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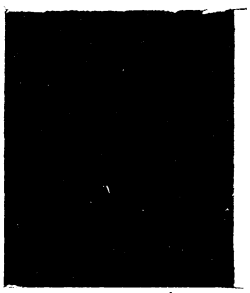

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AGRÁRGAZDASÁGI KUTATÓ INTÉZET

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ABSTRACTS

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Director General:

dr. Béla CSENDES

Edited by:

Ádám BISZTRAY

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Editorial Office:

RESEARCH INSTITUTE FOR AGRICULTURAL ECONOMICS
H-1355 Budapest 55., IX. Zsil utca 3/5.

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PREFACE

We compiled the first ABSTRACTS Number of our BULLETIN Series one and a half decades ago.[+] The task of this undertaking was to inform our scientific partners abroad about the results of agricultural economic — agricultural political research work carried out in this Institute which were formulated at first in the special literature, in the publications of the Institute and in papers for periodicals of Hungarian language. The Bulletins embracing and reviewing the publication of these one and a half decades[++] are organically linked on the one hand by the current research program of the Institute and reflect on the other hand outlines of the development of Hungarian food economy as well as related with the changes of economic policy also the transformation of our research work.

The arrangement of the present Abstracts follows the former traditional system of editing, the alphabetical order of the names of the authors namely. Since the papers published here can only partly represent the renewed agricultural policy, the structural transformation process of our food economy which but recently commenced therefore it seems necessary to outline the substantials of the Hungarian agricultural reform and its fundamental tasks in an introductory paper.

Budapest, April 1989.

THE EDITOR

[+]Bulletin No. 35.

[++]Abstracts of publications issued in 1973.- Ed. Ádám BISZTRAY, Budapest, 1975-1989. Research Institute for Agricultural Economics. Bulletins No. 35., 39., 41., 47., 50., 53., 56., 57., 59., 63., 66., 69.

CSENDES, Béla: New agricultural policy - the renewal of agriculture

New agricultural policy is needed! In the interest of society as a whole Hungarian agriculture must be renewed. Agriculture will be able to act in the future its social-economic stabilizator and in certain cases stimulator part only if the revivification of the affection for land, of the farmers carefulness, of readiness to initiate and of the peasant values could be achieved. The equality of rights, the safety of the existence, the evolving of local community forming activities as well as the enrichment of the moral values of the agricultural producers, of people living in the villages and rural settlements are all urging on the new agricultural policy. Its conception breaks with the past in several respects and its content is enriched. Each substantial characteristics cannot be embraced in the scope of one single paper we are trying therefore to treat here only some major new traits of this very sophisticated complex in the forthcomings.

After 1956 the Hungarian agricultural policy broke with the roughest and most flagrant mistakes of the Stalinian agricultural policy. A new agricultural policy was initiated which brought significant success. The results manifested themselves mainly there were the breaking with the former deficiencies has been carried out. The necessity, however, of the new agricultural policy cannot be justified at present only by the intention that the liquidation of the former mistakes of the agricultural policy should be consequently pushed through now but also by the endeavour to create such production relations and enterprise types in agriculture which are receptive for quality requirements and render possible rapid and flexible adapting to the market relations because they rely upon human readiness to initiate, on enterprising and on assuming of risks and provide

terrain for them. These all are not to be done without to achieve significant improvement in the competitiveness of Hungarian agriculture.

The building up of market economy is the most important task with which we are confronted. The reform of property makes an indispensable condition for that. We need real owners because without them the market is unable to function.

Under the diverse types of central control - let us call them control of the Stalinian type, state of the Party, direct control or else - the presence of real owners impeded the enforcement of the central will. Therefore the implementing of the central economic and political conceptions are necessarily accompanied by the abolishment of certain property types and by the creation of other collective ones where these latter are subordinated to the central will without conditions and consequently the direct producers are in fact not owners, so a type of property came into being which is inconceivable, unknown and uncontrolable for them. Under circumstances like this even within the scope of common property the labourers got into a hierarchical dependence from the central decision makers and from the local ones assisting the former, the traditional peasant values were repressed just as the initiatives and risk assuming of the direct producers did. Their interestedness became typically that of the wage-workers also in the cooperatives. The same process took place also under the changed agricultural political relations which followed 1956.

A realistic market economy - in contrast with the aforesaid - cannot function without real proprietors. Therefore the new agricultural policy should tend to the establishment of real proprietory relationships and of interestedness based on the former. The creation of real proprietory relations means that the existing property relations of the state farms and of the farmers' cooperatives should be transformed and possibility should

be provided for the agricultural labourers or for people wishing to work there to act as undertakers. This undertaking can be carried out on the ba-- sis of tenancy or of ownership. Terrain should be provided also in agricul- ture for the evolving and rivalry of the diverse types of property and the establishing of diverse enterprise sizes should be furthered upon this basis.

I think that the way how the question is put is faulty whether the new agricultural policy is pro or against the large-scale enterprises. Without variegated property types and enterprise types the competitiveness, adjust-- ing capacity and efficiency of Hungarian agriculture cannot be improved. Neither mixed property nor variegated enterprise types can be called into being without carrying out changes in the way of functioning of the present large-scale enterprises.

Several large-scale enterprises became aware already earlier of the idea that the inner relationships of interestedness should be transformed. Inner undertakings, production units based on either tenancy or on flat rates were created in a significant number. The managers of the large-scale enterprises, however, restrained these types of farming to certain limits and followed this way only to a point where they found it advisable within the scope of the present regularization system and ideological conceptions. For the end that this process should better evolve and the diverse types of undertaking should gain correct ratios - over and above the changes taken place in the ideological conceptions and regulators - cooperative inclina- tion and competitive situation should be more prevailing since only this can incite the large-scale enterprises to the application of the most ef- ficient types of production organization. Therefore the all embracing ex- tension and monopolistic position of the large-scale enterprises must be broken.

The large-scale enterprises dispose at the present of monopolistic

rigths concerning the property and use of land. Without changing this situation no significant property reform can be conceived.

It is at least as much important to point out that property reform is unrealizable in the case if the farmers' cooperative or the state farm represents only a one-way street to join to or to create it is though possible but to leave it or to wind up the cooperative is impossible or if the member cannot withdraw his assets or land from the large-scale enterprise. The transformation of the large-scale enterprise to a one-way street is a characteristic attribute of the Stalinian agricultural policy.

To render possible their winding up or leaving and to break the monopolistic positions would mean that labourers working in the large-scale enterprises would be enabled to alter their present situation and relationships and if needed to press the cooperative management to transform cooperative activities and the way of operation in compliance with the intentions of the members. If we exclude the possibility of leaving or the liquidation then the members would be deprived from the most important guarantees of selection, real decision making and interference.

In agriculture property reform is inseparable from the re-settling of the landed property relations. This re-settling means first of all the evaluation of land. Without that this fundamental production factor cannot be organically and reasonably fitted into farming. It means moreover the sale and purchase, free use, leasing out and leashold of land as commodity and as capital. If we do not allow the free buying and selling of land then we cannot render possible the variegated types of farming and we make impossible the agricultural activity of those producers who are willing to be engaged as owners in the production.

Land is at the same time a particular capital, a particular commodity which has especially many peculiar characteristics under the present pre-

vailing relations. Without realizing and correctly treating this the main functioning of the turnover and use of land is inconceivable. I should like to allude here to some of these problems.

The ratio of the private landed property of the cooperative members is still significant while the land is in collective cooperative use. This private landed property should be maintained also in the future and only the owner should be entitled to dispose of this land in the case of purchase and sale. The payment of a land rent corresponding to the real conditions should be allowed for the cooperative use of these lands.

Significant part of the cooperative lands is in cooperative property. The members do not feel this to be their real property. This situation must be changed. As far as this changing is concerned the problem may arise that in the case if the land of a cooperative member or of his parents has been earlier redeemed by the cooperative then this land should return to the property of the cooperative member for a compensation corresponding to the amount of the earlier redeeming. It can also be pondered that based on a collective cooperative decision the land owned by the cooperative should nominally be distributed among the members. This distribution would not mean the creation of property and therefore if e.g. the cooperative ceases to exist or the member leaves it then the nominal landed property would become private property only at the expense of paying the price of redeeming. The nominal landed property at the same time entitles the cooperative member to get a land rent from the cooperative incomes. It is, namely, inconceivable that without a rent the cooperative member could be made really interested in the possible best use of the cooperative landed property.

