

**THESIS OF DOCTORAL (PhD) DISSERTATION**

**THE SITUATION OF FAMILY FARMS IN HAJDU-BIHAR COUNTY**

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## 1. THE OBJECTIVES OF THE RESEARCH WORK

Significant changes have passed in the last decades in the Hungarian agriculture that affected the whole branch. The change of the production structure is characterised by frittered estates, by a numerous but small individual farms and a few number of intensive production organisation with quite large estates: a *dual production structure* has developed. But from the beginning of the 90s has a slow, but a continuous concentration of estates started due to partly market processes, partly to the Hungarian connection to the European Union. Parallel to this a new, or rather a before as middle-peasant farming producer group has come to even higher significance: *family farmers*.

The re-definition of conditions and criteria of family farming upon professional standards is essential relative to the future of the agricultural branch. Beside the mitigation of the bipolar production structure in the ex-socialist eastern-middle European states, family farms can be conducive to the elimination of unemployment and lack of income in the village. Last but not least the fact that agriculture was ever more, than a simple production branch also confirms the need to analyse the topic scientific as well. Beside the production of food and raw materials the branch takes other functions: landscape, biotope, soil, water, environment and give rural people and communities work and existence. Beside production agriculture has to take environmental, social and employment tasks as well – the extent of which depends on the given region (*Ángyán, 2000*).

The basic research aim was to investigate *individual farms in Hajdú-Bihar County that mobilize labour and capital of the family for the sake of agricultural production, so that operate as family farms*. We call family farms all farms that are prepared to long-term, production in order to gain income and use mainly the labour of family members. The control is in the hand of the family, most of the estates and equipments are owned by the family, still – regarding some economic aspects – it has a resort to a significant rent for land, labour or even equipments or services. Furthermore, they consider farming as a multi-generation, inheritable life-style. Regarding the future, these farms are fundamentals of the preservation of the rural life-style and of rural development.

By our empirical research work we have made a comprehensive position paper that shows the conditions of farms and farmer populations, as well. Upon its results and the opinion of two hundred farmers asked in the survey we tried to feature the situation in the future. The following facts underline the reasons why we have chosen this area: Hajdú– Bihar county has rather agricultural character: the total area of agricultural land is over the country-average; the agricultural branch still has a high significance here; the main strategy aim is the conformation of an “Agriculture-region” – a branch that is controlled by the market, innovation-oriented and based on the already extant market advantages.

This dissertation is trying to reveal the basic affecting factors, external operation confines and the internal motivation of production by diversified analysis: the first by a questionnaire survey, while the other by personal colloquies, talks and interviews with the farmers. We tried to get answers to the following questions: *What are the farming circumstances in the county? How and by which sources do farmers develop and extent their farms? Which human factors have a role in farming? How do farmers see their own future, what kind of aims do they have? Who will stop and who will go on producing?*

Closely related to these questions our hypotheses were the following:

- The role of agriculture in the county – in spite of the decrement of the branch’s importance on the level of national economy – has furthermore a definite role in profit production and income compensation.
- These farms covered the cost of their development in the 90s in different ways; now they do it using credits and (in a lower extent) application and other facilities.
- The human capital of family farms determines the success of farming and the rate of profit.
- Family farms stand crisis: this production population will go on producing independent from profit and production circumstances. In the future they don’t plan to give their farms up and to invest their capital into other branches.

It is important to lie down, that I don’t want to take a stand on the professional and often political debate that is related to our joint to the European Union, and the split of

the agricultural production structure. The focal point of this debate is the small (family) farms vs. agricultural concerns, so the relationship between size and effectiveness. I do not object in my work to clear this diversified and complicated question on the results about this bottleneck population. Out and away I tried to make a comprehensive status report that promotes the answer of this and such questions.

## 2. BACKGROUND OF THE RESEARCH WORK

On the one hand the empirical research work about and among farmers in Hajdú-Bihar county is based on a social geographic survey in eastern Hungary, mainly in the Great Plain in the early 90s. On the other hand its bases are the surveys of the Agricultural Economical Research Institute that are dealt with small-scale producers (running back over the past decades) and individual farming (from the change of regime). From the above mentioned works we have chosen trends and guidelines for our research work that are still actually and can be suitable for the timely investigation of some processes.

