

DEBRECEN UNIVERSITY  
CENTRE FOR AGRONOMICS  
FACULTY OF AGRICULTURAL SCIENCES  
DEPARTMENT OF BUSINESS ECONOMICS

DOCTORAL SCHOOL OF MULTIDISCIPLINARY SOCIAL SCIENCES

Head of doctoral school : **Dr. Gábor Szabó**, Doctor of the Hungarian  
Academy of Sciences

"Propositions of the PhD dissertation"

**EFFECTS OF THE CHANGES OF SOME TAXATION AND ASSISTANCE  
CONDITIONS ON THE DEVELOPMENT OPPORTUNITIES OF  
AGRICULTURAL ENTERPRISES**

by:

**LAJOS JUHÁSZ**

Consultant:

**Dr. László Tóth**

candidate in economic sciences

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## **1. Aims of the research**

The *transformation of agriculture* during the change of regime was not based on economic considerations, but rather on political grounds. This meant that agriculture was not transformed in accordance with *economic rationality and efficiency*. The change of ownership in the 1990s resulted in the *crumbling of estates* and the greater part of arable land fell into the hands of those who had no links to agriculture whatsoever. The situation established by the *co-operative association law* made life more difficult for the majority of those who earned their living from agricultural activities, especially for members of co-operative societies.

Along with the change of ownership in agriculture *structural changes* also took place.

This was an *involuntary change of market*, which resulted in a significant decrease of domestic demand due to a fall in living standards, and agriculture has entered *market competition*. However, this competitive situation is *not a competition of prices*, but rather the *competition of subsidies*, since it is well known that the protectionist agricultural policy of the European Union ensures the market entry of agricultural products by providing considerable subsidies.

To solve the problems, a *strong agricultural policy and agricultural strategy* would have been needed, which on the one hand set the requirement of *actual market creation*, and on the other hand, demanded to *improve the efficiency* of agricultural production. In practice, no such strategy has been developed for more than ten years; instead, ill-considered measures were taken resulting in quick changeovers, which had to do with the urge to handle somehow the chaotic situation of the agricultural market.

To make matters worse, different political interests and priorities prevailed with the changes of governments, which *set small farms against large agricultural concerns*. Political considerations also underlined these debates, although the need to create a market-oriented and competitive situation was always emphasised, the position of agriculture has been steadily worsening, the efficiency of agricultural production has not improved, and we could not exploit the preferential quotas of the export possibilities provided by the European Union.

The aim of the dissertation, as described above, was to examine what deeper *economic relations* were shaping the situation as well as the *causes* leading to this state of affairs.

The economic environment is determined by market mechanisms and prices as well as state regulations, and has an effect on the business of enterprises and after all on their earnings position. Over the past decade, plenty of studies have been published about the changes of prices, especially those concerned with the agricultural gap (the gap between relative prices of agricultural and industrial products). The main conclusions of these analyses are widely known, so the dissertation does not provide a detailed examination of prices.

However, no comprehensive study has been carried out about how the state influenced the situation of the various agricultural businesses, especially their earning capacity and their development-innovation opportunities, through *curtailments* (taxes) and *subsidies* (mainly capital investment grants). By analysing this question in my dissertation, based on *empirical studies* and *model calculations*, I intended to quantify the losses agriculture has suffered over the past 10 years. By doing so, in a sense, I have also tried to call attention to some necessary changes in the state's controlling activities of the economy in order to recover from the crisis.

The accomplishment of this aim was considerably assisted by scientific research results and analyses, which have been continuously published in the literature.

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## 2. Background and the applied methodology

The topic I have chosen has been comprehensively elaborated and excellently analysed mainly by the staff of the *Institution of Agricultural Economics Research and Informatics*, who have made a significant progress, but a considerable number of other *researchers and economic experts* have also intensively studied some closely related areas. In the present economic situation, the *demand to further elaborate on the topic* has come up as a new requirement, on the one hand, because it is important

to know the volume of income that was realized in an economic sense (*economic profit*), or that of the disposable income of agricultural/farm businesses. On the other hand, in practice it is essential to know the volume of *development resources* the constitution of which is made possible by budgetary subsidies granted to realize agricultural investments and depreciation methods, and how these subsidies and methods affect the payback of investment.