A particular task is to impede that the large-scale farms could bargain away the land at a price lower than its value or consume it in the

form of personal incomes.

It is frequently characteristic at the present that a cooperative farm embraces 5-6 villages and therefore the danger exists that the management of the large-scale enterprise sells out the land of one of the villages. This is the reason why the intervening, preemption and decision making competences of the cooperative members of the respective village or of the interested municipal bodies in such cases must be made clear.

The idea that part of the indivisible assets of the cooperatives should be made distributable and in the case of leaving or of the liquidation of the cooperative the assets should be distributed among the members is already generally accepted at the present. These all are really indispensable elements of proprietory existence and consciousness. Here, however, the essential requirement is that the fixing of the ditributable part as well as the decision about the principles of distribution should remain in the competence of the cooperative community.

All the above described circumstances create a new situation in the cooperatives, offer new opportunities for the members and may open the way for the re-settling of the way of functioning of the cooperatives. The concrete way of solution and pace of re-settling can be implemented in dependence with the intentions and will of the participants and at a rate which they deem necessary. Nobody can either be made proprietor or be excluded from proprietorship against his own will. The reform of property can evolve in course of an organic development, based on the respective partners and locally in the most variegated forms. The rapid and radical, campaign-like breaking of the organic processes being present in agriculture as well as the forcing of contrived and simplified theses caused - in the past - many damages in both the economic and social spheres. This is an important lesson also for the present. The simplified,

contrived schemes which are strange from life should be avoided and broad terrain should be provided for multifarious, variegated, clever solutions which adapt themselves to the existing conditions. The only task of the government can be to clear away the obstacles deriving from the ideology, legal rules or the system of regulation which impede at present this organic development started from below.

The reform of property does not render the large-scale enterprises unnecessary but transforms them to cooperatives serving the interest of the members where the administration of the estate, the organization of the undertaking, services, integration, advisory activities, the democratic functioning of the forums of the members are put into the fore of the cooperative centre's operations.

Certainly an organic development built up from below and released of the impeding factors would bring initially the evolving of the inner undertakings at a greater scale, the system of tenancy into prominence. It is to be hoped that this would start farming based on family or individual property but the broader extension of these types can be expected only later. Their coming into being largely depends on the progress and realistic functioning of political pluralism, on the steady long term legal safety and on those conditions which are related with the reformed operation of the systems of prices and of regulation, with the production means supply, etc.

Since it liquidated the real proprietory relations therefore the control enforcing the central will which pushed through the process consequently led necessarily to a system of the prices and regulators which did not provide incomes sufficient at all for making possible ownership from this aspect. The Stalinian agricultural policy was necessarily accompanied by a producers' price system not covering even the costs of production and by

a pressed consumers' food price system based on an ideology referring to socialism.

The implementing of the property reform postulates also the changing of the agricultural price and income relations. Those opinions cannot be maintained according to which no radical reform is needed in agriculture only more money should be allocated to this branch of national economy. This would mean the postponement of the reform! But also the other opinion is intolerable that property relations must be reformed while the improvement of the price, taxing and income relations is unneeded. This opinion if enforced would make the reform or property impossible.

In course of the past three decades Hungarian agricultural policy broke with the most glaring mistakes of the Stalinian agricultural policy also in respect with the prices, abolished the compulsory produce delivery to the state, several times improved the agricultural price relations, etc. The show-down with the past, however, could be implemented neither here consequently. The systems of the agricultural producers' prices and of the consumers' food prices shew even in course of the recent years significant differences if compared with the price systems in other spheres of the national economy. Serious administrative restrictions were prevalent in the agricultural consumers' prices and in those of the foodstuffs while the infiltrating costs could freely be transshifted in other spheres of the national economy. This was necessarily accompanied by the presence of an agricultural price scissor disadvantageous for agriculture which largely restrained the production of agricultural incomes.

The minimum requirement for the forthcoming years is that the decline in the agricultural real prices which lasted for several decades and accompanied by the inflation it impedes the transforming of proprietory and interestedness relations and may lead sooner or later to troubles in an

important pillar of the political stability in the country: in the domestic food supply, should be stopped. Another unavoidable requirement is at the same time that in order to maintain our international competitiveness the presumable increase of the production costs /land rend, capital costs/ should be counterbalanced by the improved efficiency which can be expected from the assertion of the tendencies of the economic reform. The implementing of the property reform and the constructing of a market economy render indispensable the integration of the agricultural producers' and the consumers' food prices organically into the general price system of the national economy. Here it is needed again that the prices should develop upon the basis of market relations in the bargaining process of the producers and purchasers. This postulates the establishment of an efficient representation and protection system of interests. We are to emphasize also that in the markets both at home and abroad market regulating and interventive measures are needed with supplementary character deriving from the situation and particularities of agriculture. In the agricultural sphere the conditions of farming are different from those in the sphere the conditions of farming are different from those in the sphere of movement of other productive economic branches. Agriculture is more vulnerable since there is already a supply market situation, the monopolistic organization and the direct constraint for subsistence of the producers are failing. So far as these conditions do not become general in the economy a uniform regulation would increase the defenseless position of agricultural economy. Besides there are such particularities in agriculture which derived from its metabolism with nature. These particularities will lastingly exist and economic regulation must adapt itself to them.

The establishment of market economy postulates neutrality in the competition. This is true also for the requirement that as far as the diverse

property and enterprise types are concerned within agriculture the price and regulating systems should be sector-neutral and compared to other activities agriculture should not have an unfavourable position in respect with the prices, taxation and subsidization systems.

The carrying out of the property reform and the operating of new property types postulate that in respect with its scale and applied settling methods the system of taxation should be adapted to the particularities of agriculture, and to the agricultural production relations among them. In the further developing of the taxation system the endeavour should be not only the assertion of the principle of competition-neutrality at fixing the scale of withdrawals but also that the applied system of taxation should not frustrate the propagation of the multifarious types of undertakings in agriculture. The separate taxing of the wages and of the profit is almost impossible in the diverse types of undertakings. The present sophisticated system of accounting is the greatest obstacle for the propagation of the undertakings.

The agricultural production is characterized by its great demand for fixed and current assets. The available own sources are in shortage and the participation of capital is not attractive in the present situation. Experience gained in the recent years shows the fitting of agriculture into the restrictive crediting system represents a very difficult task. Such burning problems of agriculture are to be resolved like the short-term credit supply, reduction of the high interests, etc. The settling of the above problems postulates also that agriculture should dispose as soon as possible of specialized agrarian credit institutes, with a cooperative banking organization among them and real estate mortgage as well as the institute of crediting based upon the former should be established.

After the socialist reorganization of agriculture the most important income sources of the agricultural population became income deriving from labour and the social allocations. The average income of the peasant households caught up - at the expense of surplus labour - in the decade of the 197o-es that of the worker families but from then on it lagged behind again and this drop is increasing. Rural inhabitants feel themselves to be "second-rate" subjects. Their costs of living surmount in several respects those of the urban inhabitants /they pay much higher public utility costs/, their infrastructural supply lags far behind the urbans. Changes are pressed also in this sphere for the sake of equal chances.

The living conditions for the old-aged and the improved prosperity of the offspring at the same time were based in the peasant farms on real proprietory interestedness in enrichment. The wage-worker interestedness which replaced the former and the problems of the public superannuation insurance linked with it became intensified when the possibility of increasing the real wages came to an end.

The task is to establish a system of social insurance which may provide equal chances to people working in agriculture even if compared with other layers of society and is organically linked at the same time with the reform of property. The renewal of the owner's interestedness will - in the more distant future - improve the income safety of the older aged people: landed property, land rent, tenancy of land, the divisibility of the collective assets, the paying of dividend are all factors tending to this.

The propagation of the undertakings and of family farming postulates the establishment of an insurance-system which can prevent the impact of the weather fluctuations.