The survey in 1993–94 in the villages of the Great Plain consisted of 2500 questionnaires and pointed out the reasons of the turnout of a producing group based on the family after the change of the regime, just as – as mentioned in the bibliography – it categorised the given producer group. Upon the results of the survey it has been stated that the multiplication of farms, that use mostly family members as labour, was mostly forced, therefore they can be considered as “forced enterprises”. This group was divided into three main categories upon the source of their income. Upon the answers family farms and enterprises can be classified into three groups:

- *Assisting farms*: the majority (more, than 75%) of their income comes from external sources. Family members do any work related to farming after work-time or they are pensioners.
- *Part-time family farms*: farms that have their income from employment and family farming in almost the same rate are the members of this group. The aim of production is not only self-sufficiency, but production for the market as well.

- *Family enterprises*: in their case they primarily or only have income from farming. It is a business-oriented activity that utilizes the labour and the capital of the family. This farming form covers usually the labour of one or two persons. There are permanent employees in the enterprises – still not that common (*Baranyi –Süli-Zakar, 1997; Baranyi, 2000*).

In the Agricultural Economical Research Institute deals for almost two decades with the investigation of farming circumstances and conditions, just as with the – indirect or emphasized – investigation of the farmers’ opinion and reactions (*Alvincz J.– Varga T (2000).: Situation of family farms and possibilities for the improvement of their competitiveness; Kaproncai I. (ed.) (2005): Characterisation of farmers’ adaptability – The answers of farmers to actual questions; Alvincz J. (ed.) (2001; 2003): The income-situation of agriculture and the affecting factors; The taxing of the incomes of individual agricultural producers; Tóth E. – Hamza E. (2006): The supporting capacity of individual farms and their role in living*). The methods and aims of our research work match the publications of the Research Institute in many aspects. They presume a full-developed research methodology and give us the opportunity to compare the representative national results with our conclusions.

### 3. METHODS OF THE RESEARCH

Two data collection methods were used during our research work: *primer* and *secondary* data collection. The source of the primer data collection was the *questionnaire survey* in our empirical research work. These data were completed with the valuable information from the informal interviews with the farmers who previously filled the questionnaire in. Beside the questionnaire survey, other *interviews* were made as well. These were colloquies, professional conversations, not standardised interview. The interviewed people were previously asked family farmers. Beside these, colloquies were made with officers, the specialists of the chamber of agriculture and the members of the local farming advisory board, as well.

We introduced and analysed the nearer (on the level of the county) and the wider (on the level of the region) farming conditions by the *secondary data*. The databases in

the survey rest on databases of the *TeIR* (National Land Development and Land Arrangement Information System) and *T-Star*, just as the collected and processed secondary data of the KSH (Central Statistical Office). The data of the General Agricultural Draft (*ÁMÖ*) in 2000, just as of the economy structure drafts (*GSZÖ*) in 2003, 2005 and 2007 have been processed in this work more emphasized. We performed our own research by a – in the social research activities common-used – *questionnaire survey*.

The latter method has many advantages: it is relative fast and suitable for the descriptive characterisation of large populations and we can easily have a secondary analysis from their data. Of course this method has some disadvantages: among others it has to be added, that it can't give us a whole report about the social processes in the natural medium of the survey-population, and it often covers the background information. To eliminate these deficiencies and to be able to confirm relationships (that are obvious in the survey, but statistically hard or impossible to prove) we used *qualitative interviews* as micro-sociologic method. This method is flexible, easy to execute and especially suitable for the investigation of phenomena that are hard to numerate and change in time. The interviewed people were chosen from the in the questionnaire asked farmers. We aimed to have a directed conversation rather than a directed interview. Experiences and information from the conversations were integrated into some evaluating and explanatory points of the dissertation.

The target population was chosen from the in the database of KSH registered agricultural, wild management, fish farming active farms, as sampling abundance. The number of filled out and evaluated questionnaires was 200. By the composition of the questions both *qualitative* and *quantitative* methods have been used. The survey was made in the years 2006 and 2007. The filling in of the questionnaires was partly made by the members of the local farming advisory board, partly at the programs of KITE PLC. and the Agrya – Federation of Young Hungarian Farmers (Figure 1). First we took up some test-questions to the sampling group of farmers. Upon the experiences we corrected the structure of the questionnaire and reduced the number of questions. It took about 60-70 minutes to fill a questionnaire in. Most of the questionnaires were filled in with the help of questioning people, but in some cases alone. In the first chapter questions related to the *main characters of the farms* were put up, therefore it collected the calibrating and quantitative data. In association with the operation and

extension of farmlands beside natural indexes (size of estate, owned and rented area etc.) we investigated the opinion of farmers, as well.