Thoroughly detailed, national data about individual enterprises were available only to a certain limit, which made the elaboration of the topic difficult. This is why we also needed a *representative study*, which made it possible to carry out a detailed analysis where it was indispensable in order to accomplish the aim set by the research. The economic activities and results of a relatively large number of agricultural businesses (about 82) had to be thoroughly examined, extending over years. In the course of the *empirical study* I was keeping track of the *economic expenditures, the investments, tangible assets, development resources* of these enterprises and last but not least *curtailment and subsidy items* connected to their economic activities. The area I chose to study, for different reasons, was Csongrád county, which - judged by the results - proved to be suitable.

The farmers involved in the study had to continuously face numerous problems in the production process. They struggled with permanent financial strait, and they were left with an insufficient size of income due to the unsatisfactory quality of goods they produced, and the hectically changing market conditions. Practically no development resources were available, and agricultural investments could not be realized or only by raising a considerable amount of external resources.

The effects of economic regulators examined in the dissertation on enterprises can theoretically be measured with different methods. In the Hungarian literature *effective income and costs* are usually calculated from statistical- accounting data. However, the leading idea of the dissertation is to define and evaluate the effects of these regulators on enterprises by considering the possibilities they provided for enterprises, and the *possible development resources* enterprises were deprived of, which could have been served as a basis for development. This means that we have to determine the degree of *economic sacrifice* farmers have to (or should) make for the sake of unchanged but undisturbed course of business. What follows from this is that in the economic calculations the so-called “normal profit”, i.e., the *opportunity cost of the capital* should also be considered as a profitability requirement.

This method is widely used in economic literature, however, to the best of my knowledge, it has not been applied to agricultural businesses so far. By making use of this general method, I have created a *model* in my dissertation which seemed suitable for studying the problem from this aspect. I have identified two cornerstones of the method. I have taken the so-called norm-based requirement as one of the cornerstones, which according to the literature, equals the *long-term public securities market reference yield*. In theory this corresponds to the risk-free (having no market risk) yield, which, under normal market circumstances, is the lowest expected yield of tied-up capital. The other cornerstone was *inflation rate*, which I took into account in *present value calculations* in forming the discount factor.

I have considered two tax categories which determine income: *personal income tax, corporate income tax and dividend tax* (widely known as venture tax), as well as the *tax refund connected to energy use*, which is vital for agriculture. The third tax category included in the analysis was VAT (value added tax). Considering ordinary development resources it seemed indispensable to examine *depreciation* as well.

In terms of development, *investment grants* and *reorganisation aids* were crucial in the period examined. The detailed analysis of aids *provided for machines* was justified by their great importance and the availability of the relatively large database.

When calculating the return on investments, I took *the operative capital* as a starting point – which can be defined as the sum total of *depreciation expenses and after-tax profit* – then I estimated the value of *return on investments* and the *volume of the realized development resources*.

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### 3. Main conclusions of the dissertation

My starting point was that a rational, long-term agricultural policy has to ensure the return on capital tied up in agriculture, the circulation of tangible assets, the realization of development resources necessary for maintaining the technical standards, through measures taken to prevent overproduction, on the one hand and despite the agricultural output prices kept low for social reasons, on the other hand. In the present situation of agriculture, it is very difficult, almost impossible, to turn profit, since the prices of agricultural products are very low, input prices are high, the price gap between agricultural and industrial products is widening. This raises the question whether it is possible to correct the above tendency with the help of a curtailment and subsidy system, to enable agriculture to continuously meet domestic demand, to appropriately utilize the advantages of export opportunities, to produce the needed volume of marketable and exportable products by meeting the requirements of quality production. If the agriculture cannot meet these expectations, we should examine what changes are needed in the controlling system of economy to be able to carry out those tasks.

While surveying the *literature and laws concerning the topic*, we found that *tangible assets* of Hungarian agricultural enterprises are *extremely outdated*. In international comparison, the *income of entrepreneurs is very modest*, the *volume of state support* compared to EU countries is *extremely little* – only 1/5–1/10 of that. Hungarian taxation rules hardly gave any priority to agricultural production, the supporting system of the agricultural government – especially its investment support elements – was not only insufficient, but in respect of investment aims and forms, it was *also inconsistent*.

