

SZENT ISTVÁN UNIVERSITY GÖDÖLLŐ

Doctoral School of Management and Business Administration



THESIS OF THE DOCTORAL (PhD) DISSERTATION

**THE ROLE AND CHANGE OF KNOWLEDGE
MODELS REGARDING THE RURAL
DEVELOPMENT PROCESS IN HARGHITA
COUNTY**

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Gödöllő

2014

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1. INTRODUCTION

1.1. The timeliness and importance of the theme

The theme - the development of the rural area - has become up-to-date in Seklerland since the end of the 1990's. It's true for Harghita county, too. But this subject hasn't been treated continuously, and not any professional and legal institution has undertaken it. Nevertheless there have been sociological researches, professional and public occasions treating this theme (forums, materials presented by the media, plans elaborated either by the county's authorities or by smaller regional companies regarding the rural development process, contracts, Hungarian intensions of transferring their knowledge, the printing of professional materials, projects elaborated with partners inside or outside the county, the running of basic university sections). Of course, the documents regarding the society and industry of Transylvania didn't appear only in our days. The earlier sociological, ethnographical, cultural-anthropological studies, articles helped me to understand the social and agricultural conditions of this region. Beside these I became acquainted with the procedures of the rural development process adopted in Hungary. The intension of the Seklerland's population to find a new way of development also stimulated me. Later on the possibility of joining the EU, the starting of projects also played an important role in my decision of dealing with this theme.

The above mentioned processes have happened in such social-economical, historical and cultural environment – and they are still happening – which didn't make possible the unchanged, perfect transfer of the EU models. We don't treat the process in detail, but one must know that the establishing of the EU-conform institutions doesn't mean their EU-conform functioning too.

There were many proposals, plans and ideas concerning the development of the region, but few of them named those institutions or human resources which could adopt and run the professional knowledge needed in the many-colored Transylvanian countryside. Everybody recognizes that learning is necessary and that we need specialists. There were and still there are initiatives in this connection, but no well-considered unified conception and program has been adopted regarding the development of human resources in the countryside. The place, the importance, the functioning of the forms of knowledge in the studied region didn't become an urgent theme even to date and in this respect we cannot see any positive change.

The lack of treating this problem including the training the different types of knowledge by the local and national authorities may have several negative consequences. We can observe in many places that the new inventions are based on examples experienced in other places, without respecting the special characteristics of this region. Such inventions obviously do not work, no local positive examples exist, which are accepted by the local population, thus the regional lag becomes more and more evident.

Nowadays the international experts of the rural development process write about the appearance of a new paradigm (Van der Ploeg et al, 2000 – Marsden, 2006 b) and they stress the fact that the rural area and the local values are getting more and more precious. As well the special literature expresses that the successful rural development process is based on the interaction of different forms of knowledge (Bruckmeier, 2004). But in the studied region not even the consideration of the forms of knowledge has been carried out. The analysis of the way of their appearance hasn't been made either. We are convinced that such a professional analysis is needed in this region. In lack of such a study no positive initiations will appear, initiations which will serve the development of the region's social and economical conditions, as well as the improvement of the local population's quality of life.

1.2. The goal of the dissertation

The present thesis intends to present the appearance of different forms of knowledge and the relationship between the different forms of knowledge as they have been carried out in the process of the rural development in Harghita county. We examined the different - scientific, managerial and traditional/local - forms knowledge based on Bruckmeier's study (2004). Because these forms of knowledge have not appeared and worked programmatically and well planned, their investigation and their operating methods could be fulfilled exclusively in the context of the county's rural development process. This local process is the background of those knowledge forms, which sometimes have been overshadowed. The rural development process itself has been influenced by many effects. Sometimes this process ran quite swiftly, sometimes it was slowed down. This fact explains why the appearance and running of the forms of knowledge has often been accidental.

Obviously most of the professional works dealing with the rural development of the region concentrated on the obtained results or on finding possibilities and proposals of further development. This phenomenon can be

explained by many facts. One of these facts is that in Harghita county the rural development process started before the first programs regarding the rural development processes appeared in other regions of Romania. Thus in Harghita county there were formed 15 micro-regions, when this notion was unknown in Romania, so there was no legal framework for the foundation of micro-regions. This explains the fact that even today the description of the results seems to be more important than the analysis of the actual situation. In Harghita county there were earlier experiments of presenting the rural development process (Biró Z., 2006, Koszta, 2004, Mátéffy, 2004), but these didn't deal with the forms of knowledge. Due to the fact that there in no earlier expert analysis of this theme, the present thesis can be considered a standard and pioneering work.

1.3. The starting hypotheses of the Ph.D. thesis

The starting hypotheses of the Ph.D. thesis are:

- a) The rural development process which had happened in Harghita county formed the possibility of appearance of those forms of knowledge which are connected with the development of the countryside.
- b) The use of the possibility given by the collaboration of different forms of knowledge is not characteristic for this region. Thus the simultaneous appearance of the forms of knowledge did not happen.
- c) The ways of appearance of the forms of knowledge were accidental and variable. Exception is the managerial knowledge.
- d) Because of the lack of planning and programming the interaction of the different forms of knowledge wasn't realized.

Taking into consideration these hypotheses we follow the unlike success of the forms of knowledge. Due to the special East-European characteristics of the social development, the different forms of knowledge have different role in the rural development process. The managerial knowledge occupies a central place; the other types of knowledge are relatively neglected. These facts prove the importance of linking to the central institutions instead of respecting only the local intentions.