The task system of agricultural policy should be enlarged and also rural development should be taken into consideration in it. The large-scale

agricultural enterprises contributed also hitherto in resolving the problems of the rural settlements. Along with the increase of enterprise-scales, however, the cooperatives left several villages, the number of rural intellectuals reduced, the contact between the farming centres and the household plots loosened. The renewal of the cooperatives, the revival of the owner's attachment of the cooperative peasants, the reform of property relations may provide a safe existential and financial basis for the development of the rural settlements. The villages could be filled with life again if the system of public administration would be transformed and the farming of the agricultural producers would gain new prospects.

In the agricultural policy also the assertion of environment protective aspects are to be reckoned with. The more efficient management of costs and material saving are also arguments for the environment protecting use of chemicals. This is required also by the interest of the country's population and by the endeavour that the international competitiveness of our agricultural products should be maintained.

As soon as possible the system of the representation of agriculture's interests is to be established or transformed. The task of the representation of interests is to protect efficiently the interests of the agricultural producers, to weigh them against the conceptions of the government. Several kinds of interest representations /business federations/ are needed: the managers of the large-scale enterprises, the agricultural intellectuals may have such organizations but solution should be found for the representation of the interests of the agricultural workers and the cooperative members in a broad sphere as well as for the evolving of the self-organizing efforts of the diverse agricultural branches of activity in the form of associations or federations. The interests are, namely, increasingly differentiated in an agriculture based on undertakings and they

should find a form for their expression. Beside the business federations also an Agricultural Chamber could render efficient assistance to the agricultural producers and the food industrial enterprises. The Agricultural Chamber would provide informations about the market and economy in general and would perform intermediating, contact establishing functions. Without this the fitting of the agricultural sphere into the market economy would be inconceivable.

In the concerting of the diverse chain links of the agro-business such types of property and of interestedness receive already a part which have the ability to develop the integration of the production, processing and realization processes on the basis of interestedness in the final product. The calling into being of the interestedness of the commercial organizations and of the producers in the realization at markets both at home and abroad. Private dealers should play an increased role in food trade.

The reform of agricultural economy is closely interrelated with the political and economic reform processes. It can be successful only in the case if the reform will consequently be implemented in the whole society and economy.

ALVINCZ, József: Az állati eredetü élelmiszeripari nyersanyagok minőségi kérdései, a minősitési és felvásárlási rendszer korszerüsitése /hus-, baromfi- és tejipar/. /Quality problems concerning the basic food materials of animal origin, modernization of the qualification and buying up systems - meat, poultry and dairy industries./ Publications of the Research Institute for Agricultural Economics, No. 8. 1988.

In course of the past years the quality of the food industrial basic materials did not improve so much as desired in several activities and in certain cases even regression could be observed.

The coming into prominence of problems related with the quality was made possible or necessary by several conditions partly interrelated with each other. First of all the quantitative improvement of the basic material supply in certain specialized activities /e.g. the increased buying up of pigs and poultry for slaughter/ is to be emphasized in respect with the former while the becoming more strict of the qualitative requirements at markets abroad must be stressed as related with the latter. As a motive for food economic surveys on quality last but not least we have to mention the well known fact that the raw materials of diverse quality exert a significant influence upon the results of activities in the respective specialized branch and through the public purchase prices also upon the agricultural production.

Raw material quality as a notion has no adequate definition in the public use. In the case of the three specialized branches which represent the subject of our survey - meat, poultry and dairy - the useful content characteristic for the respective raw materials play the greatest role among the qualitative attributes. Besides all these, however, also other qualitative attributes like e.g. the hygienic grade of milk must duly be emphasized.

In compliance with the aforesaid our survey stresses also the clearance of problems related with those qualitative attributes which exert a determinative influence upon the efficiency of the economic management of the respective specialized branch /or enterprise/ and upon the results of its activities equally from the aspects of the value, the costs and marketability.

Based on the considerations described above we may evaluate the raw material situation of the diverse specialized branches as follows:

Among the meat industrial raw materials the output indexes of meat and bone taken over from both the small-scale producers and the agricultural enterprises improved. As far as the small-scale producers were concerned the value produced in the year 1986 exceeded by 2.6 percentage points the same of 1980 while of pigs taken over from the agricultural enterprises the increase represented 1.5 percentage points. In spite of this all - taken the results achieved abroad also into consideration - we cannot be satisfied with the present quality.

Regarding beef cattle the quality worsened as a result of intraspecific variation. This is expressed also in the decay of meat and bone output by 1.2 percentage points.

From the aspect of meat industry it is the development of the meat output related with the respective public purchase prices among the quality factors which exerts the greatest influence on the income producing capacity at the present and it can be quantified most correctly upon the basis of the value of the meat and bone output, of the accession value of the unit quantity meat and bone as well as of the impact of output development upon the costs of processing. Based on the survey of these three factors we may draw the conclusion that taking the reestablishment of the quality

of beef cattle at least at the standard of the former years /the average 57 per cent output index of the years 1976-1980/ into consideration there could be produced an output surplus value of about 1.8-1.9 thousand million Ft in the meat industry in the case if meat and bone ratio of 53 per cent could be realized /instead of the present 53.3 per cent/ for pigs taken over from the large-scale enterprises. A considerable part of this amount should be re-allocated, of course, into agriculture.

Taken also the value of accession into consideration - on a data basis of the year 1986 - a surplus value of about 200 Ft presented itself on a so called "large-scale enterprise" pig of 100 kg weight if compared to pigs taken over from small-scale producers. With other words this is the amount by which a pig taken over from small-scale producers costed more for the meat industry than a "large-scale enterprise" one of the same value did.

The improvement of meat output would reduce the costs of processing the value of which could be estimated to about 164 MFt in the case of a quality improvement as outlined above.

The quality of market poultry essentially satisfies the requirements. This statement is correct also in the international comparison. In spite of this, however, there are still things to do in respect with certain qualitative attributes like e.g. uniformity, fat content and in several cases the average body weight. This latter which does not develop always as intended by the producers exerts significant influence on the output of the respective product and through this also on the trend of the first costs. In the case of table poultry ready for oven /"Bratfertig"/ the output improvement of 1 percentage point reduces full first costs by about 0.50 Ft per kg. Therefore it is not accidental that several enterprises endeavour to encourage the producers to the achievement of greater average weight.

As far as the indexes of the inner content are concerned there a worsening is demonstrated. The reason can be deduced here also first of all to the replacement of variety. On the other hand, however, the price system encourages the producers unambiguously also to produce "diluted" milk of large volume. After the start of the milk program /in 1972/ the fat content of milk reduced by o.o8 percentage point and its protein content by o.15 percentage point in course of the past 14 years.

The evaluation of the fat content of milk by dairy industry is a clear-cut task. The case is not the same with the assessment of the protein content of milk. This latter, namely, is largely dependent on the production profile of the respective enterprise.

The production of milk having greater useful material content is determined mainly by genetic but partly also on feeding bases. Milk rich in protein and fat is produced at present first of all by the Hungaro-Frisian variety. The fat content produced by this cattle variety surpassed in 1986 by o.66 percentage point while its protein content surpassed by o.23 percentage point the national average. Our calculation shows that if those products /powdered milk, cheese, curd/ whose output depends on the inner /protein/ content would have been produced in the whole country from milk of this kind then resulting from this and from the reduction of other costs would create about 174 MFt savings. Presuming a 5o-5o per cent distribution of this amount between dairy industry and the producers the price of milk of concentrated inner content could be increased by o.15 Ft/l. According to our experiences, however, this amount alone would not be sufficiently incentive. Therefore the real solution could be presented only by the transformation of the milk price system.

In the case of pigs and poultry the necessary improvement of feed quality is to be stressed within the condition system of quality improve-

ment. Further modernization of the genetic basis of pigs bred by small-scale producers makes also an inavitable task.

In each specified branch the development of the price system should continue so that in the diverse classes the prices should be closer linked with the real inner content. The situation is particularly disadvantageous in this respect for milk where only fat is acknoledged among the components of milk in the prices but even this only in a degressive manner. In 1986 the ratio between skim milk and fat was 44:56 per cent for milk of 3.68 per cent fat content and if we take into consideration also the subsidy granted on milk by the state then this ratio alters to 58:42 per cent. Better quality is neither satisfactorily acknowledged in the prices of pigs for slaughter taken over from the agricultural enterprises.