1. While studying the agriculture of *Csongrád county*, I concluded that following the change of regime a *crisis* evolved which was entirely similarly to the national situation. The *volume of production greatly decreased*, large-scale farming structure disappeared *without being replaced by an operational system of enterprises*. No specialized small-sector production evolved to exploit the comparative advantages of the county, *arable land became fragmented*, *tangible assets and plantations aged*, enterprises changed over to an *irrationally narrow cost control*, which made it possible to produce only *low-quality goods*. No sufficient income and innovation resources were generated either.
2. When studying *taxation rules linked to income*, it was established that the profitability situation of agriculture, following the change of regime, was almost continuously deteriorating, in spite of this, taxation rules did not make it possible to measurably improve the financial situation of agricultural businesses by providing appropriate extent of *tax-base reduction*, *different tax credits and tax exemption* in order to enforce special aims in agricultural policy.

3. In the analysis it could be revealed that the introduction of preferential *VAT rate on agricultural products* did not improve the financial situation of enterprises on the whole; to the contrary, their situation deteriorated. Paying the VAT imposed on agricultural inputs considerably increased the costs of agriculture at the very start of production. The bureaucratic tax refund system continued to worsen the liquidity of enterprises. On the basis of the data I found that between 1994 and 1998 the sum that temporarily “got trapped” in the budget, due to the changes in the VAT refund system, increased more than seventeen-fold, thus contributing to the intensification of liquidity problems.
4. With the introduction of *tax refund connected to energy use*, the agricultural government aimed to decrease the expenses of agricultural production and to improve the financial situation of enterprises through the curtailment system. In studying the refund of VAT/excise tax of diesel fuel, this controlling measure proved to *improve the situation of farmers* only to a *very little extent*. Due to the continuous rise of diesel fuel price, the tax built in the price was also rising, which increased the *financing demand* of agricultural production and the *cost price* of agricultural products, so it did not have a cutback effect, at most we can talk about a moderation effect on cost increase. (Figure 1)



*Source:* Act No. LXXXVIII of 1991. Supplement 1; Act No. LXXXVIII of 1994.; Act No. CIII. of 1997

*Figure 1* Refundable proportion of VAT/excise tax of diesel fuel between 1993-2000

5. It is extremely important to choose the appropriate one from the different depreciation methods, and to adopt eligible *corporate-enterprise depreciation policy* in agriculture, since its *tax respiting* effect has an influence on the earnings of agricultural production, and its development resources. In studying taxation rules it could be established, that the method and norms of depreciation, as stated in the taxation rules, do not allow for the perfect *functioning of depreciation as earning control*. This is the consequence of the inconsistency between accounting regulations and taxation rules.
6. In the course of the research carried out it was proved that *invitation for investment grant tenders* were not carefully thought-out, the volume of financial instruments for assistance proved insufficient, the neutrality of sectors was guaranteed only in theory, which resulted in the *fragmentation of subsidy resources*, while *constrained enterprises* emerged, or support went to businesses which could not use it efficiently enough.

The volume of agricultural investment grants which were restarted in 1992 by the government was increased very modestly until 1999, except for machinery (Figures 2 and 3). This confirms that the government had no appropriate agricultural strategy, after all it barely allowed for the replacement of worn-out tangible assets of agriculture and raising of its technical standards.



*Source:* Own calculation based on Alvincz, 2000

*Figure 2* Changes in agricultural investment grants between 1993-2000 (national)



Source: Own calculations based on the data of Csongrád County Office of the Ministry of Agriculture and Regional Development

Figure 3. The value and support/assistance of agricultural investments (1993-1999)

7. By means of model calculations based on empirical data it was also proved that due to *insufficient investment grants* financed from the budget, their extreme fragmentation and their allocation to low-efficiency areas, farmers *did not generate investment resources worth mentioning*, the realized income did not cover more than the demanded capital for the assets tied up in production. This meant that due to a significant resource gap, agricultural enterprises could finance their investments only by *restricting their own consumption*, and relying on relatively *significant external resources*, which in many cases resulted in diminishing the value of grant, or shrinking of agricultural tangible assets.