1.4. The theoretical background of the research work

The fundamental and starting point in my research was Bruckmeier's study related to the CORASON project. His conception of treating separately

the scientific knowledge, the managerial knowledge and the traditional/local knowledge was very useful in taking into account and in describing the different forms of knowledge regarding the rural development process in our region (Bruckmeier, 2004, 2009, Kelemen and others, 2007). The quoted authors analyzed the interaction of the forms of knowledge and considered this interaction as the main condition of maintaining the rural development process. Kulcsár and Székely (2014) also stress the importance of the relationship between the different forms of knowledge in the rural regions in order to decrease the social damage caused by the changes of the climate, as well as to increase the efficacy of the adaptation. In the present thesis we try to take into account the presence and the functioning of the forms of knowledge. The entire discovery of the relationship existing between them can be the theme of a following study.

Most of the rural development paradigms stress the importance of the different forms of knowledge. G. Fekete Éva (2008) emphasised the standpoints regarding the importance of endogene-development, stressing the importance of the local, traditional knowledge. Her study convinced me that in examining the competitiveness of the rural regions we have to pay attention to the endogene factors, to the local knowledge. Van der Ploeg describes several examples for the importance of the local, traditional knowledge. But this type of knowledge is not equal with the endogene source of energy. In his conception the managerial knowledge is also a source of energy, which is based on exterior relationships (Van der Ploeg, 2009). The local knowledge is not equal with „the endogene sources of energy” notion. Lowe (1995) ten years ago took a note of the fact that in the European rural development models the “bottom-up” program-philosophy is losing its importance and the exogenous developing models are preferred. They mention that the two types can hardly be separated. The support of the two types depends on the decision of the local social or institutional associations.

Van der Ploeg and Marsden (1994, 1995, 2000, 2003, 2006, 2008, 2009), as well as de Haan and Long (1997) stressed the important role of the traditional knowledge and its relationship with the other forms of knowledge. Both Marsden and van der Ploeg (2008) based their rural development paradigm on this factor, thus defining the web which presents the regional and functional relations of the rural development process. We show the connection of the traditional, scientific and managerial knowledge with the following figure:

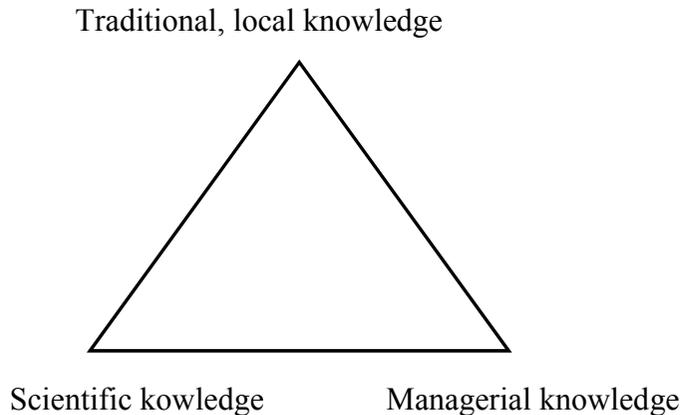
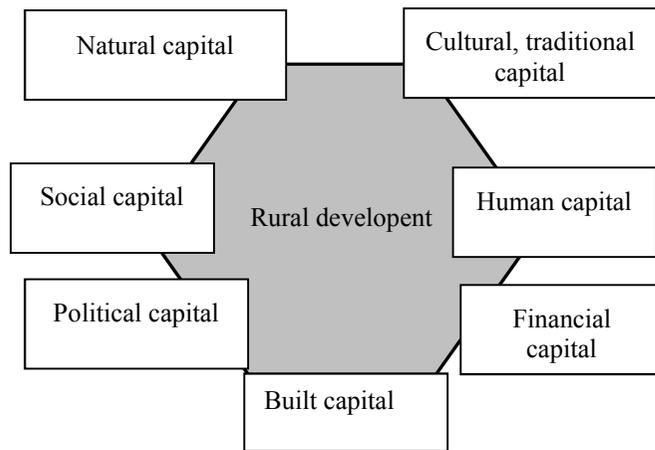


Figure no. 1. Knowledge types of rural development

This figure expresses the fact that equilibrium among the different kinds of knowledge would be desirable. But this equilibrium is rarely fulfilled, and usually the managerial knowledge or the traditional one becomes dominant. The collaboration of the three types of knowledge would be preferable in case of the rural development paradigms, but unfortunately there are very few such examples.

In the field of the rural development the scientific knowledge is represented mainly by professional advising institutions and activities. Their traditional, agricultural production activity must be enriched with economical and managerial knowledge (Kulcsár-Obádovics, 2000). The managerial knowledge is represented by those institutions and their collaborators which help the fulfillment of the processes wanted by the EU.

Well-known USA experts (the Flora couple – Flora, 2008) analyze the different characteristics of the forms of capital regarding the rural development from a different point of view.



Source: Flora and Flora, 2008

Figure no. 2. Types of capital regarding the rural development

2. MATERIAL AND METHODS

This thesis intends to present the appearance of the different forms of knowledge – connected to the rural development process - in Harghita county. The analysis of the county's rural development treats in detail the fact that this process since 1990 until now hasn't been carried out systematically and well programmed. It was composed of many elements, which appeared and functioned independently, without having much connection between them. In this region the appearance and functioning of the forms of knowledge was rather accidental. Today we can recognize the fact that their appearance was not planned and was separated from the general rural development process.