An important condition of quality improvement is the elaboration and application of qualification methods which correspond to the requirements of the specialized branches. Efforts should be made in this sphere for a more objective measurability of the attributes serving as a basis for the evaluation. In a way similar to the countries of progressed food economy the diverse qualification methods should be elaborated here also in compliance with the particularities of the specialized branches.

If the qualification of pigs would be introduced at a full scale then quality would further improve expectably also in the sector of the small-scale producers.

The methods of so called objective qualification are approximately given in the case of pigs and milk - the problem of the necessary set of instruments also seems to be settled - but in the case of killing cattle and broiler chicken still further research is needed for the elaboration of adequate methods. We must remark here, however, that the interested

experts do not unambiguously agree whether a qualification more objective than the present one represents an important task or not as far as the two kinds of livestock are concerned.

ALVINCZ, József - BALOGH, Ádám - Mrs. CZÁRL IVANICS, Mária - SZABÓ, Márton: A nagyobb hasznosanyag-tartalmu tej termelésének szükségessége és lehetősége. /Need and possibility for milk production of more useful material content./ Publications of the Research Institute for Agricultural Economics, No. 10. 1987, and Gazdálkodás, No. 3-4. 1988/

When having carried out this survey we intended to find answer to the following questions:

- What is the interestedness of dairy industry in milk production of great useful material content?
- What are the conditions and arrangements under which the producers can undertake the production of milk rich in its inner content?

The major conclusions of the survey are summarized hereinafter.

Experience indicates that under conditions prevailing in this country the genetical influencing of the inner content represents mainly but an opportunity while the actual concentration of fat /and of protein/ depends first of all on environmental factors: on feeding, milking, housing and on the standard of labour performed by the tenders and managers.

The economic regulators which were asserted during the past 12 years focussed to the breeding and mainly to the genetical activity within its scope. The development of the environmental factors whereby the mean the feeding, the technology of care and milking as well as the veterinary hygiene were relatively pressed to the background and therefore exerted a retrogressing impact on the standard of production. The useful inner content of milk reduced obviously at an extent greater than genetically justi-

fied and this was in fact the consequence of the disproportionate development. The majority of the experts are at the opinion that further advance is hardly possible without the improvement of the environmental factors and mainly of the feeding.

Pondering jointly the advantages and disadvantages we may draw the conclusion that in respect with the income production there is either no significant difference between the breeds which produce thin or concentrated milk when kept under equal conditions or if there is any difference then it is not great enough to be incentive alone for changing the breed.

The processing of concentrated milk would be accompanied by considerable economic advantages. The producers must also share from the surplus profit produced by the dairy industry and not only for the reason of equity but also since the activity can hardly reckon with external surplus sources - from the budget - for the contracted production of concentrated milk. On the other hand, however, in consequence of the present construction of the public purchase prices and specifically of the smallness of the part paid after the inner content this stimulation is hardly adequate: only 12 f are paid after o.1 per cent increase of the fat content. Correct solution could be presented by the transformation of the milk price structure.

Disregarding their other particularities the respective firms are at different stages of their development and most of them did not yet arrive to the level where they could concentrate their efforts to the contracted production and processing of milk having greater inner content.

It is to be stressed here that there are several mostly external obstacles in the way of an offensive behaviour of the firms /the shortage of measuring devices in certain cases, the low standard of self financing capacity in the dairy industry, the fixed public purchase prices/. Notwithstanding with this all the relative neglecting of the problem presumably

refers also to the lacking income interestedness of the respective firms.

In order to make the economic advantages realizable first of all changes are needed in the conception about milk as a basic material. Milk which was regarded so far to be homogeneous and was recorded according to its liquid and fat content should be treated for the future both in thinking and in the practice in a differentiated manner and distinguish according to the two special basic materials as liquid and industrial milk /products not depending on the proteinless and fatless dry content of the milk are produced from the former while those having an output depending on them are produced from the latter/. Recommendably milk of high protein content can be processed to such products in which use can be made of it. If this changing of the conception would fail to take place then not only the profit of hundered million order of magnitude could not be realized which was demonstrated by our model calculations but also in the case of the introduction of prices according to the protein content the dairy industry would be damaged by serious losses.

This all burden the enterprises with a responsibility higher than has been so far and requires more labour of improved quality from them. We are convinced that the inner content can and should be influenced first of all at the level of the enterprises which, however, does not exclude in the case of necessity central measures either e.g. through exports or imports. Nevertheless much more means and assets should be accorded to the enterprises for the purpose that their activity should be increased.

The present milk price system - combined with price supports - encourages mainly the increase of milk quantity. One cannot deny at the same time that also fat premium is of an orienting effect. Experience demonstrates, however, that the increase of the specific fat output represented considerable efforts only in those farms where

- the conditions of milk production became consolidated at an extent higher than the average, the services were of a high standard and the reserves of the increase in quantity were small or

- which dispose of a livestock genotype characterized by high fat concentration and not by great specific milk output.

The way of the future could be that - in concert, of course, with the requirements of dairy industry and with the given structure of the enterprises - the stocks of smaller output will be replaced or ousted by a breed producing concentrated milk.

For the end that agriculture could produce milk in quantities and composition adequate with the requirement of economical export, a price system more flexible than the present one is needed which conveys the market demands more correctly to the producers. The system of subsidization should not significantly weaken these effects. Not depending on prices paid after the inner content the profitability of milk production should be granted or more precisely opportunity should be offered for a situation where rentability is guaranteed basically by the consumers' /and at a smaller extent by the export/ market. Besides, however, in a way similar to most of the producers as well as under the conditions prevailing in this country also with the supplementing of the consumers' prices.

We consider the following solution of the problem:

If we consequently separate both physically and theoretically the liquid and industrial milk then in respect with liquid milk first of all the increase of the liquid quantity should be encouraged in compliance with the market demands and secondly the increase of the fat quantity - if the demand necessitates this. The price ratio between the liquid and fat contents could have a determinative role in the stimulation. Besides the correspondence with the requirements raised by the users' demand /e.g. the hygienic quality/

would become an increasingly important factor of the prices. Anyway the price system would be the same as the present one both theoretically and practically.

As far as the contracted production of industrial milk is concerned the primary purpose would be on the contrary the improvement of the inner content accompanied by an adequate price construction. The price of the liquid would be gradually transformed to the price of protein and the market demands would regulate the ratio existing between them and the price of the fat content.

In our conception the enterprises or even the plants would conclude agreements with the supplyers of the basic materials within the scope of a system of contracts /or tenders/. Some of them would undertake the production of liquid milk while the others would undertake that of industrial milk - with the adequate consequences in the price system, respectively. The different price constructions would warrant approximatively equal returns for the producers through the fixing of protective prices.

Mrs. BARCZA, Gabriella: Szövetkezeti mozgalom Japánban.
/Cooperative movement in Japan./ Gazdálkodás, No. 9. 1988.

We intend to draw a picture in the forthcomings about the work of more than eight decades performed by Japanese people in the elaboration of the cooperative way of rural agricultural and supplementary activities carried out under poor agricultural conditions. The picture is very instructive and very sophisticated just perhaps in respect with the particular arrangements of seeking the ways and means.

The primary cooperatives

The organization levels of the primary agricultural cooperatives in Japan are: the big cities, the cities and the villages. The members of the cooperatives are farmers and non agricultural inhabitants.

So to say almost all the farms can be grouped at present within the scope of the cooperatives. The category of the primary agricultural cooperatives dealing both with variegated and with simple activities. The cooperatives having a variegated activity structure are those which were organized in compliance with the demands of the Japanese farmers like gear-wheels. Therefore they are the most universal ones within the agricultural cooperative movement.

There are, of course, particular sectors and spheres of activity like fruit and vegetable production, animal husbandry which are embraced by the simpler agricultural cooperatives so that they organize production in a way concentrated to its marketing. Almost each member of them are in a competitive position against the cooperatives performing variegated activities.

Unions and federations at the administrative level

The primary agricultural cooperatives connect the administrative and federative levels. These organizations can be grouped into two categories:

those ones are belonging to the first category which unite principally the major functions /economic, crediting insurance and sanitary functions/ of the agricultural cooperatives of variegated activities while cooperatives of the simpler type /like e.g. the unions of the dairy farmers at the levels of administration, the administrative federations of the crop growers, etc./ are belonging to the other category.

