercial base advisory system is traditionally very professional and it tries to provide quick and precise solutions for the arising questions of the farmers. Among the professional advisors in Hungary as well as in Austria several typical heterogeneous groups are working. With the applied questionnaire, author has successfully highlighted some of the general specifics of these groups. Due to the differences between the developments of the advisory systems of the two countries, significant differences can be seen such as the age of the advisors, their field of expert, or the seating place (urban-rural).

The differences of the age of the advisors in Hungary and in Austria are significantly different. In Hungary the youngest advisors (between 25 and 35 years old) are standing only 9% of the total number, in Austria in this category 40% of the advisors belong. In Hungary, the majority of the advisors (68%) belong to the oldest age category (over 51 years old), meanwhile in Austria only 15% belongs to this age group. The most probable reason for this difference could be that in Austria the advisors are working actively for the Chambers of Agriculture, as a comparison in Hungary those who are listed as advisors are often start advisory activity in their pensioner years (for instance former university of high school lecturers, etc.).

One of the main characteristics of the work of a consultant/advisor is the number of the costumers served.

Investigating the number of farmers belonging to one advisor in Hungary the distribution is more or less equal. Those consultants who give professional advice for small number of farmers (1-10 people) and no more than 20 farmers are 26-26%, those who give advice for more than 20 farmers are below 50 (46%). As a contrast, in Austria 80% of the professional advisors are belonging to the group who gives advice for more than 20 farmers. The reason for this can be found in the existing Austrian advisory system, where group advisory forms are more often used than in Hungary. Moreover, those who are employed by the Chambers of Agriculture and giving advice as a full time employee has the chance to keep contact with more farmers than those in Hungary who are giving advice as a part time job only. In order to be effective in the advisory systems it is mandatory to have the professional technical background, as well as being able to apply various knowledge transfer techniques. Furthermore, continuous, up to date further education in the field of advisory knowledge as well as in the field of methodology of advisory techniques. These characteristics are shown in Fig. 2 concerning the investigated countries.

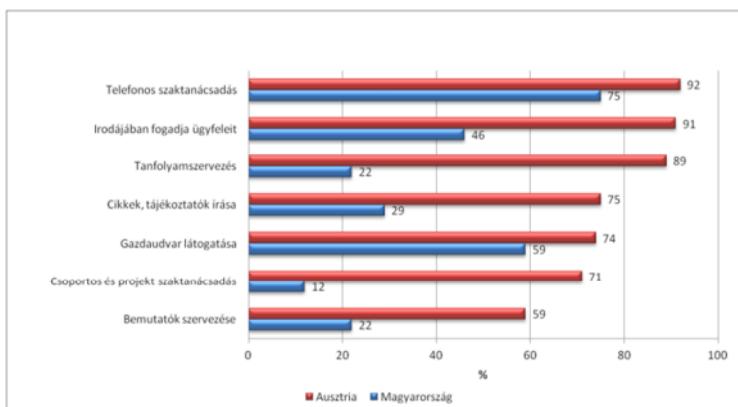


Figure 2. Knowledge transfer technologies applied by the Hungarian and Austrian advisors. Source: own investigation, 2011

It is visible that the knowledge transfer technologies applied by the advisors in Hungary can be described by two or three main techniques, namely advice via telephone, consultation in the advisors office or visiting the farmers in their homes. Nearly half of the advisors (46%) consult with the farmers in their office. The more costly and workload (organization) required methods, such as course and demonstration organizing are existing in 22-22%. It is also relatively rare method to write an article in the professional journal, or advice booklets, since only 29% of the advisors using this method.

In Austria, the distribution of the different knowledge transfer techniques is much more equal. Moreover, each method is more often used than in Hungary. Similarly to Hungary advice via telephones are the most applied advising technique, nearly all advisors are using this method (92%). It is also very popular to give advice in the office of the consultant. As indicated earlier in Hungary less than half of the advisors use this method, contrary, in Austria 91% of the advisors use this method. The explanation is similar to the earlier one: the advisors are working full time for a Chamber of Agriculture. The Austrian farmers are going into the offices of the advisors with trust at the Chamber of Agriculture, in case he/she needs any help of advice. In Hungary this trust does not exist, the farmers do not prefer the visit into the office of the advisors.