In order to take into account the forms of knowledge which have appeared in the rural development process we needed such a notion framework which offered the necessary tools to this analysis. During the fieldwork and the partial analysis as well as in personal experiences we have been always faced with the theme of the human resources connected to the rural development. Thus we realized that we have to analyze the way in which the different forms of knowledge – connected with the rural development process - appeared and functioned.

The professional studies related to the CORASON project (A Cognitive Approach to Rural Sustainable Development) formulated the idea that the forms of knowledge and the interaction between them may have an important role in the rural development process (Csurgó – Kovách – Kucerová, 2007, Kelemen – Megyeri – Nagy, 2007). These professional studies of the CORASON project drew attention to the approaches related to the forms of knowledge and their interaction, thus to the division of forms of knowledge elaborated by Bruckmeier, which became the starting point of the professional analyses in the project, too.

Bruckmeier distinguishes three types of forms of knowledge, the scientific/expert form of knowledge, the local/endogen and the managerial form of knowledge (Bruckmeier, 2004, Bruckmeier – Kopytina, 2006, - its brief presentation was written by Kelemen and others, 2007).

A brief description of the main characteristics of the three forms of knowledge follows (Bruckmeier, 2004):

The characteristics of the scientific form of knowledge:

- It is explicit
- Well documented and elaborated

- „Proved” knowledge
- A knowledge attained in institutional conditions (university, special literature)
- Continuous and logically built up
- Its content: theories, methods, research results, technological procedures
- It must always take into consideration the local conditions
- Publicity. This knowledge can be useful only joining the local participants and their knowledge

This scientific knowledge – in this region – is owned by the agricultural engineers. We analyze the place and role of this knowledge, why and how did it get a secondary importance, what happened with it until now and what is its relationship with the other forms of knowledge.

The characteristics of the local/endogen knowledge

- - the passing of traditions to the younger generations
- - a knowledge characteristic of the region, not only an inherited one
- - it is present in tacit, obvious forms
- - it has an experimental character, we prove its use taking into consideration the given situations
- - it can be learned in an informal way (by learning from each other or imitating examples)
- - it has a simultaneous, holistic character
- - good example: the economy is guided by the local geographical circumstances

In the studied region this knowledge is present in the farmer families, in smaller starting undertakings.

The characteristics of the managerial knowledge

- - stresses the thinking in projects
- - it is owned and transmitted by the project elite
- - legal and financial knowledge concerning the functioning of the institutional systems
- - writing of proposals
- - administration, office work

- - management of projects
- - content: development support, tools, ideas, knowledge, authority, lobby (the project elite transmits and/or owns them)
- - he owns both a scientific and local knowledge

The managerial knowledge in new in this region, it appeared due to the possibilities offered by the proposals and to the rural development process. Nowadays many authors deal with the representatives of this knowledge, with the project elite. This thesis treats the appearance of this form of knowledge in the region and the problems related to its becoming established. The special literature usually stresses the importance of the interaction between the different forms of knowledge. Tomka describes the further advantages of the joining of these forms of knowledge (Tomka, 2009). He refers to Polányi, who declares that the joining of the *explicit and the tacit knowledge* generates innovation.

2.1. The adopted methods

A brief presentation of my personal professional attachment:

To map the forms of knowledge we had to take into account – from 1990 up today – the rural development process in Harghita county as completely as it was possible. In this work my personal participation and my experience was a great help: the most important institutional factor of the process was the Community of Harghita county. In the 1996-2010 period I worked in this institutional framework as a development director, later as head of the section. At the same time I was an active participant of a county-program initiated by the Regional Training Centre and carried out together with the county- and local community. This was the first occasion when the rural development knowledge was transferred in an organized way. As a result of this program 15 micro-regions were formed in Harghita county, and the preparative material of the Rural development branch of the Sapientia EMTE was also elaborated by this program.

This personal attachment helped me to get acquainted with the persons involved in the county's rural development process, with the documents, and thanks to my personal experience I could familiarize myself with the organizing processes and with the program-conceptions as well. My professional obligation was to follow the elaboration of the national and local rules. These documents

were a great help in the reconstruction of the county's rural development process. After my work at the Community of Harghita county I continued to gain further experience at the Regional Training Centre. Since 2010 I have been an active initiator of the Leader process, and since 2012 I am managing one of the Leader's local Action group.

The identification, the analysis of the rural development processes needed a collection of data and a secondary analysis of the collected professional material. By means of questionnaires I presented the existence of the different knowledge forms and their appreciation by the local farmers. I questioned 522 persons, and I analyzed their answers in the SPSS program. The following table shows the regional and local composition of this model.

Table no. 1. The territorial distribution of this questionnaire-research

Region	Number of questionnaires
Ciuc:	205
towns	20
villages:	185
Gheorgheni:	132
towns	10
villages:	122
Odorheiu Secuiesc:	185
towns	48
villages:	137
Totally:	522

At the occasion of the secondary analysis I worked up the interviews made in 2004 with the managers of the 15 micro-regional associations (Kosztá, 2004). I made similar interviews 2008, too with the active managers in order to have the possibility of analyzing the changes. I asked two colleagues to analyze the 15 interviews. If there were any differences in their appreciation, we tried to interpret the given passages together.

In order to analyze the local knowledge I made deep interviews with the farmers and the enterprisers and I analyzed them.

Related to this theme I analyzed the interviews published by the House of Science (Biro – Tiboldi, 2012), completing them with other deep interviews.