The democratic supervision and the system of administration

The members of the cooperatives performing variegated activities are the territorial administrative delegates as well as members invested with electorial rights. At the very beginning the farmers were the founder members and later on those non farmers joined them who were local inhabitants. Correspondingly three levels of the control over the cooperative activities were established:

The first is the level of the general comprehensive consultative organization unit which represents the supreme decision making body at the highest level.

The second level is the administrative office. Its members are elected and deputed people of the directorate's personnel who are elected for three years periods.

The third level is composed from the supervisory committees. Supervisory committees are elected in general at the meetings of the general consultative body for three years periods.

The system of organization and control

The control of the network of the agricultural cooperatives is performed by the directorate's office elected by the members and proceeding on the basis of the control program as well as of the control policy.

The perfection of marketing and the integration of the production car-

ried out in the farms is particularly important in the rural settlements. Therefore decision was made that the calling into being of diversification to such an extent is needed which takes into consideration the tasks of the agricul ural production and the cooperative movement, encourages the associations and consolidates the operation of the agricultural cooperatives on a business basis.

Mrs. BARCZA, Gabriella: A szakszövetkezeti gazdálkodás tanulságai. /Lessons drawn from the management of specialized cooperatives./ Gazdálkodás, No. 2. 1988.

The specialized cooperative is a socialist agricultural organization looking back to a past of a quarter of century which proved to be serviceable for the concerting of the interests, the modernization of production, the mobilization of the local reserves, the enriching of the collective and private fortunes, as well as for the improvement of the living conditions.

In regions of unfavourable conditions, in sectors unsuitable or less suitable for large-scale activities the specialized cooperatives are able to survive or even to develop with a modest subsidization grantes by the state.

Based upon the surveys the question can be raised and answered: what are the chances at present for the organization of specialized cooperatives or for the transformation of farmers' cooperatives to specialized cooperatives which was envisaged by several counties within the scope of their program for a way out? First of all: the conditions radically changed in the course of the last decades. There are no individual farmers who enter, the generation which would be able again for farming "managed by the members" automatically and in masses either died off or became overaged, the

scopes of the large-scale enterprises were established and they dispose of diverse production means of high performance capacities, etc. If this all would not be reckoned with then the good-intentioned efforts aiming at the organization of specialized cooperatives would strike wide of their aims.

We drew moreover the conclusion that the point is not the repainting of the sign-board but the modification of the management of the existing farmers' cooperatives both in effect and in content - after the example of the specialized cooperatives. This could mean that reasonably all those activities, assets and equipment should be ceded - in a correctly defined labour division, on a lasting contracted basis under clear and mutual interestedness - to the members for utilization which compared to the large-scale enterprises are promising more advantageous utilization by the members under the existing conditions. These can be realized first of all in the labour intensive activities of crop production and animal husbandry.

Emphasis should be altered also in respect with the collective activities of the specialized cooperatives since it is the organization of adequate conditions for a management by the members, of processing and commercialization which comes into prominence or becomes even the principal activity.

The purpose of the paper[+] is the economic analysis of the specialized cooperatives leaving a quarter of a century past behind them, the evaluation of the results achieved and progress realized by the specialized cooperatives working under socialist commodity and financial relations and under the conditions of changing political judgements. The concerting of interestedness between the collective farm and that of the members, labour division and cooperation are worthy of distinguished attention in this res-

[+]Part of the research results achieved in the Research Institute for Agricultural Economics in the year of 1986-1987.

pect while their role played in the progress of the rural society cannot be neglected either. All things considered we should like to arrive at a number of conclusions which are useful not only in the specialized cooperatives but also in influencing the development of the enterprise structure. Speaking with other words: the point is here elucidation and forecasting about the survival of the organization type of the specialized cooperatives, about their vitality and perfectibility, about their possible propagation. The conclusions and lessons collected in the paper should serve this end upon the basis of empirical survey and personal experience.

The concern increased for the present in respect with the specialized cooperatives can be explained on the one hand with the fact that they were estimated in the recent past as formations worthy of propagation by both the political stand and the state control. The actuality of the specialized cooperative form is justified on the other hand also by the coming into prominence of the undertakings. As far as our research program is concerned stress was laid there upon the specialized cooperatives because the reasonable use of the productive resources - of land, assets and labour - the purposeful association of crop production and animal husbandry with complementary and subsidiary activities as well as the resultful settling of labour division, cooperation and integration based upon the mutual interestedness of the collective and the members of the specialized cooperatives became conspicuous.

Mrs. BARCZA, Gabriella - M.G.L. GABALY - S. EL SHAMY - I. BADR:
A fejlődés természeti tényezői és közgazdasági akadályai az egyiptomi mezőgazdaságban, a buza- és a rizstermelésben.
/The natural conditions of and the economic impediments to the progress of Egyptian agriculture, in the growing of rice and wheat./ Gazdálkodás, No. 7. 1988.

From the aspect of the people's food supply the growing of wheat and rice are of outstanding importance in the economy of Egypt. Until the beginning of the eighties the improvement of the productive capacity as well as the increase of the outputs of these crops was impeded by several inner and external factors. Even in the case of the new varieties of high specific output his was impeded by the agricultural policy and within this scope mainly by the price policy regulating the price level and price ratios of the agricultural products while at the level of farm management by the considerable differentiation which came into being in the production means supply and technology of these crops. Consequently suitable conditions are to be established for a producer's behaviour interested in the exploitation of the given natural and economic facilities and adapted also to the needs of the national economy. In order to reveal all these conditions we surveyed the major factors influencing the behaviour of the producers on the example of wheat and rice growing.

An extraordinary symptom of Egyptian agriculture is that notwithstanding with the gaining ground of the modern wheat varieties the per feddan yields did not increase. In the second half of the seventies the average per feddan yields represented 1.36 t and in fact this did not increase till the first half of the eighties. We can find both inner and external reasons - which can be attributed mainly to the deficiencies of the economic regulation - among t e factors giving rise to unfavourable tendencies. The most important inner impediment is - from the aspect of up-to-dateness -

the low technical and technological standard of wheat production deriving from the primitve production method which prevails. This impediment can be eliminated through the modernization of technology, the experimenting and adapting of new varieties as well as through the improvement of the economic and social conditions of the Egyptian agricultural producers moreover through the introduction of new more advanced production means /machines, implements/ into the production.

The surveys demonstrated that in those farms where the role of the direct human labour performance among the factors of production is greater than the average i.e. where more human workhours are used there the potential productive capacity of the given variety is utilized at a lower standard which means that smaller specific yields were realized. In order to improve the exploitation of the potential productive capacity of the modern wheat varieties incentive wages are to be applied for the end that the daily incomings of the producers should increase and thereby the performance of human labour should be boosted. The gradual respect of human labour, the settling of the relations of financial interestedness would impose smaller burden on the agriculture of Egypt than the introduction of modern technics and technologies in a broad sphere would do.

The results of surveys performed so far on the most important strategical crop - on rice namely - can be summarized as follows:

Certain researchers evidenced that the efficiency of the invested capital is as more favourable as more completely is the verticum of production developped. And yet the investments for the vertical development of production did not surpass in 1978 but o.2 per cent of the total agricultural investments.

Another research drew attention to the fact that the ratio of rice harvest based exclusively on human labour developed with a very great dis-

persion in the diverse provinces. Mechanized harvest was characteristic approximately only for one third of the total cropland of rice.

It was established that irrigating water does not represent yet a restrictive factor for the present and moreover overirrigation i.e. water wasting irrigation generally prevails. As far as the winter and summer crop rotations are concerned there the increase of vegetable production and of the new plantations as well as the enlargement of the acreage of the respective crops is restricted not by the shortage of irrigating water but by the great territorial share of the strategical crops /of wheat, rice and of the leguminous plants/.

According to the opinion of the World Bank the increase of the yields in cotton, wheat and rice production is possible in course of the forthcoming years if irrigation through drain tubes will be introduced at a large scale. Other surveys presume that only corn yields will increase - but at a year by year decreasing rate - while irrigation through drain tubes will not exert significant effect on the yields of cotton, wheat and rice.