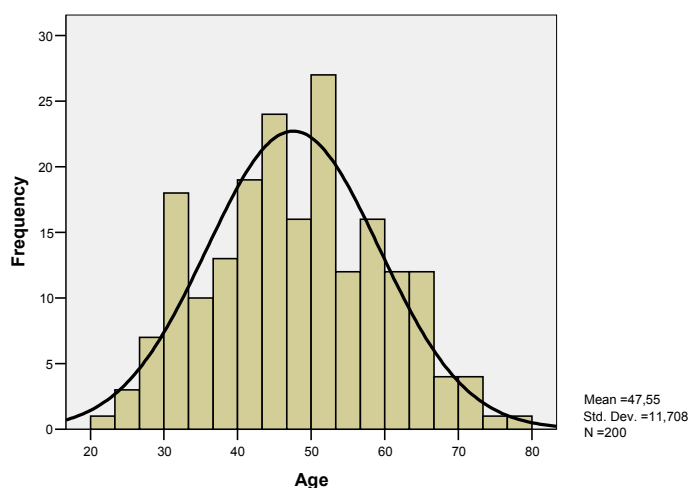
The *profit-production* and its *utilization* was a special group of questions. In this case we measured the subjective opinion of farmers rather than natural indexes in connection with the profit. Our basic aim is the evaluation and the label of the present situation and future plans perspectives. It was also important for us to chart and recognise the *external relationships* of farms. Hereby we had the opportunity to investigate the opinion and indirect reactions of farmers, beside the collection of basic information. At the end we put up questions in connection with the reactions of farmers to the European integration processes and with the *application- and support-facilities* of farmlands, completed with the surveying of information sources of farmers. The collected data were evaluated by the software SPSS 13.0 for Windows to find the right answers to our questions; beside this the figures were made by Microsoft Office Excel 2003, while the maps by the computer program GeoMedia Professional 5.1.



development of farming identity. Farmers themselves consider that agricultural production compared with other income facilities means a rather more negative possibility. It hinders the harmonisation of the dual production structure in a long-term period (Figure 2.).

Figure 2.

*The distribution of involved answerers between different age-groups, regarding the frequency of the valid answers, 2008*



Source: On the basis of empirical research self-edited

The *sex distribution* of involved people reflects the national and county conditions as well. 81.5% of the involved people are men (national rate: 86%), while only 18.5% are women (national rate: 14%). This fact lets us conclude that although farming is present in women’s lives, still they lead a farm rather rarely. In most of the cases they are represented as assisting or employed labour in the production. Regarding the *farming period*, 66% of answerers have been dealing with agricultural production – as a life-style or as secondary income facility – for *more than ten years*. 24.5% have been farming for 5-10 years. It can give us a favourable basis for the evaluation of questions in connection with the investigation of farmers’ opinion and reactions.

Regarding the *farming character*, mainly *plant producers* have been asked (51.5%). 37% of the answerers have mixed farms and only 11.5% deal with animal husbandry.

The reason for that was mainly that questions in connection with land use had a significant role in the survey that motivated us to have our questionnaires filled in at forums and training courses. The distribution of farming type in the sampling population is somehow different from the distribution in the county and in the region; still it represents the national characteristics. (Table 1.).

Table 1.

*Distribution of surveyed farms upon the aim and type of production, 2000, 2008*

| Farming type     | Sampling population | Hajdú-Bihar county* | North Great Plain region* | Hungary*       |
|------------------|---------------------|---------------------|---------------------------|----------------|
| Plant production | 51.5%               | 29.1%               | 35.5%                     | 40.1%          |
| Animal husbandry | 11.5%               | 31.9%               | 24.4%                     | 22.1%          |
| Mixed            | 37.0%               | 38.9%               | 40.1%                     | 37.8%          |
| <i>Total</i>     | <i>100.0 %</i>      | <i>100.0 %</i>      | <i>100.0 %</i>            | <i>100.0 %</i> |

*Source:* On the basis of empirical research self-edited

\*Data of the General Agricultural Draft, 2000

Regarding the *education* of farmers it can be stated that 34.5% of the answerers have a *secondary technical school* education. The second largest group (29%) has higher education degree and 13% has only basic skills. This distribution differs from the regional and county data of the census in 2001. Referring to the *farming state* the population consisted mostly of full-time farmers (57%), then of farmers who work after a full-time job in their free time (17%) and only 10.5% of the sampling population was part-time employed.