Summing up the conclusions of the research it can be concluded that the results can be used in their complexity in the development of the efficiency of the Hungarian advisory system therefore the suggested structure would be available for the farmers and the advisors as well that would be advantageous even in the long term.

The aim therefore is to build such a network, which relies on the need of the farmers, and starts at the farmers. In order to work effectively such structure is needed that the professional advisors have the knowledge, the experience and the

knowledge base for giving up to date and innovative advice for the farmers. By the integration of the existing (in many cases parallel) advisory systems a new structure has to be formed, which is outlined in Fig. 3.

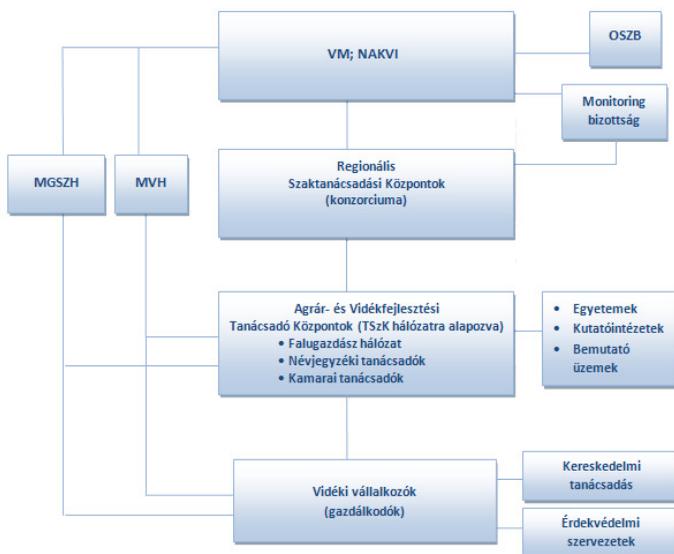


Figure 3. New structure of the advisory system in Hungary
Source: own investigation, 2012.

According to the opinion of the author with the lead of the National Agricultural Extension, Rural Development and Training Institute the Consortium of the Regional Extension Centres would coordinate the work of the advisory network. The background institutions for the Regional Extension Centres, such as Universities, model and demonstration farms, laboratories, etc. would be able to coordinate this work with the existing infrastructural and institutional background.

It would also be important as a part of the network apart from application of quality management, marketing and production management systems, operating the demonstration farms as well as support for them would be the responsibility of the Regional Extension Centres.

The role of the existing locally functioning village advisors, and Chambers of Agriculture would be taken over by the local Agrarian and Rural Development Advisory Centres, which would be working extensionally compared to the existing system. Therefore, there would be no parallel networks, and the farmers would know exactly where to turn in case he needs a professional advice and the most up to date information. The rural entrepreneurs (farmers) would be in contact with an organization which could provide a complex “one window” service similar to the Austrian system.

From the point of the farmers view the above outlined system would give the following advantages:

- The efficiency of the advisory system would be notably increasing as the farmer would have the needed information in one place from a reliable source, consequently he/she would have more time for the effective work.
- Due to the more simple and transparent advisory system, the farmers would use the advisory system with more trust. Therefore, they would be more competitive.
- The farmers would have the information more easily and quickly, which would help their more effective decision making.
- The farmer would have a better (winning) position in applying for call of proposals, and supports since such advisor would deal with the farmers, who is well trained. Moreover, knows the financial limits, possibilities and requirements of the farmer.

From the point of view from the Managing Authority the envisaged system would provide the following benefits:

- By the integration of the earlier existing systems the suggested system would be more cost-effective.
- The new advisory system would be more transparent as more controllable.
- The allocation of the EU and national funds would be better planned.
- The proposed system would be more useful in the communication channels among government-advisors network-farmer relations.
- Due to the proposed attitude and system changes the advisory network would be more reasonable, more effective and farmer friendly, therefore the support would be spent on the effective work and the effective operation of the new advisory system.