Some papers call the attention to the importance of quite new factors like the joint effect of underground water level, irrigation and fertilizing on the salt and alcali content of the cropland. Their conclusion was that the decrease of the underground water level improves the effect of other factors which is manifested in the increase of cotton, wheat and corn yields by 3o, 37 and 3o per cent respectively.

The analysis casted light on the fact that the specific yields of the diverse varieties of rice are mostly determined by the predecessor in crop rotation; by the fertilizers used, by the way of cultivation, by the duration of growth season and by the number of working hours used.

Miss BORSZÉKI, Éva - HARZA, Lajos - MÉSZÁROS, Sándor - VARGA, Gyula: Árak, adók és támogatások az élelmiszergazdaságban. /Prices, taxes and subsidies in food economy./ Research Institute for Agricultural Economics, Budapest, April 1988, 135 pp./

At the middle of the 198o-es a round two decades long epoch of Hungarian agricultural history came to its end which was in all certainty one of the most successful eras and its consequence was that Hungarian national economy became - considering both its scales and values per head of the population - one of the most significant agricultural exporters of the world from a food importer country. In course of this epoch the food demand of the world market favourably met the Hungarian agricultural political efforts aiming at the very rapid rate growth of production. This - so to say lucky - coincidence now ceased to exist from both sides.

The domestic production is able to satisfy the food demands of the population at a very good standard. To maintain this situation with a produce assortment of adequate quality and at an acceptable price level represents our economic, social and political interest. The agricultural political thesis, however, which endeavours to realize full autarky in respect with all products which can be produced in this country should be revised.

The development of production and the changes which became necessary are called forth at present by the foreign trading relations. In the setting of the future tasks of food economy export and partly import political considerations should play the decisive role. Hungarian food economy should be increasingly adapted to the requirements of competitiveness dictated by the world market.

For this end the requirements of the market in general and of the world market in particular are to be asserted in our economic regulation,

the prevalence of the normative measurement system of economicalness should be consolidated and the differences made on a subjective basis in the subsidization should be eliminated.

The enforcement of export orientation postulates at the same time the supervision of the present system of import austerity as well as the existence of a controlled but realistic import competition. The outmoded conception and prejudicial practice which consider that all imports are wrong and all exports are correct from the outset should be stopped.

The adjustment of Hungarian food economy to the requirements of markets abroad can be as much easier and more complete as more the protectionist system of market restrictions which is disadvantageous for us becomes demolished and as the agricultural foreign trading system based on mutual advantages within the CMEA will become more consolidated. Hungary should continue to play and strenghten its initiating role into both directions and also political measures must be taken for this end.

When outlining a more reasonable and more economical agricultural production structure we should start out from the assertion of comparative advantages. The following major tendencies can be indicated upon this basis:

1. Cereal production as well as the vegetable oil verticum have and will expectably have a determinative role also in the future in the optimum utilization of cultivated land and which represents a significant part of the natural resources of the country.

2. Presuming that real economic competition will prevail in both the grain export and the import of the other feed components the comparative advantages residing in wheat production will be possible through the breeding of fodder consumer pigs and poultry.

3. There is no realistic alternative against the export of products produced in great quantities /products of the wheat-meat verticum/. It is,

however, indispensable that these commodities produced in masses should be relieved of their "trumpery stuff" or "mass product" nature through the improvement of their quality, the enriching of their assortment and efforts made for an economical grade of processing.

4. The one-time reputation of the traditional Hungarian commodities should be resuscitated and asserted and the export of the so called small commodities produced in far the greater part by small-scale producers which are suitable for the satisfaction of special demands should be increased.

As far as the structure policy is concerned a new conception should be formulated which differs from the former practice and which is better adapted to the requirements of the present epoch in the establishment of a desirable and reasonable export structure.

The renewal requirements of the structure policy acutely indicate the necessity of a renewed economic regulation. In compliance with this the major things to do are the following:

- the price system should increasingly assert the value judgement of markets at home and abroad and it should gradually draw nearer to and concert with each other the judgements of both markets,

- the encouragement of the exports should be consequently normative and the realistic measure of economicalness should prevail,

- the import should be regulated through the exchange rates and customs policy and import restrictions should be abolished,

- the improvement of the balance should be regarded as the task of the incentive system and the financial management of foreign currencies should be liberalized for this end,

- the organization and relation system of food economy and of foreign trading should be transformed so that the producer and trading firms

should become equal in rank as its result and direct relationships could be created between the former ones and markets abroad,

- the state and mainly the financial government should even more withdraw themselves from the direct control over the firms and the re-distributing role of the budget should be significantly reduced, the present regulation system of the wages and earnings should cease to function,

- the role of the market elements should increase within the economic relationships between the firms and the monopolistic situations should be liquidated,

- the role of the market should become stronger in the circulation of capital and in the credit policy of the banks,

- the differences between the regulations of the state, cooperative and small-producer /private/ sectors should continue to decrease and labour division as well as economic cooperation /integration/ should be improved.

From the aspect of the above described principles the present practice may obtain a positive qualification. The proposals and recommendations described in the paper are - in our opinion - well adapting to those reform processes which became intensified in course of the years 1987 and 1988. Particular stress should be laid on the following ideas:

The resultfulness of the steps made so far is highly impeded or partly checked by the fact that a comprehensive reform of the prices and wages did not take place or is in retard. The unambiguously positive liberalization process of the prices raises demand for a new treatment method of the agrarian scissor. The well grounded and rightful antiinflatory efforts of the government lay high stress on the foodstuffs. The problem, however, how the price raising intentions manifested because of the limited competitions at the market and of the monopolistic situations in the sphere of the inputs of the foodstuffs could be impeded would be solved only through the central

will and control. The Central Statistical Office - presumably with the co-operation of the MÉM STAGEK /Statistical and Economic Analysis Centre of the Ministry of Agriculture and Food/ - should perform price observing service and the elaboration of continuous input-output indexes for this end.

Further steps should be made also in the differentiation according to quality. Important fields are here grain production and mainly the production of livestock for slaughter. As far as this latter is concerned - at least in the case of pigs for slaughter - switch over should be made to the qualification after the slaughter also in the sphere of small-scale producers.

Those price differences which can be observed for several reasons still at the present between the outputs of the large-scale enterprises and the small-scale producers should be eliminated. In addition to the already mentioned price of pigs for slaughter also the producers' prices of milk should be unified and so namely, that price differences after the quality should consequently be asserted and the still existing subsidization of the producers should be abolished at the same time through the increase of the milk prices. This same principle should be applied in the production of killing cattle.

This is a historically favourable moment for getting the domestic price ratios existing between the cereals and vegetable proteins nearer to those of the world market. In the protein program /more precisely in the program of vegetable protein and soya production/ this makes necessary also the replacement of the subsidies with prices consequently asserting at the same time in the prices the differences existing between the quality of the domestic and imported products.

At present the expected favourable effect of the taxation reform can but difficultly be measured. It became obvious that - because of the significant inflation - the progressivity of the SzJA /tax on the personal incomes/ hides a great danger of performance stoppage. In the taxation system of the small-scale producers this is still prevented for the present but after one or two years the revision i.e. the "maintenance" of the value limits will become necessary. Also the double taxation /SzJA and enterpreneurial taxation/ over the value limit of 2 million Ft should be eliminated since it is contradictory with the basic principles.

The increase of the role of the land tax can realistically be expected only after the introduction of the new system of land evaluation and after gaining positive experience with it. This will be necessary first of all for the end that a more direct source could be created for the subsidization of regions situated under unfavourable conditions. The idea can be raised that an agricultural fund /cashier's office/ should be established from the outset for this purpose where the payers-in would be the enterprises working under conditions more favourable than the average and those situated unfavourably would be supported by it.

We suggest that the subsidization of the producers should be restricted in the future to this assistance for surmounting the disadvantages. The other subsidies can be eliminated partly in the function of the domestic price system and the gradual progress made in this respect so far seems to be reassuring also in the future.