The survey of the county's rural development process was possible only by collecting all the published and unpublished special studies which can be related to this process.

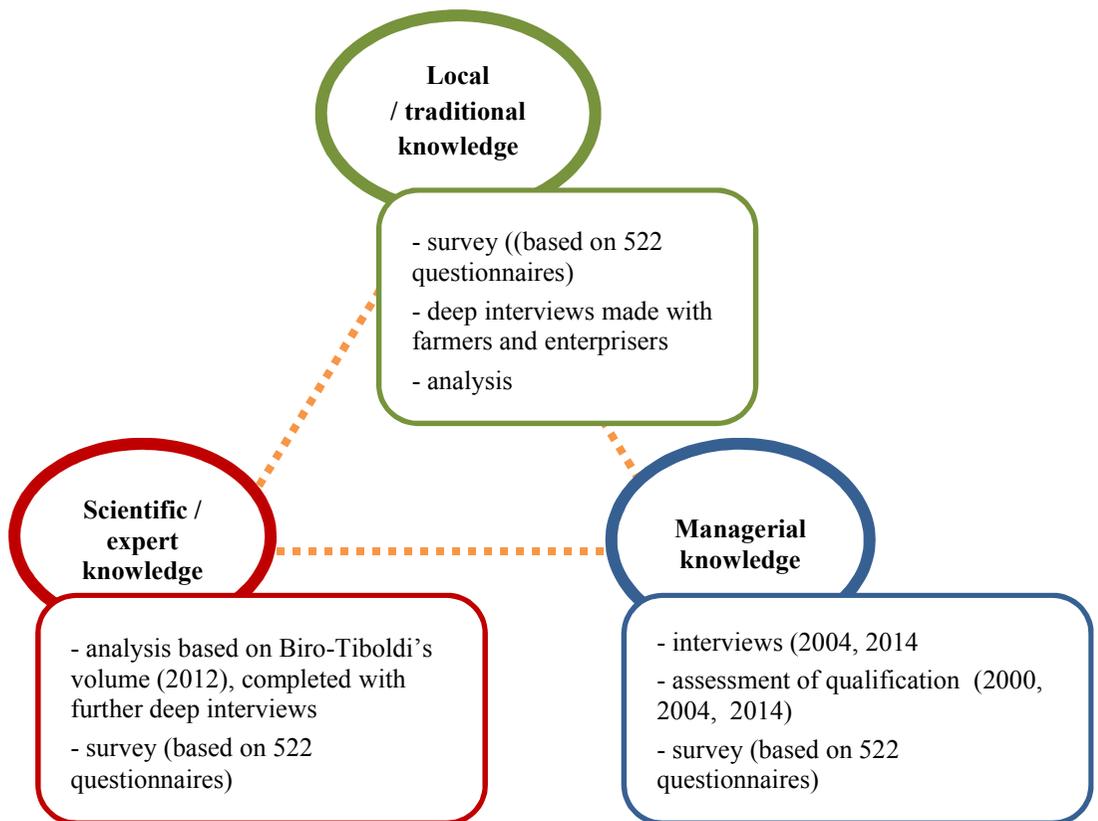


Figure no. 3. The methods of research of knowledge forms (my own editing, 2014)

2.2. The rural development process and its main participants

We can form an idea about the appearance and the way of functioning of the knowledge forms as well about their social role only if we sketch the rural development process which has been taking place since 1990, paying attention to its participants and to its contents. As I have already mentioned, this process wasn't programmed and it hasn't worked systematically. The process started in different ways and from different points, having different effect. It has no institutional organizing-coordinating representative. In the rural development process there appeared many claims, imitations, personal initiations and conceptions, but they were not organized in a system. Regarding the knowledge forms related to the rural development we must stress the following facts:

- - the process is not based on forms of knowledge, but on the imitation or adoption of examples seen in other places or on local micro-regional initiations.
- - the claim for the knowledge forms (mainly for the managerial one) came up after the elaboration of the framework in different way and extent. The rural development process worked as a loose framework which allowed the appearance of the knowledge forms if there existed a participant urging it.

In the present thesis I intended to describe the rural development process. As the entire presentation of the process hasn't been elaborated yet, I could undertake only the description of the main phases of the functioning, of the important institutional actors and of those regional professional themes which characterized the process. All these give a general framework, better to say a kind of an interpretation background to the functioning of the knowledge forms.

3. RESULTS

3.1. The judgment of the sources of information

The 2014 questionnaires concentrated on the sources of information among the farmers and on the opinions concerning the employing of the managerial/professional knowledge. One cannot always well separate these two types of knowledge. The professional knowledge comes from outside, while the managerial one appears together with the elements of the local professional knowledge. Probably this phenomenon can be explained by the fact that changes appeared in the concept of professional consultation, and the professional and managerial knowledge got closer to each other (Kulcsár – Obádovics, 200).

In the course of the assessment we wanted to know more about the information channels. The results are shown by the following table.

Source of information	Frequency of mentioning (%)
Newspape	47,7
Television	49,2
Internet	26,8
Electronic newsletters	6,9
Printed newsletters	6,1
Technical publications	13,8
Professional programs	6,5
Professional consultation	13,6
Other farmer	25,7
Personal relationships, discussions	27,1
Experience	16,1

Table no. 2. The sources of information which help the agricultural work

We can learn a lot by studying the data of the above table. The high per cent of the media shows the dominancy of the expert knowledge, because the local managers and experts can hardly be present in the media. Among the sources of information the managerial knowledge is pushed into the background.