Furthermore, I have experienced that after the termination of interest *subsidy of the long-term working capital loan*, *liquidity problems* of producers started to arise more and more powerfully. The constant rise of agricultural input prices and the low price level of agricultural products, insufficient income and the pressure to maintain production plunged the farmers into a *narrow cost control* and a *process of exhausting capital and property*. Perceiving the problems, in 1996 *capital replacement loan facility* was introduced. However, this form of crediting served only as a compensation for a part of the used-up property and did not provide for the expansion of investments. The future of those who took out the capital replacement loan was made even more difficult, since they involved themselves in a *significant debt service commitment*, which decreased their net income.

8. By comparing the *call for tender of the reorganization programme for increasing exportable commodity funds* and the implementation of the programme itself, I have come to the conclusion that the market conditions and the targets of the programme were not in accord with each other, the call for tender was too general, and following the invitation for tender it could already be seen, that the aims set by the programme will not be realized. The genetically high-quality livestock, which are indispensable in order to produce marketable and exportable animal products, were only partly available, there was a lack of *high-level professional expertise* which is necessary to produce exportable goods, and there were not enough *financially stable family businesses* either. The tender did not provide *direct investment grants* for the renovation and modernization of out-of-use animal stabling.

The fundamental aim of the reorganization programme for increasing exportable commodity funds was to significantly increase the amount of Hungarian *exportable animal products* so that we can make the most of the *preferential quotas of the Association Agreement*. There was hardly any increase in the number of animals, the farmers were not able to produce export-quality goods, the rural development effects of the programme were negligible. Based on the empirical study and the model calculation I have come to the conclusion that the assistance *did not accomplish its aim*. The market prices of the products were low, so the majority of the enterprises did not manage to

generate investment resources, indeed, rather using up property and indebtedness became typical. Financial instruments of assistance diminished, the bulk of temporarily filled up animal stabling became again empty within a short time. The failure of the programme is demonstrated well by the fact that the originally five-year-commitment of the tender was reduced to three years by the government itself.

9. By studying certain subfields, several general conclusions can be drawn which are rather “common talk”, however, they are expressed only at the level of intuitions. This was the first time that it could be supported with hard facts and calculations, that following the change of regime all along there was no *agricultural policy and -strategy* which would have grounded the necessary transformation of agriculture and the long-term capability of the development of agricultural enterprises. Measures of agricultural control which would have ensured the profitability of agricultural enterprises and the development based on it were not taken.

*Individual regulators were not incorporated in a consistent system*, the forms and rates of regulatory measures were inappropriate, their temporal changes were largely *accidental*, ill-advised. The creation of these programmes was not *future-oriented*, instead what dominated was always some current, “fire-fighting” type of intervention depending on political changes, whenever a new market anomaly occurred, new targets were set, and the system of terms for tenders changed from time to time.

According to the findings of my empirical studies it can be claimed with a great certainty that there *was no preliminary analysis of efficiency* as to the aims and volume of the different forms of assistance, they could not estimate well the expected inflation, the agricultural government and the agricultural lobby was completely divided, and as a result of this they could not counterbalance fiscal restrictions. The forms and methods of curtailment and support were not selective in respect to assist only those enterprises which could be capable of producing competitive goods. As a result, relatively many investment resources were given to businesses where they were used with very low efficiency, or capital resources left agriculture once for all. The national and Csongrád county data, the model calculation and empirical studies carried out all reinforced the general statement of the literature, namely that the *assistance system of agriculture is not EU-conforming yet*. In the competition of subsidies domestic enterprises have a huge competitive disadvantage, which is primarily due to the inappropriateness of subsidy resources.

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#### 4. New and novel findings of the dissertation

Given the nature of my topic, new and novel findings on the one hand come from how the economic regulation could be made more effective and selective, more enterprise-friendly and consistent. On the other hand, it should be mapped out what agribusinesses would need to improve their financial position and earnings capacity, to raise more funds for development, and thus achieving that the accession to the EU would mean for agriculture as little shock as possible and those living from agriculture would make the least sacrifice possible.