Real trouble is caused by the subsidization of the exports. We have no correct solution or reassuring proposal for the treating of exports under Rouble accounting on realistic economic basis since in the lack of real market relations we can speak about neither realistic price ratios

nor realistic exchange rate policy. Under the irrealistic world market price level - as we are convinced - subsidization of normative character i.e. price supplementing would be justified. One can expect from this system that it provides particular preference for the commodity of the most favourable economicalness but impedes at the same time the most deficitary export.

The sphere and scale of the subventioning of the consumers radically decreased. This does not influence directly the interest of the producers but one should reckon with its indirect effect, with the reduction of the demand and with a structural re-grouping. The favourable budgetary situation, however, which resulted from the elimination of the consumers' price supplements will be lasting only in the case if the already mentioned price raising of the inputs will not continue.

Miss CSÁNKY, Zsuzsa - Mrs. LÁSZLÓ, Gyöngyi: Az abraktakarmány-gazdálkodás javitásának néhány közgazdasági összefüggése. /Certain interrelations in the improvement of grain fodder management./ Paper of the Research Institute for Agricultural Economics, 1988/

The average digestible protein content of the about 11 million t grain fodder disposable for livestock breeding amounts only to 12 per cent. It is significantly richer in energy which according to our calculations means 13.45 MJ/kg corresponding to 3212 kcal. If compared to the needs deriving from the structure of Hungarian livestock breeding and from the demands of the respective varieties the here involved broad protein-energy ratio of 1:224 is very unfavourable. The nutriment ratio of 1:6 unambiguously proves that our fodder is poor first of all in proteins. Their average protein concentration represents only 16 per cent.

The consequence of this composition is that - as our surveys embracing 16 years demonstrate - the utilization was not improved.

In course of the eighties we tried to organize our feed management all the more on the basis of domestic protein feed resources. Almost 7o per cent of this proteins, however, is represented by sunflower and rape and its 16 per cent by meat meal of doubtful value. In a way justified not only by the data of the special literature but also by the practice of production these proteins cannot compete with coarse soya and fish meal either in quality and utility or in amino acidic content and homogeny etc. This calls our attention to the fact that though under the economic conditions of this country the increase of the domestic protein basis represents a comprehensible endeavour nevertheless this alone is insufficient for an efficient production. Feeds of much greater value should and even under our present conditions could be produced in respect with the inner content. This latter, however, can be realized only in the case if the present quantitative conception of production would be replaced by a continuous stimulation for quality both in crop production and in the production and commercialization of industrial feeds.

Reality is, however, that the increase of the domestic protein feed basis at a great extent would entail great sacrifices from the aspect of land use and of the state subsidization granted for the production and processing of coarse soya. 1 t soya protein costs 26 thousand Ft in the traditional extracted coarse soya and 42 thousand Ft in the recently propagated oleaginous coarse soya. If compared to corn we lost at the same time 11o $ on each ha cropland of soya taken even the very depressed corn prices of the year 1987 into account. Considering all this - and also the improvement of quality - without imports neither the twofold of the present output would be sufficient for the production of animal products characteristic

for the eighties.

So the restraining of imported proteins is accompanied by the worsening of utilization.

When carrying out our surveys we elaborated three versions for the establishment of a fodder structure which could satisfy the needs of the fodder consumer livestock better than the present one does. In version I we measured the results of small-scale farming, in version II those of large-scale farming and in version III their joint result on the basis of its effect exerted on the feeding costs of animal husbandry and on the foreign currency returns of the national economy.

The major conclusions which can be drawn from our research are the following:

The enrichment of the inner content of the small-scale farmers' fodder basis would bring 27 million $ profit for the national economy resulting exclusively from feed consumption. The value of the additional 98 thousand t coarse soya and 15 thousand t fish meal needed for the implementation would make, namely, hardly the half of the possible export returns deriving from savings in grain.

The enriching of the inner content of the small-scale producers' fodder basis would reduce the specific consumption by 3.6 per cent for the whole animal husbandry. This, however, would not be accompanied by the decrease of the feeding costs in the farms. In addition to the deformed price ratios of grain and of the protein feeds and to the irrealistically high per unit prices of the feed supplements the reasons for the latter symptom should be saught also in the production costs of the nutritives to be fed in an increased proportion.

At the same time the improvement of the quality and meat output of

the pigs raised in the small-scale farms which accompanied the modification of the fodder structure could reduce the production costs of the meat industry by about o.4-o.5 thousand million Ft. This would provide an opportunity for the more adequate paying of meat of improved quality which could be produced with this feed.

Through the creation of a feed composition which closer approximates the demands of the fodder consumer livestock in the large-scale farms the import expenses of the national economy would increase by 15 million $ while the returns from the exports could be raised by 28 million $. This way an active balance of 13 million $ could be produced in the feed consumption alone.

Beside an additional quantity of 3o thousand t coarse soya and 19 thousand t fish meal also the improvement of the quality of domestic protein feed - mainly of sunflower groat - is indispensable for the implementation. The improvement of the utilization would make possible at the same time the feeding of grain less by 3o8 thousand t.

The modification of the composition of the fodder basis for pigs and poultry in the large-scale farms would reduce the fodder consumption of the total livestock by about 3.1 per cent. Notwithstanding with the higher unit prices of feeds with enriched inner content the quantitative savings would reduce by more than 1 /appr. 1.3/ thousand million Ft the feeding costs of the producers. This amount would represent a cost reduction of about 3 per cent for the two fodder consumer sectors jointly and that of about 2 per cent for the whole animal husbandry.

The quality and the meat and bone output of pigs for slaughter in the large-scale farms improved through the use of feeds with an inner content better satisfying the needs of meat production than at the present could reduce the costs of food industry by about o.2-o,3 thousand million Ft.

The simultaneous modification of the fodder structure in both the small-scale and large-scale farms could produce 4o million $ savings for the country even under the present depressed grain and raising protein feed prices. The more reasonable management of the feeds could make possible a utilization improved by 6.7 per cent for the whole livestock animal husbandry. The reduction of the feeding costs by o.6 thousand million Ft could be achieved at the national level and the same of o.6-o.8 thousand million Ft could be realized in meat industry through the improvement of the meat output of pigs for slaughter.

The improvement of fodder composition could produce at a national average 284 Ft/t feed cost savings in the production of pigs for slaughter. This would be composed from the 4 per cent /997 Ft/t/ reduction of the specific feeding costs within the large-scale farms and from their 1 per cent increase / 37 Ft/t/ manifested in the small-scale ones.

The use of feeds less serviceable for running to fat than the present ones are brings about at the same time the qualitative improvement of the final product. Through the general prevalence /in a uniform manner for both the small and large-scale farms/ of a really objective qualification, through the assessment of prices which realistically reflect the differences in the quality the activities of both the large-scale farms and the small-scale producers could be rendered more resultful. The creation of conditions needed for this end represents the task of the near future.

For the whole of pig husbandry feed consumption could be less by 8.7 per cent. Through the qualitative modification of the nutritive materials included in the fodder and through the improvement of the value of their inner content this activity could increase the assets of the national economy by 29 million $ in the feed consumption alone. Further advantages could be resulted by the higher export returns deriving from the improved

quality of the final product.

The improved fodder structure in the poultry breeding of the small- and large-scale farms could bring about 240 Ft/t savings of the feeding costs at a national average. The reason of the very significant specific feeding cost reduction of 1766 Ft which can be realized in the large-scale farms is first of all the fact that the protein concentration of the consumed feeds is the least advantageous here and therefore the results of the improvement are obvious.

Through the transition to the feeding concentrates, on the other hand, grain of smaller value /by 2064 Ft/t/ becomes released than the surplus cost of the more valuable protein and supplementary feeds /3375 Ft/t/. Moreover the costs of the production of the concentrates is coupled with this. They jointly increase the feeding costs of a unit poultry product /animal for slaughter equivalent/ with 1910 Ft /by 10 per cent/ in the small-scale production. Since an amount of cost increase like this is not counterbalanced by the producers' price therefore the small-scale producer is not interested in the general use of concentrates of improved inner content. Just for the very reason because about 50-60 per cent of the breeds kept here are of double utilization and as a result of their genetical capacity their production postulates a higher feed ratio for the sustenance. Therefore the improvement of feed utilization in the small-scale production does not depend only on feeding but also on the breed.