It's true mainly for the information helping the farmers. The sources containing the expert knowledge play also a moderate role. The technical publications are more important, but their usage is characteristic only of certain strata. The agricultural information is often spread with the help of personal relations. These sources, like conversations, help the communication of the traditional knowledge.

We also studied the use of the different channels, taking into consideration the age and the qualification of the farmers. We supposed that the age and the qualification influence the intensity of the personal communication. The following table shows only the direction of the use of information and fact that the change was significant or not. The missing channels show, that there was no essential relationship between the age and the scholar qualification.

Table no. 3. The effect of age and qualification on the use of information sources in agricultural problems

Source of information	Direction of connection More employment	Significance level (chi2)
Age		
Electronic newsletter	younger	0,008
Printed newsletter	younger	0,040
Television	older	0,020
Internet	younger	0,000
Technical publications	younger	0,007
Experience	older	0,010
Scholar qualification		
Electronic newsletter	higher	0,000
Farmer ó	lower	0,029
Internet	higher	0,000
Professional programs	higher	0,030
Experience	lower	0,037

The up-to-date communication means play a more important role among the younger farmers. The older ones rely on the television as a source of information and on their own experience. Almost the same phenomenon can be observed in the case of the highly qualified persons. They take advantage of the

professional meetings and of the electronic newsletters, while the less qualified farmers rely on their own and others' experience.

3.2. The acceptance of the managerial knowledge

We studied the social factors influencing the use of the information of the managerial knowledge by applying the "managerial knowledge index". This index shows the degree of acceptance and usage of such information sources related to the rural development which are part of the managers' activity. The more managerial information is used by the farmer, the higher the value of this index will be.

The average value of the managerial knowledge index is 1.46, which means that such a quantity of managerial knowledge source was considered important by the farmers for themselves. As the maximum value was 6.00, we can formulate that the involved farmers didn't consider important the use of the managerial knowledge. 60.9% of the questioned farmers considered only one single source of information as being important. Only 7.1% declared the importance of three or even more managerial information sources. The age didn't seem to influence the answers. This – studying the necessity of different knowledge - expresses that the younger age in itself doesn't mean the coming nearer of the traditional and managerial knowledge.

The scholar qualification had an important role in judging of the managerial knowledge. The following figure illustrates this.

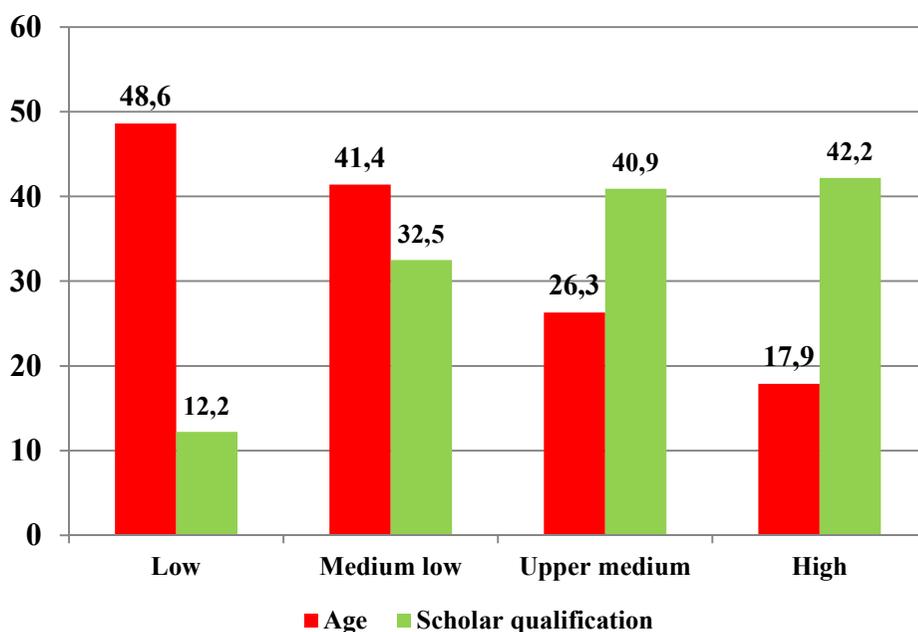


Figure no. 4. The change of the managerial knowledge index according to age and qualification (min.: 0, max.: 6)

The influence of the scholar qualification concerning the managerial knowledge was significant (sig:0.002, while the age didn't show such a great influence (sig:0.493).

The claim to the managerial and expert knowledge can be examined if we take into consideration the farmers' claim: how much expert consultation they would need and what are those expert consultations which the farmers would consider important for them.

Table no. 4. The claim to the professional consultation taking into consideration

Groups formed according to scholar qualification and age	The proportion of claimers in each group of the qualified persons	The proportion of the claimers in each group of age
Low	35,7	57,6
Medium low	51,2	63,7
Upper medium	61,1	56,2
High	54,5	34,3
Significance level	0,012	0,000

The persons wanting the expert consultation are mainly members of the younger and highly qualified groups. But we have to realize the fact that almost half of the farmers do not want such services. This fact points to the dominant role of the traditional knowledge, and in this respect it's no matter whether the lacks of the material bases or the backward way of thinking or both cause this phenomenon.

In the following paragraphs we tried to discover whether the farmers needing special consultation want to remedy their managerial knowledge (and in what degree) or they feel the lack of their professional knowledge.