1. In studying VAT refund, I found that thanks to the preferential VAT rate of agricultural products, joint and sole agribusinesses took a *net VAT reclaiming position* in the second half of the period examined. Although it resulted in that VAT functioned as a negative tax, however, due to *the big burden to finance VAT on the input side and the length of time VAT refund needs* – which

requires to tie up significant funds for a long time already at the start of production and the lost yield of VAT is also significant – the financial position of agriculture deteriorated after all. The explanation for this is that VAT-affected agribusinesses provided an ever-increasing and relatively high (almost HUF 15 billion in 1998) current financing resource for the state, although the opposite case would be required in a preferred sector.

2. I elaborated new *models* to compare *different depreciation methods*. By using these calculations, we justified that – in the case of agricultural machinery investments – applying *digressive depreciation* would have been more beneficial against linear one, since, on the one hand, it would have increased the size of *discounted operative capital* by almost 3 percent relative to tied-up capital, which means an even bigger loss of earning in expense ratio. On the other hand, by increasing the turnover of investment, it would have improved the *return period* of agricultural machinery investments (Table 1). The liberation of linear depreciation rates presently fixed in taxation rules would favourably affect the development resources of agricultural production.

*The effect of linear (permitted by Taxation Act) and digressive depreciation  
on the return on machinery investment  
(model calculation for machinery investment made in 1994)*

Table 1



- <sup>1</sup> calculated by reference yield of long-term government securities
- <sup>2</sup> calculated by the rate of company tax
- <sup>3</sup> sum of depreciation of after-tax profit
- <sup>4</sup> calculated by investment price indices
- <sup>5</sup> calculated by the SOYD method

Source: Own calculations (Juhász, 2001)

3. Using the model calculation, I quantified the *negative effects of recent inflation* on the depreciation resources of agriculture. The model calculations showed that, partly, there was a significant *drop in the machinery value recovered by depreciation* – which barely exceeded 50 percent in the period examined – partly, it *increased* the companies' *pre-tax profit* by the same amount, which raised the tax payable, partly, because of the aforementioned, the size of *operative capital resources* (Table 2).

*The effect of linear (set by Taxation Act) depreciation on the return on  
machinery investment  
(model calculation, machinery investment made in 1994)*

Me:% Table 2



Source: Own calculations (Juhász, 2001)

4. By examining the *tax, tax concessions, tax refund* related to energy use *and depreciation*, we can say that the regulation, which disregarded inflationary



factors, caused direct and indirect *disinvestments* in agriculture, and indirectly decreased its *development funds*, the “reward of innovation”.

*The effect of linear depreciation adjusted by inflation on the return on machinery investment  
(model calculation, machinery investment made in 1994)*

Me:% Table 3



Source: Own calculations (Juhász, 2001)

As the table shows, a regulation, which takes into account the inflationary effects, depreciation resources would have provided 90 percent return on the value of agricultural machinery in real terms.

5. *Estimation of the size of empirically expected earnings* of investments. In relation to the basic logic of model calculations, I carried out model calculations: in agriculture, the earnings remaining with agribusinesses – which should allow for proper development funds in agriculture – can be estimated by knowing the risk-free yield, the rate of which is greatly influenced by the current inflation. In the model calculations I found that the *expected rate of return on equity* in agribusinesses – between 1993 and 2000 – should have been *6 to 15 percent*. In contrast to this, Udovecz (2000) calculated that the actual rate of return on equity, i.e. in 1998, was 3,7 to 4 percent, which further deteriorated by 50 percent in 1999, and ran at only 1,8 to 2 percent.
6. The findings of the study of return on investment also showed that the *shortage of investment assistance* and the almost complete lack of support *to revolve the long-term working capital* connected to investments forced many producers to *take out big loans* to ensure continuous production. This in turn resulted in that agribusinesses' *debt burden* rose, which also contributed to increasing indebtedness, the deterioration of agricultural workers' position.
7. The requirement of capital assets return tied up in production as an economic guideline should be ensured also in agriculture through the controlling system of economy. I quantified it by *model calculations* to determine *the expected rate of return on machinery investment*. I made the model calculations by using the discounted after-tax operative capital and the risk-free yield of capital tied up in production. The calculations show that the *reward of innovation* for agricultural machinery investments made between 1993 and 1995 intended for 7 years use should have approached 4,5-5 percent level of earnings capacity, with 6-6,5 years annual return and a turnover value of nearly 1.05 (Table 4).