It is important to mention that 12.5% of the sampling population is pensioner. Altogether 43% of the asked population produces for the sake of additional income. Regarding the *operation confines* of farmlands it can be stated that the most of the farmers at present are husbandmen (46%), followed by family farmers (28.5%). The number of Ltd-s in the sampling population is some lower than that of individual farms; therefore farms – that are defined as *individual farms* – are represented in the sampling population by 84%.

#### 4.2 *The means of farms and their utilisation*

The use of labour in the farmlands and its evaluation is especially important, because it's a basic parameter. The surveyed farmlands have *in the average five employees*; the half of the answerers employs 1 to 5 people. The most of the cultivated area is cropland, while the second place is taken by grasslands. The demand on living labour is rather low in both cultivation systems. Only one percent deals with horticulture. The *resort to the labour of family members* is dominant in the individual farms; still *its rate is rather low*: mostly one person (the national average 1.92 men).. Analysing the *whole sampling population* it can be stated that *38% of the farmlands don't use any labour of the family members*. The half of the farmlands in turn uses 0-2 persons' labour.

The use of labour of family members shows a decreasing tendency on national and county level as well. In the personal interviews farmers have mentioned "to stand on more legs" as a basic cause. The consort or the children try to have a "sure" income from any other economical sphere. Beside this the labour of the family is present – but informally – in the farm and covers the most of the demand on living labour. Upon our results it can be stated that the role of agricultural employment has to be revised and redefined and its wider explanation would be reasonable as well. The closely, only as economical activity defined agricultural employment will not increase even by favourable marketing conditions; in a favourable case the number of effusing agricultural labour stops only.

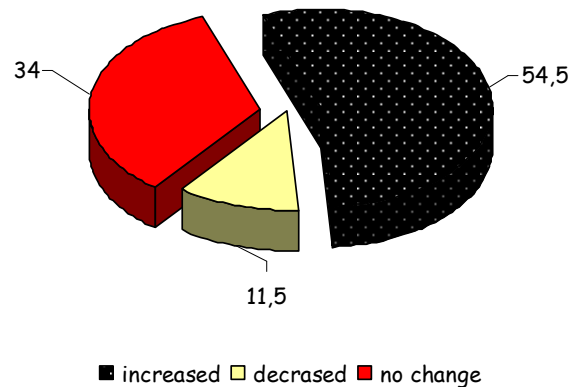
Agricultural production will be an elemental part of rural life in the future as well, among others because – whether it is only for the sake of self-supply or profit – it can eliminate the income-deficiency effectively. Upon the periodically issued regional development conceptions the developed areas and the high yields can be rated as strong points. Agriculture is still basically important for people who live in the sampling area; both as primer and secondary income. Beside this there is quite much available well-skilled local labour that can could supply the employment demand of the extended agriculture – by the qualitative change and development of human resources.

Agriculture as income compensating activity plays an important role in the life of active working and pensioners as well. At the judgement of their own income situation farmers were motivated by more factors. From these the strongest was a high and fixed distrust, in many cases fear. The *full-time workers judged their situation the most positive*, so the full-time agricultural production can give enough income to live on. The rate of those, who rated their activity to be absolute profitable, was the highest in this group. The judgement of the profit was independent from age or education, but the answers were influenced by the farming type. The operating priorities of farms were also in connection with the judgement of the profit. In farms where the development is the aim the judgement of the profit is positive. It is also important that none of the farmer groups stated that he or she would give up farming, not even if their farms were deficient. It confirms that *farms stand crisis relative high*, production has an important and fix role in the additional income production.