The data show that they need mainly consultation related to the production (51,2 %). On the second and third place there are four types of managerial knowledge: organization (19,1 %), proposal writing (18,1 %, getting sources (17,8 % and services (14,4 %. The other managerial knowledge forms are wanted by even less persons: book-keeping (12,5 %, financial planning (8,4 %), advertising, marketing (8,4 %) and legal problems (7,2 %). In working up only 14,4 % would be interested.

55,7 % of the questioned farmers didn't need any kind of managerial knowledge. Anyway, it's a good that more the 40 % would like to obtain one or more types of these knowledge forms.

As the following table shows, the mentioning of the managerial knowledge depends on the age and the scholar qualification.

Table no. 5. The claim to the managerial knowledge according to the farmers' age and qualification (%)

Age and qualification categories	Claim to managerial knowledge			Totally
	Low	medium	high	
Age (sig: 0,000)				
Under 40 years	51,7	29,7	18,6	100,0
41-50 years	39,7	39,0	21,3	100,0
51-60 years	56,2	27,7	16,1	100,0

Over 60 years	82,0	13,0	5,0	100,0
All together	55,6	28,4	16,0	100,0
Scholar qualification (sig: 0,000)				
Primary school	76,6	19,0	2,4	100,0
Technical school	61,1	28,1	10,9	100,0
Final exam	46,0	30,3	23,7	100,0
University	51,1	33,3	15,6	100,0
All together	55,7	28,7	15,6	100,0

The claim to managerial knowledge is higher in case of the younger and more qualified farmers.

3.3. The managerial and professional knowledge – in business

The majority of the questioned farmers would not pay for farming special consultation. They consider it too expensive and think that the received information wouldn't be com-measured with the sum they would have to pay. In many cases both were mentioned. Only 35 % of the farmers would pay for the consultation, which means that they appreciate the managerial/professional knowledge. Among the highly qualified farmers the proportion of those who would pay the consultation is higher, though we would they that their qualification doesn't need consultation. Here too, we studied the effect of age and qualification.

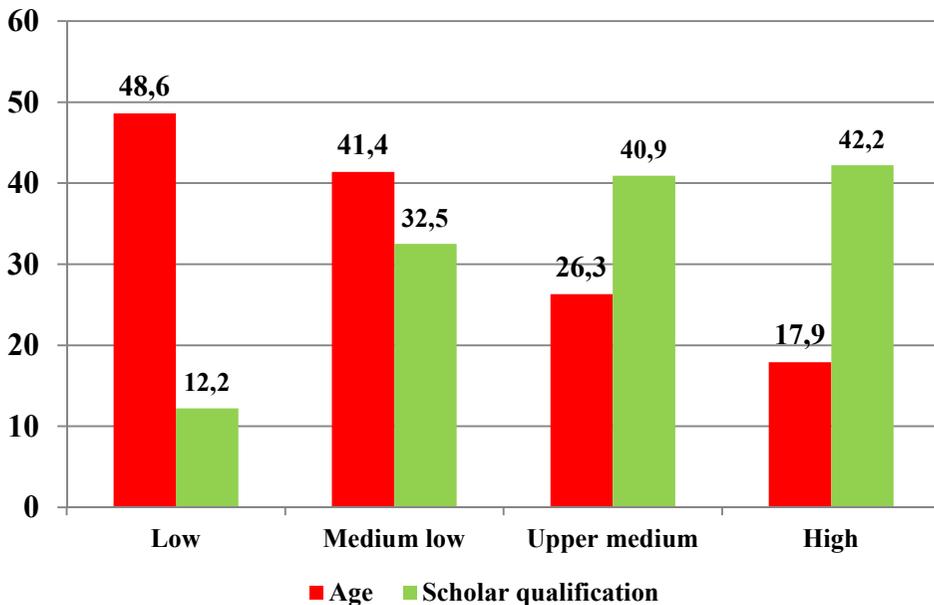


Figure no. 5. The paying willingness according to the age and qualification

The differences are obvious. The paying willingness depends on the age and qualification. The level of signification is very high: in case of the age it is 0,000, in the case of the qualification it is 0,003. Although the paying willingness increases with the degree of qualification, only 13,6 % of the highly qualified (university) farmers would pay the current price. Here too, 56,8 % of the farmers would like to pay a smaller sum. The farmers having the lowest qualification would prefer free of charge consultation (54,8 %).

3.4. A summary of the results

The persons involved in the rural development process show a great variety regarding the organization, the function and their activity. Their activity changed as the years passed. For instance at the beginning the Harghita County's Council was the most powerful actor in the rural development process. It was the initiator of the process. Later other organizations appeared mainly non-profit ones. The foreign organizations had an important role not only in starting the process, but later, too. They represented the special knowledge transmitted to the actors of the rural development process. We can form some groups of these participants:

The participants of the rural development process in Harghita county in the studied period:

- Local and national organizations of the state management (3)
- Non-profit organizations (1)
- Professional organizations (4)
- Foreign, Hungarian organizations (3)
- Communication (press) (3)
- EU (2)
- Undertaking (1)

The civil organizations are on the first place, but this doesn't mean an order of rank too. Most of these civil organizations are not strictly linked to the micro-regions, their field of activity is larger. The relatively great number of the professional organization shows their stressed presence, but their effectively is very different. The presence of the press was also important. The effect of the EU organizations was very important (much more than their number shows) in the foundation of the institutions of the rural development and in the instruction of experts.