*The expected rate of return on machinery investment  
(model calculation: 30% own resources, 15% loan, 25% redeemable and 30% non-redeemable government assistance)*

Table 4



\* machine value is 100, calculated with the depreciation rate in the taxation act (7 years)

\*\* reference yield of long-term government securities

\*\*\* calculated with the price index of machinery investment, less capital payback  
\*\*\*\* opportunity cost of own capital

Source: Own calculations, 1996-2000

8. I also managed to show that agribusinesses had to face agricultural *significant shortage of resources* in every targeted area of investment – 50 to 70 percent in my estimations –, which greatly hindered the realization of new investment. A relatively small sample proved that carrying out different agricultural investments did not bring in the profit from the production process to allow for the generation of sufficient development resources. The above fact makes it indispensable to *significantly increase investment support*.
9. The findings of *the impact study of investment grants* intended to increase *exportation* show that *non-redeemable basic investment grants* would have also been necessary is (Figure 4). The default of this support resulted in that businesses had to obtain relatively big external funds to start the reorganization investments, which brought about comparative disadvantage, since it made production more expensive and decreased the profit of the enterprise and its innovation resources.



Source: Own calculation, 1996-2000

Figure 4 Estimation of “Basic investment grants” in the reorganization programme (Csongrád county)

## 5. Practical use of the findings

The problems arising from the topic and the findings of empirical studies demonstrate that both agribusinesses and domestic budget need the allocation of a relatively significant financial and mental resources in agriculture to reach a measurable improvement in the present crisis of agriculture, an EU-conforming agricultural strategy as well as curtailment and subsidy system. The practical use of research findings is mostly connected to some elements of curtailment as well as to empirical studies and model calculations of agricultural investments and special investments to increase exportation.

1. The practical significance of *norm-based aspect* used in the calculations and *return as an economic guideline* is that they help carry out an *impact study* of controlling elements of curtailment or subsidy, and the *estimated market price of tied-up capital* in production can be clearly determined, as well as the “*innovation reward*” of businesses. In the case of insufficient generation of innovation resources, feedback is possible to change the controlling item, to adjust it subsequently.
2. The model calculations I developed to *compare different depreciation methods* make it possible in practice to *determine the most appropriate depreciation policy* for the agribusiness, thus enforce the *profit-controlling function of depreciation*, and ensure the biggest operative profit possible. To ensure the above, however, it is necessary to “liberate” the depreciation norms set in taxation rules.

3. The model calculations related to *inflation-adjusted depreciation* can be applied in two ways. Firstly, they help determine the size of *disinvestments* in agriculture caused by the present value of depreciation not following up – the current taxation rules and accounting act in effect permit only such depreciation – secondly, the *present value of depreciation following up on inflation*. Determining the latter helps establish the size of depreciation-related shortage of resources in agribusinesses if inflationary effects are disregarded in curtailment controlling systems.
4. *Model calculations* can also be used which are connected with production and investments, and which, on the one hand, help determine the size of average *expected earnings* (earning capacity) in agricultural production, and on the other hand, they also help estimate the discounted operative capital of a business in the case of machinery investment or any other agricultural investment. The above model calculations can also determine the *capital need and expected shortage of resources* of different agricultural investments.
5. The study of agricultural investments and the special investment programmes for increasing exportation was done partly by using *model calculations*, and partly by *statistical regression calculations*. The practical use of applied techniques is that they may provide a *methodological basis* for subsequent analyses. The findings will in turn reveal that the proclamation by the agricultural government of an economic controlling system without an *impact study* can lead to the diminishment of subsidizing funds, while the aims set will not be met.
6. Studies of VAT show that moderating the VAT burden related to agricultural inputs could reduce the unfavourable impacts of VAT. Findings in the *tax refund of diesel fuel* throw light to that the complete refund of excise tax of diesel fuel may effectively reduce the input side-financing burden of agriculture.
7. There is a need to consistently distinguish between the subsidizing methods of sustainable, *market competition-based businesses* and *constrained enterprises* assisted on the basis of their social condition. Businesses which have a potential to develop and efficiently use resources should be given assistance whose amount would partly allow for *bigger and more beneficial investments in terms of technical standards* – which is vital for the coming accession to the EU – and partly *new forms of subsidy* should be introduced which would make it possible to realize at least the expected yield during production. The less capable farmers or who produce near the breakeven point should also receive more assistance, but the main stress should be on the promotion of alternative rural activities (tourism, environmental and landscape reservation, organic farming, etc.) and *social subsidies*, which could ensure the expected living standards of those who produce with low efficiency or at a loss. It should be made possible that farmers in *regions* with special microclimatic conditions and landscape produce *marketable and exportable products*. To ensure it, *tax concessions and special subsidies* should be introduced to create a *small sector as well as a product structure* making use of comparative advantages, which can mostly operate in the framework of family businesses.