In connection with the resources we studied the area of the cultivated land, its affecting factors and the mechanisation of each production segments. *Regarding the cropland area* we concluded that most of the farms cultivate two or even three big, continuous piece of land and rarely on four or more. Regarding the *ownership of the estates*, the *first (largest) piece is mostly owned by the farmer*. The rate of rented cropland grows parallel to the cropland area, the number of plot of lands respectively, while the rate of self-owned area decreases. It is a favourable phenomenon that in case of 54% of farmlands *the cropland area increased since the establishment of the farm*. Within that 42.5% was rent, 34% was bought, 2.5% was gained by involving family members or business partners, 3% was donated, inherited or gained back as rent. These confirm the previously mentioned fact that farmers develop their cropland area mainly by rents. This indirectly shows that they have capital to mobilise for the sake of development and expansion and it is also informative regarding the national land market. The growing tendency of the farming estates confirms that although farmers judge the life-style and profit of the family rather pessimistic, still they develop their farms in the extent of their facilities (Figure 3.).

Figure 3.

*Changes in the cropland area since the establishment of the farms, in the distribution (%) of valid answers, 2008*



Source: On the basis of empirical research self-edited

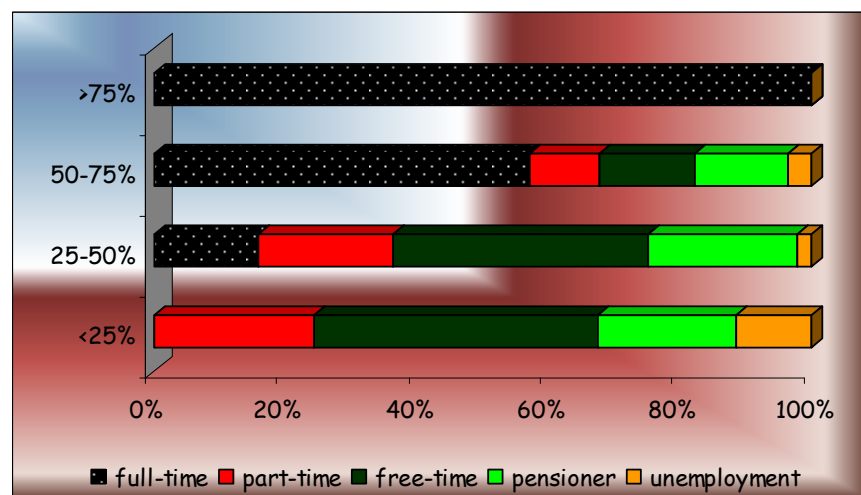
The *size of the farms in the average was 15 hectares* that is due to the fact that farmers produce to the market, while there are only a few farmers in the sampling population who produce for social self-support. The rate of production profit changes on a wide range, but because every farmer objected to produce profit, therefore the average estate size (rent and own) showed a favourable tendency. The average estate size per each group was the following: in case of full-time workers 48 hectares, in case of part-time workers 14.2 hectares and in case of farmers who produce in their free-time 18.7 hectares, while pensioners have 20 hectares and unemployed 4 hectares. The latter ones do social farming for the sake of self-support and self-supply. In case of any other mentioned categories the frequency stayed under 5, so we didn't involve them into the evaluation. As a result of the survey it was stated that the *concentration of the estates goes on continuously and shows an even favourable picture*. The mechanisation of the production is favourable on the whole; therefore the production level is ensured from technical aspects. However it is a negative fact that the mechanisation rate of product procession is rather low. This negative phenomenon could be remedied easily by the successful operation of farmer organisations.

#### 4.3. "Sensitive points" – Income production and utilization

The life-style that the family can afford to from its income is also in connection with the issue of income. *Adjusting the profitability of farmers* we didn't measure *profit production* upon indexes with absolute numbers (income, liquidity rate etc.) like it is done in practise, but upon the *subjective opinion and rate of farmers*. In most cases of farmlands *the income (from farming)* makes out more than 75% of the family income. Regarding the frequency of mentioned cases the next category is the income rate of 25-50%, followed by the answer category of the smallest income rate. The distribution of categories in function of the farming state shows a statistically significant relationship ( $p=0.000$ ;  $p\leq 0.05$ ). More than 50% of farmers ranked to the income rate category between 50-75%. Therefore it can be stated that to be a full-time producer farmers have to gain more than the half of their income from agricultural production. None of the members of not full-time producing groups are ranked to the highest category, most of them are somewhere under the rate of 50% (Figure 4).