5. NEW SCIENTIFIC ACHIEVEMENTS (RESULTS, THESES)

1. **I have compared the requirements and needs of farmers of two economically different countries (Hungary and Austria) concerning advisory systems.** Knowing the farmers requirements, the aims and goals of the advisory systems as well as their working processes and their effective structure can be outlined.
2. I have compared the consultants/advisors services in both countries (such as advisory methods, knowledge transfer techniques, working relationships, etc.) **I have concluded that effective advisory work can be carried out in such**

country, where the knowledge and training level of the advisors are high, their knowledge is regularly updated, and furthermore the Agricultural Knowledge and Information System is fully available for them.

3. I have investigated the working process of the advisory systems in both countries. **I have concluded that the advisory system can be effective only in those countries, where the continuous learning of the advisors are in very high level, the methods used for the advising fulfils the requirements of the farmers, and by the correct motivation methods the advisors are motivated to exercise their profession.**

4. Based on the conclusion made during the research work **I have outlined a „one window” agricultural advisory system which is much more optimal than the existing system from the expert of view as well as from the cost effectiveness of view.**

6. LIST OF OWN PUBLICATIONS CONCERNING THE TOPICS OF THE THESIS

Pear reviewed scientific articles

Vér András - Cser János

Bio-tönkölybúza termesztése a Hanságban (Növényvédelem, 44 (9) 2008, 447-451. p.)

Vér András - Tenk Antal - Cser János

Tízéves az óvári mintagazdasági hálózat (Gazdálkodás, 55 (2) 2011, 214 – 218. p. 2011)

Vér András - Cser János

Investigation of the Hungarian and Austrian agricultural advisory system among the farmers based on questionnaires. (Acta Agronomica Ovariensis. Vol. 54. No 1. p. 53-62. 2012)

Conference presentations and posters

Vér András - Karácsony Péter - Cser János

A Nyugat-Dunántúli Regionális Szaktanácsadó Központ tevékenysége egy működő projekt tükrében (Agrárgazdaság, Vidékfejlesztés, Agrárinformatika, Nemzetközi Konferencia, Debrecen 2007. március 20-21.)

Vér András - Karácsony Péter - Cser János

A Nyugat-Dunántúli Regionális Szaktanácsadó Központ tevékenysége (Interreg IIC-RENE konferencia "A direktértékesítés jövője és lehetőségei az átalakuló mezőgazdasági piacokon" Mosonmagyaróvár 2007. február 14-16.)

Vér András - Cser János

Az agrárszaktanácsadás tradíciója és innovációs lehetőségei az óvári akadémián (Tradíció és Innováció Nemzetközi Tudományos Konferencia Gödöllő 2007. december 3-6.)

Vér András - Cser János

A hazai agrár-szaktanácsadás fejlesztési lehetőségei az osztrák példa alapján. (XXXII. Óvári Tudományos Napok, Mosonmagyaróvár 2008. október 9.)

Vér András - Dr. Cser János - Takács Krisztina

EU projektek a Szaktanácsadó és Továbbképző Intézetben ("Mezőgazdaság és a vidék jövőképe" Tudományos Konferencia 2009. április 17. Mosonmagyaróvár)

Vér András - Cser János

A magyar és az osztrák agrár-szaktanácsadási struktúra összehasonlító vizsgálata

(LI. Georgikon Napok, Nemzetközi Tudományos konferencia 2009. október 1-2.)

Vér András - Cser János

A mintagazdasági hálózat szerepe a tudomány és a gyakorlat kapcsolatában. (XXXIV. Óvári Tudományos Napok, Mosonmagyaróvár 2012. október 5., 730-733p.)

Cser János - **Vér András** - Lakner Dóra

Advisory qualification programs at the University of West-Hungary, Faculty of Agricultural and Food Sciences (Rural Development international scientific conference, Kaunas 2007. november 8-10., 152-158. p.)

Other articles

Vér András

Román delegáció látogatása az Óvári Akadémián (Vivat Academia, 2007. március-április)

Cser János - **Vér András** Interreg IIIC-RENE konferencia Mosonmagyaróváron (Vivat Academia, 2007. március-április)

Vér András

Tanulmányút Güssingbe (Vivat Academia 2007. május-június)