Regarding the expert knowledge most farmers declared that this knowledge plays a secondary role in this region. This opinion is noteworthy. As we saw several professional organizations published important theoretical and methodological works, but the declared opinions show that these publications didn't reach the farmers. This means that the farmers' connection to other knowledge forms is quite accidental. The questioned experts had a few proposals for handling the present situation, most of them mentioned earlier examples. The effect of the model of the 1960's is very strong: everybody must have a basic agricultural knowledge, this knowledge must be taught at school. The interest in agricultural work and this work itself should be a natural occupation of everybody. The questioned farmers formulated only a few proposals which would be applicable today. The dominant, rather didactic opinion was: "it has to", "it would be", "it's necessary". By expert knowledge – in many cases – they understand only technologic knowledge or general agricultural knowledge. The opinions do not express the claim for relationship with other forms of knowledge; the experts speak as if the local or the managerial knowledge wouldn't exist. This fact shows, that the possibility of using the advantage originated from the linking of the different forms of knowledge is not given. Nevertheless the answers express the fact that the roles are mixing. Thus the scientific knowledge in certain occasions shows the

characteristics of the managerial knowledge. The most relevant phenomenon is, that the representatives of the scientific knowledge and the representatives of the managerial knowledge aren't in the same position. The enforcement of interest in the case of the scientific knowledge is more limited.

At the characterization of the managerial knowledge we saw that the managerial and the expert knowledge cannot be clearly separated from each other. Not even the information services themselves divide them. The professional knowledge coming from outside the region is qualified mainly as expert knowledge, while the knowledge offered by the managers working (and living) in the region owns certain elements of the agricultural professional knowledge, and the two forms of knowledge appear together.

These results confirm our supposition: the claim for expert and managerial knowledge characterizes mainly the younger and highly qualified farmers, while the older and less qualified farmers prefer the traditional knowledge.

We studied the social factors influencing the claim for getting information belonging to the managerial knowledge by using the so called "managerial knowledge index".

The questioned farmers didn't consider the use of the managerial knowledge too important. The younger age in itself didn't mean a more stressed interest in managerial knowledge instead of the traditional one. In appreciating the managerial knowledge the scholar qualification played an important role.

The farmers who claim to the professional consultation and service are mainly younger and highly qualified persons. But we have to observe that almost half of the farmers do not need these services. This fact shows the dominant role of the traditional knowledge. In this respect the cause of this thinking has of secondary importance: it can be explained by the financial situation, by the backward thinking or by both.

Most of the questioned farmers didn't claim to any kind of the managerial knowledge.

The local knowledge of the farmers is built on their parents' and their community's knowledge. We can sum up their opinion regarding the scientific and managerial knowledge as it follows:

- The formal appreciation of the importance of knowledge (independent of its character and content). And if in some cases the meeting with knowledge is "obligatory" – for instance with the managerial knowledge during a managerial instruction - , they declare that they take part at the instruction only for the sake of the diploma (project).

- Sometimes either explicitly or hidden they refuse any meeting with other forms of knowledge. This behavior can be observed in the appreciations of the instructions, in the absence from the instructions and in the contrasting of the local knowledge and of the knowledge offered by the instructions.
- They define the “knowledge” only at a general level. They mean by knowledge the agro technological procedures and the ability of using the different tools. They do not consider this owned knowledge - which organizes and directs their activity -, a real knowledge, (an endogen and valuable endowment), they better think of it as an everyday routine, an everyday task. They feel that their own agricultural practice must be the same as that of their colleagues’ practice working in the same way in their immediate surroundings. This thinking causes the refusal of other types of knowledge.

We can state that still the traditional knowledge is present in a higher per cent. And this phenomenon is enforced by the refusal of the expert and - mainly - of the managerial knowledge by groups of the older and less qualified farmers.

3.5. The presentation of new and modern scientific results

An important result of the present thesis is, that the research tried to study the rural development process holistically, in its entirety, which includes both the history of the process and the relationship between the persons involved in this process.

I consider my thesis original, because it determines - for the first time - the forms of knowledge related to the rural development process and deals with their relationship.

I think that the presentation of the rural development process in Harghita county before 1990 and after 1989 as well as the mapping of the knowledge forms are original results of my research work. The presentation of the rural development practice of Harghita county can generate the appearance of a new knowledge. As this process hasn’t been described I can undertake the presentation of the main stages of the activity, the main institutional factors and those regional professional themes which characterized this process.

I also consider original the use of the so called “managerial knowledge index”. This index shows the degree of acceptance and use of those information sources which are included in the rural development managers’ activity. The

value of the managerial knowledge index shows how much knowledge is considered important by the farmers.

According to my opinion the analyses based on the forms of knowledge in the region can also be considered original, as no such analysis has been elaborated before. This analysis can be the starting point for further research.

The way of revealing and presenting the importance of the concurrence of the knowledge forms is also original. By the research work executed with several methods I proved the fact that the simultaneous appearance and the joining of the forms of knowledge didn't happen.

4. CONCLUSIONS, SUGGESTIONS

4.1. The acceptance or refusal of the starting hypothesis

The main goal of the study was to describe the methods of the appearance of the forms of knowledge as well as the relationship between the various forms of knowledge in the context of Harghita County's rural development process.

The study examined the methods of the appearance of scientific, managerial and traditional/local knowledge. According to the fact, that these forms of knowledge have not appeared and have not functioned programmatically, neither planned, their investigation and their operating methods could be fulfilled exclusively in the context of the county rural development process.