Figure 4.

*Distribution of farmer states in function of the income rate from agricultural production, in function (%) of the valid answers, 2008*



$p=0,000$ ,  $p\leq 0,05$

Source: On the basis of empirical research self-edited

It is a positive phenomenon that in the category 50-75% the rate of groups that are not full-time workers is rather similar. Accordingly, agricultural production is a relative profitable activity; families rate them as important income source. *The role of agricultural production in the income compensation seems to be confirmed.* The rate of profitability is also related to the *operation priorities* of the farmland. In farms where the development is objected the profitability is more positive. It is primarily due to the fact that mainly full-time farmers have chosen this aim. “Sober minded” farmers, who object rather the maintenance of their farmlands rate their profit much more moderate, while the number of farmers who rate their farmlands deficient is quite high. This group consists of mainly pensioners and part-time workers. Still, it is a positive phenomenon, that despite all they don’t want to give agricultural production up. It confirms that farmlands survive crises in a relative high extent and that production plays an important and fix role as additional income.

As the results of our analyses show, the judgement of the family life-style is independent from the *status*, *age* or the *education* of farmers. This issue is also independent from the *farming type* ( $p=0.04$ ). However, there was a statistically significant relationship between the life-style of the family and the judgement of profitability. The most frequent mentioned answer category was the “sure living, solid savings”. So the answerers’ opinion is that farming is a sure source of income. The well-known economy-thesis that *farming means a real alternative in income compensation only over a definite extent* doesn’t match the results of the opinion survey.

The European Union supports agricultural producers and *income diversification* of rural people in a long-term. In case of this issue we got rankling results: 24.5% of farmers do any other by-activity. The *external income source* – unlike its animating role in the middle of the 90s – can be rated nowadays as “escape”. *Farmers try to choose their potential income compensating, supplying sources not closely related to agricultural production or rural life.* This fact calls our attention to the lack of by-activities and the low undertaking activity. Unbalanced market circumstances and realization problems have lead to mistrust against the branch; farmers don’t rate the offered and supported by-activities as profitable. Therefore the activities connected to

rural life should be revised in the future. The up till now preferred village tourism and handicraft are not viable in this region. The dominance of activities related to trade and services can give them a new and reasonable way. Beside the income diversification upon real demands should be the for more decades present regional differences taken into consideration.

Last but not least we asked – in the issue of *profit production and utilisation – how farmers see their profit in the next three years*. The rate of the answers in this case was the same as the rate of answers in the issue of estimation of the farming profitability. The latter case there is a significant relationship ( $p=0.01$ ;  $p\leq 0.05$ ). The most of them (42%) made stagnation the most probable. *Almost the same number of answerers has named better and worse profitability expectations*. Regarding the mistrust and pessimistic answering approach of farmers the arguments by the stagnation can be rated as positive phenomenon.

#### *4.4. With or by each other? – Cooperation and information flow*

The results of the empirical research work confirm the well-known fact that farmers produce even more by than together with each other. *Most of the farmers (64.5%) are not member of any production cooperation or organisations*. We observed that the lack of cooperation can be lead back to subjective causes. The lack of the motivation is caused by the *mistrust*. During the evaluation of questionnaires we observed a tendency of using and labelling categories both “the lack of trust” and “is not need”. At the start of the evaluation we had the hypothesis that the elder a farmer is, the more mistrust he or she has against producer organisations, respectively in conscious of his long (more decades) experience he would feel the membership unnecessary.

Although there was no statistical significance in this case and the deviation of answers was also rather high, it is definite that together with the higher age these causes are mentioned even more often. The main reason is mistrust and disinterest at all ages but mostly in the younger generation. It makes us a bit pessimistic regarding the future. The *low readiness for self-organisation and cooperation* has primarily *subjective causes* therefore the remediation of the problem will be quite tough in the

near future. The elimination of low- and misinformation, the revision of the effectiveness of the operating advisory board and the *knowledge of basic information sources* would be indispensable for the solution of the problem. It would help a lot to defence moral obstacles. First of all, a professional head that can collect farmers into an organisation and is able to operate it effective in a long term would be needed.