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## 6. Publications on the subject of the dissertation

- A nyereséget eredményező tejhozamszint meghatározása.

Gazdálkodás. 1990. 34. évf. 10. 28-32.p.

- Determination of milk yield level resulting in profit.

Hungarian Agricultural Review. Periodical of the National Agricultural Library.  
Abstract. 1991. N<sup>o</sup> 3.

- A kisgazdálkodási termelés főbb ökonómiai, szervezési összefüggései.

Gazdálkodás. 1992. 36. évf. 6. 39-35.p.

(Társszerkesztők: Vizedák Károly, Király János)

- A kisgazdálkodók helyzete és lehetőségei.

Kistermelők Lapja. 1992. 4. 5.p.

(Társszerkesztők: Vizedák Károly, Király János)

- Tejtermelő családi vállalkozás gazdálkodásának tapasztalatai és perspektívái.

IV. Agrárökonómiai Tudományos Napok (1994. március 22-23.).

GATE Főiskolai Kar. 330-334. p. Gyöngyös.

(Társszerzők: Mónusné Goda Ágnes, Szöllőssy Károly)

- A fenntartható mezőgazdaság értelmezése a nyugat-európai gondolkodásban. Tiszántúli Mezőgazdasági Tudományos Napok (1997. június 12-13.). 136-137.p. Karcag.
- Az export-áralap növelő reorganizációs program mezőgazdasági és vidékfejlesztési hatásai csongrád megyei tapasztalatok alapján.

VI. Nemzetközi Agrárökonómiai Napok (1998. március 24-25.). Gyöngyös.

- Mezőgazdasági támogatás hatása néhány főbb mezőgazdasági termék jövedelmezőségére Csongrád megyében. A versenyképes magyar agrárgazdaság az évezred küszöbén.

XL. Georgikon Napok (1998. szeptember 24-25.). Keszthely.

- Az export-áralap növelő támogatás főbb hatásai. (Csongrád megyei esettanulmány.) Terület- és vidékfejlesztés az EU-ban és Magyarországon. Nemzetközi Tudományos Közéleti Konferencia (1998. november 23-24.). Ajka.
- A tejtermelés elemzése különös tekintettel a támogatás hatására a jövedelmezőségben.

Debreceni Akadémiai Bizottság Székháza (1999. március 24.). Debrecen.

- Vállalatgazdasági irányelvek. In: Gazdálkodók zsebkönyve. Mezőgazda Kiadó. Budapest. 1999. 285-311.p.

(Szerkesztette: Mucsi Imre – Szabó János)

- A beruházás-megtérülés néhány tanulsága Csongrád megyében.

XLI. Georgikon Napok (1999. szeptember 23-24.). Pannon Agrártudományi Egyetem, Keszthely.

- A tejtermelés helyzetének elemzése Csongrád és Hajdú-Bihar megyében.

II. Alföldi Tudományos Tájgazdálkodási Napok (1999. október 7-8.). 3. kötet, 58-63. p. Mezőtúr. (Társszerző: Búzás Ferenc Ede)

- A búzatermesztés ökonómiai elemzése Hajdú-Bihar és Csongrád megyei mezőgazdasági társas vállalkozások esetében.

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- Hajdú-Bihar és Csongrád megyei mezőgazdasági vállalkozások cukorrépa-termesztési eredményeinek ökonómiai elemzése.

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