The hypotheses of the thesis are the followings:

- a) The rural development process in Harghita county has established opportunities for the introduction of rural development-related knowledge forms.*
- b) The area, couldn't take advantage of the opportunities offered by the coexistence of the different knowledge forms.*
- c) With the exception of the managerial knowledge all other knowledge forms appeared in an unsystematic way.*
- d) The lack of design of the program did not allow the achievement of the interaction between the forms of knowledge. The lack of proper planning and a systematic introduction of these knowledge forms resulted in the leeway of their mutually positive interactions.*

Our results partially confirmed the hypothesis that the rural development process in Harghita county provided opportunities for the introduction of rural development-related knowledge forms.

I found that, micro-regional associations have been founded, rural development specialization in university education has been created, the interest in agricultural sector has increased, the County Council has launched ambitious programs, new financial resources appeared, but the process didn't have a legitimate professional or institutional representation and leadership.

The appearance and evolution of different forms of knowledge related to rural development was formed due to a variety of factors, forms of knowledge prevailed in different ways.

The importance of managerial knowledge of the county's rural development process depends more on the evolution of social processes, than in other parts of Transylvania, or of Romania.

Sometimes these social processes influenced positively the development of knowledge, sometimes on the contrary, they impeded the development. Conservatism is an important feature of our region's self-consciousness, which in many respects is a virtue, but when it is against the development, it means resistance. The development in the social processes and the spread of source orientation and of the managerial skills were brought to the fore, but the other two forms of knowledge are not really used, and the simultaneous appearance of the form of knowledge does not happen, the opportunity of synergy was loosed.

My work confirmed the hypothesis that the region could not take advantage of the opportunities offered by the cooperative work. Knowledge holders don't show any interest in other forms of knowledge, they talk as if local knowledge or managerial knowledge would not even exist.

Expert knowledge is on the periphery. The increased focus on managerial knowledge, the professional and the local / traditional knowledge indicate the relative neglect of them, the primacy of connections to the central institutions, shows the marginalization of the local democratic aspirations.

The traditional knowledge cannot create relationships with institutions, institutional leaders. Scientific knowledge is undervalued, farmers don't see its significance. Managers possess and use their own knowledge, which is the only key to success in the development process, Traditional knowledge is considered to be an interesting however outdated form of knowledge.

The analysis clearly confirms the hypothesis that the emergence and disappearance of different forms of knowledge were irregular in the rural development process. The different knowledge holders' reactions were different regarding the bigger changes. Despite the fact that the volume of the financial resources grew (area-based subsidies, grants, LEADER programme, etc.), projects were implemented. It's a question whether there is a genuine rural development process in the county or this is just an opportunistic way of resource use.

The fourth part of my hypothesis was also proved. I confirmed the lack of proper planning and a systematic introduction of these knowledge forms

resulted in the leeway of their mutually positive interactions. Due to the unwillingness of different actors to collaborate, share and improve different forms of knowledge, rural development still has a rather moderate effect in transforming the wider society. Today there is also a lack of openness regarding the interaction between the various actors representing the different forms of knowledge. Therefore the society's role in shaping the rural development process in our region is still unimportant. The land restitution and the introduction of the European subsidies improved the revival of local knowledge, whereas scientific knowledge was practically unimportant and managerial knowledge - despite its increased importance – hardly can be an effective tool without the other two forms of knowledge.

4.2. Further statements and suggestions

The importance of the joining of the knowledge forms appears on two levels. On the one hand it is necessary for all the owners of the different types of knowledge to see the national and European processes, to get acquainted together – participating at professional forums, conferences – with the nationally accepted limits of the supports. We have to stress the importance of the common experience, because there were several examples when the employed persons (whose duty was the application) didn't apply the rules presented and adopted by the leaders. The execution of this transfer of knowledge (although it would cause the success of the national program, too) is imaginable within the networks functioning at regional level.

On the other hand the communication of the owners of different knowledge on local level (county, developing region, micro-region) is necessary. The period of elaborating the strategy - when the ideas must be fitted to the local claims and sources and to the possibilities offered by the different programs – is suitable for this communication. But this communication must be well prepared, as each form of knowledge has its important role in the different stages of the development processes and the region is need of all the knowledge forms.

The results of the research show that there is no true connection between the different forms of knowledge. The representatives of the expert knowledge are not acquainted with the managerial and traditional knowledge. As well the representatives of the traditional knowledge have not enough information about the other two. This lack of connection can mainly explained by the fact that the representatives of the different knowledge forms are present in totally different

cultural environment. We can't deny that among the owners of the professional knowledge there are small family enterprisers or their descendents, but in most cases their way of live and their thinking is much behind their time. Of course, there are exceptions, too. The interaction between the different forms of knowledge can be assured by the activity of such intermediary persons, who - thanks to their knowledge - can realize the connection between the different forms of knowledge and the totally different forms of live. They can be those who will be able to synthesize the transferable and useful, locally valid knowledge.

Such a complex knowledge can mainly be obtained by youngsters coming from a rural area having a relatively high scholar qualification. Of course, this instruction needs a complex instructional and mentoring program, when the youngsters – besides attaining the modern (expert and managerial) forms of knowledge – will overcome the difficulties like the low self-appreciation or the low appreciation of the farmers' form of life. The educational system which neglects any of these two problems will be unsuccessful.

The knowledge of the adult farmers can be completed with the professional knowledge by the reducing of the formal education and by laying stress upon the transmission of the practical knowledge. The practical courses and the exchange of experience can help the spreading of ideas and innovations, much more that the transmitting of the knowledge “at school”.

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