Regarding the *source of information, the most important is the television*, followed by the radio and internet. The main information sources don't have any filter, they are not controlled. Unfortunately *journals* that contain scientific and valuable articles and reviews are read only on a *very low level*. In case of the sources outside the media the local farming advisory board has a main role. It confirms the previously demonstrated fact that farmers have a high demand on advisement. It is an interesting fact that – regarding the frequency of answers – this answer was followed by the answer category “from other farmers”, namely *farmers mainly lean on information from each other*. Communication and conversation with each other is smooth and lively. Farmers reported in almost all cases in the interviews that they have daily contact to the surrounding farmers. So *the informal relationship, that could be the basis of self-organisation, is rather strong*.

The already operating *local agricultural advisory system has a main role in the information of farmers*. The most of the farmers in the sampling area have resorted to the advice of the expert. The demand on advice is mainly related to the *support facilities* and the connected administrative tasks. Administration and legal questions have dominated much more than questions in connection with production technology. From all these we conclude that *farmers have enough professional experience for the successful agricultural production, but they are deficient informed in administration and management questions*. For that – beside local advisory system – the organisation of informing occasions or the support of trainings on undertaking and management would be reasonable. Parallel to the higher age of the farmer the demand and the lean on the advisory work is increasing. We foreclosed the answers of the 18-24 years old group, for the frequency of their mentioned answers was too low. We made other correlation test, but the *answers* were not influenced significantly by the either the *duration of farming* or *education* or by the *form of farming*.

Beside we revealed the reasons for the low cooperation readiness, we aimed to survey the fields where there is any demand on producer cooperation, as well. The most expressed demand was related to the *common sale*, the *common advisory system* and the *supply and marketing safety* (that is ensured by an organisation). In this case education was an unambiguous influencing factor. 75% of the answerers were intermediate or higher educated, so they have a specific and expressed demand on cooperation. The further education of the farmer population and the higher employment rate of skilled labour in the branch will be a need in the future.

#### 4.5. “Through a glass, darkly” – Future

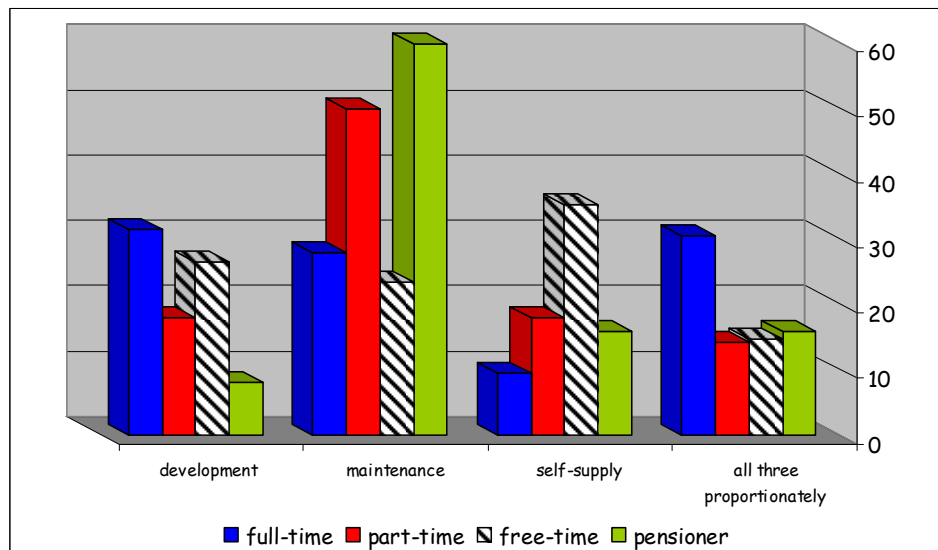
The judgement about the future of agricultural production depends on many factors. Unfortunately we didn't have the opportunity to deal with all of them within the confines of our research work. Future means for farmers mostly their future plans with their own farmlands. *Farmers consider the maintenance of the farmlands is the basic plan for the future.* So in their opinion farming is not only a permanent activity, but a long-term life-style. We also compared the farming state with farming priorities and found – in a not surprising way – a very close relationship between the two factors. The maintenance of the farmlands was an aim in the highest rate in case of pensioners and part-time workers. But the self-supply was an aim by the free-time workers, while development was the most important objective in case of full-time farmers. We found an *unambiguous relationship between the long-term aims and the form of the production.* Family farms showed the most balanced picture: their aim was mostly the further farm development, beside this the harmonisation of consumption, maintenance and development. The future plans of farms and the priorities of the activities determine basically the growth of the farm size. In farmlands, where the aim is the development and the harmonised operation, the size of the estates grows in a huge rate. The more positive the future plans are, the cropland area was extended in a higher rate during the past three years (Figure 5.).

The sources and their utilisation for these aims have capital importance for the future. The *resort to credit* was independent from age or education. Still it is

interesting that the lowest amount of credit was taken by the members of the basically educated group (23%); this group was followed by the group of higher – but not professional – educated farmers (27%). *The highest and lowest educated farmers resorted to credit in almost the same extend.* The involvement of credits as external means for the maintenance and development of the farms was typical in case of the full-time farmers; therefore it *depends on the status of the farmer.*

Figure 5.

*Relationship between farmer status and priorities, in the distribution of valid answers, 2008*



p=0.000, p≤0.05

Source: On the basis of empirical research self-edited

The willingness of farmers to get credits is independent from the duration and type of the farmland; still it is worthy of note that there is a statistically significant relationship between the income rate (from agricultural production) and the willingness of farmers to get credits (p=0.00; p≤0.05). The credit uptake highly depends on the operating priorities of the farmland; of course farmers who objected development and harmonisation of their farmlands took more credit up recently. Credit is henceforward not the primer source for development for individual farmers.

It is an important fact that the role of supplements from applications is higher than that of credit. It is true, although the credit uptake process is favourable in the farmers'

*opinion as well.* Upon the results of the survey it is not surprising that *the aims of the farm are closely related* ( $p=0.01$ ;  $p\leq 0.05$ ) *to the willingness to apply for additional sources*; the highest activity was measured in the group of farmers who object to develop their farmlands or harmonise the production aims. *According to the farmers' opinion the applications are basically important for a successful production.* In contrast to the credits, farmers consider applications to be basically important for the successful production. This fact indirectly confirms their lack of capital, and that marketing anomalies make (the anyway risky) agricultural production and its income unpredictable. It's totally different from the situation of ten years before, whereas farmers gained their sources for development mainly from family members or other people and from external income sources.

After the change of the regime many publications dealt with the question whether together with the privately owned estates agriculture based on peasant traditions also return. It was also a question if the post-peasant and the historic traditions affect the configuration of a new production structure. Two decades after the economical and social change we still can't define, what our agricultural system is like, what our future aims are. It seems to be sure, that the configuration of a transparent, well-operating production structure has failed. The problems connected to the agricultural production are often related to disarranged circumstances. For this situation many of the segments have their own responsibility. The failures of the privatisation law (e.g. to gain estate without any equipment, the re-compensation that lead to the subdivision of estates), a dynamically changing market, the too high or even too low evaluation of the social and economical role of the branch, and the ambivalent matching to the often different expectations and norms all assisted to the fact that both political leaders and farmers see the situation of farming "through a glass, darkly" at present and in the future.

## 5. NEW SCIENTIFIC RESULTS

1. A perspicacious empirical (questionnaire and prominent) complex survey was made for the first time among the population of individual farmers in Hajdú-Bihar county since the joint to the European Union.
2. As a result of the empirical research work we defined new status types of family farms according to the income from agricultural production. By that we succeeded to confirm the differences of family farms.
3. Upon the results of the survey the following scientific hypothesis was confirmed: in case of family farms there was a step-forward in the last one (and a half) decades to the direction of market oriented operation; still the studied farmlands have a rather narrow latitude and their activity is mainly determined by external circumstances. Between these activities there are quite a high number of “quasi undertakings”.
4. It was also proven that family farms survive relative well any crisis – despite the low profitability. Agricultural production has a fix and strong position as additional income for rural population, therefore the branch is of high importance in the region.
5. It is also an important result of our work that income diversification (based on real demands) of family farms as a break-out point would be viable and needed.
6. It has been also proven that national and European Union applications are dominant among all external sources (that have a positive influence on the operation and maintenance of farmlands). However, credits do not have henceforward any important development function in case of individual farmlands, that requires new internal and external development sources to be involved into the extended re-production in the future.

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