The improvement of utilization of 9.4 per cent, however, which can be realized through the modification of the fodder structure in the whole poultry breeding activity could bring a profit of 10.7 thousand million $ for the national economy.

The totalled improvement of feed utilization in the pig and poultry breeding of the large- and small-scale farms raises increased requirements

in respect with the quality of the domestic feeds /of both grains and protein feeds/ even in the case of a growing consumption of imported proteins. Fundamental condition of the satisfaction of these requirements is the application of economic regulators which encourage the growing and production of high quality feeds and the maintaining of their quality as well as the general propagation of technologies /e.g. of granulation/ which reduce the specific consumption.

The present structure and production value of animal husbandry just as its national economic importance equally necessitate that instead of the present distribution of feeds real feed management should prevail also in this country. More active import policy, the establishment and continuous maintenance of a more reasonable - i.e. more proportionate with the feeding values - price and subsidization policy are basic conditions for this.

CSETE, László: Védekezés az aszály ellen. /Protection against the drought./ Természet Világa, No. 5. 1988.

Inquiry after the changes of climatic increased throughout the world in the recent years. The possible growing warm of the atmosphere can be accompanied by the inundation of the lower situated territories and by the extension of drought stricken regions. These all may create a dangerous situation in food production and in nourishment being anyway contradictory, increasing thereby the number of undernourished and starving people. Therefore the elaboration of a strategy of prevention and adjustment came into prominence.

Strategy aiming at the control of damages caused by the drought

Based on the fact that the years of drought are irregularly occurring in Hungary the conclusion can be drawn that water supply will be deficitary

also in the future and therefore the possibilities of reducing the damages caused by th draught as well as preparations for this should be considered reasonably as distinguished tasks in the whole country.

The strategy for the control of damages caused by the drought represents a complex system which embraces prevention, then protection when the drought appears and its sufferance and finally the counterbalancing of the impact of the damages with the intention to re-establish and safeguard the potential:

- in addition to those damages which can be observed directly it takes into consideration also those presenting themselves indirectly;
- things to do are indicated in three levels - in the state control, in the diverse regions and in the enterprises;
- the social, oecological, technical, economic and organization demands, possibilities and conditions are concerted in it;
- its time horizon is that of a longer term but certain elements of it can be asserted even in the near future while others can be implemented gradually;
- it is a multipurpose - economic, environment protecting and social - strategy and the recommended things to do are in fact of those which should be realized anyway for the sake of farming in order to improve efficieny and economicalness.

Things to do and conditions

The key of prevention and control against the damages caused by the drought is the storage and preservation of rainfall in the soil. Soil cultivation with adequate equipment and up-to-date technologies is here of a determinative importance. The propagation of manuring in a broader sphere, the production of manure and its suitable spreading to the soil are to be considered as dintinguished tasks.

Fertilization has also a determinative role in the fight against the drought. It is already proven that in the case of harmonic nutritive material supply the crops transpire increasingly less water when producing a unit quantity of dry material.

Liming improves the soil structure which is important for the conservation of the precipitation and protects the soil against acidification.

Power machines and equipments available in the optimum period, plant protection and weed control, chemical protection against the insects are all factors which reduce the consumption of water stored in the soil. In addition to the aforesaid also melioration and irrigation, the improvement of drought resistant varieties, afforestation as well as the application of crop rotation may serve as a basis for the safety of production.

Diverse financial interventions may assist /reserved profits, risk reducing assurance, funds for the case of elementary damages, etc./ may assist in combatting the drought, in the prevention of further damages and in safeguarding the productive capacities.

CSETE, László: A paraszti jövendő margójára. /On the margin of peasant future./ Publication of the Political Academy of the HSWP, 1988.

Considerations are developed in the paper about the conclusions drawn by Péter VERESS in his exciting and illuminating book "A paraszti jövendő" /Peasant Future/ published four decades ago.

The effects of the socialist reorganization of Hungarian agriculture which formed history, people and smaller settlements were followed by the modernization of production, and then by its prosperity and international appreciation.

The way leading to the results achieved, however, was not smooth at all. From time to time here and there people working in agriculture and the diverse productive capacities suffered the consequences of the structural transformation violating the voluntary principle, neglecting the gradualness, wasting the productive capacities and underestimating the economic considerations. These are illustrated by having made join such regions of unfavourable natural conditions to the collective farming which were unsuitable for large-scale production or more exactly or functioning in the farmers' cooperative type conceived at that time as well as by the gathering of horticultural activities into collective organizations, by the liquidation of the scattered fruit gardens and groups of buildings, by the concentration of the livestock even if the adequate conditions were failing, by the underrating of those "lower" types of the cooperatives which were more adapted to the human nature and to the given conditions, etc. In spite of the deficiencies these changes created favourable conditions for the further development.

And how to go on now? Experience gained at home and abroad equally demonstrated that progress should be made on two lines: in the large farms of cooperative scale and in the activities of small but flexible undertakers.

In connection with the structure also the types of property, the interestedness, the functioning of the enterprises, the types of organization within the scope of the enterprises and their interestedness are suffering significant modifications.

The development of the large-scale enterprises takes place in a differentiated manner where it is characteristic in general that they become increasingly centres of organizing, operating, interestedness, property managing and increasing activities to which the organization units of independent economic management within /integrated/ and outside the enter-

prises are joining.

The specialized cooperatives present a good example for the modernization of the large-scale enterprises in both their content and operation. The specialized cooperatives - worthy also of international attention - are particular Hungarian formations: combinations, namely, of the classical cooperatives for the sale of products and the Hungarian farmers' cooperatives. Their functioning is in compliance with the up-to-date cooperative efforts for spontaneous development and activity.

The extension of the sphere of small-scale /family, joint, individual, integrated, etc./ undertakings is necessary in the enterprise structure. This can increase efficiency and employment.

The motive force in the transformation of the structure of enterprises and undertakings is the interest i.e. the concerted utilization of the "property" for both the short and the long terms. Everywhere where the social relations rapidly progressed there such an utilization of property can come into prominence which satisfies the public interest.

CSETE, László and co-authors: Szabolcs-Szatmár megye agroökológiai potenciáljának fejlesztése és prognózisa. /The development and prognostics of the agro-oecological potential in the county Szabolcs-Szatmár./ Paper of the Institute for Agricultural Economics, Budapest, 1988.

The task of the survey is to demonstrate - in compliance with our present knowledge and under various surmises - where are the limits of the development of agriculture and forestry making use of the natural resources in the county Szabolcs-Szatmár and what are the predictable versions of this utilization.

Like any forecast this also indicates possible ways and tendencies, gives rise to thoughts and encourages us to elaborate further conceptions,

concrete measures and things to do.

The forecast provides footings also for the experts of the county to arrive at agreement in certain problems which are under discussion or can be elucidated difficultly at the present or at least in versions of solution which they consider to be perspectivical ones what alone may further purposeful acting.

The environment is continually changing and the system of economic regulation is also year by year modified. The applied methods as well as the explored knowledge relatively easily can be completed, modernized or even repeated.

The ready made forecast can be used for the formation of the experts' views, for education and postgraduate training since it suggests ways how the future, the progress should be regarded "through the eyeglasses" of quality in a broader sense and what are those fields where initiating steps should be made reasonably. Thereby also the expert capacity being of fundamental importance from the aspect of future development could also be increased.

The tendencies, process and methods of research

Corresponding to the program labour commenced in three logically interrelated directions.

a/ First of all the exploration of the situation of the agro-oecological potential and the elaboration of a forecast about it.

b/ Then the elaboration of the diverse versions of utilization of the agro-oecological potential and - in respect with the processing of basic materials and of timber, with the challange of the era - the demonstration of the more efficient po-sible utilization in a sphere broader than so far of the biomass produced in the diverse versions followed.

c/ After this the surveying of the social, market, regulation and other aspects of adjustment to the changing conditions took place taking into consideration also that the demands can be satisfied but occasionally through posterior adjustment in the future and a behaviour built on foresighted strategies and on conscious preparations will be needed.

Detailedly elaborated steps of the research followed each other in the aforesaid three directions.

1. Labour started with the delimitation of the small tracts since the smaller districts composed of villages having more or less equal oecological conditions, production standards and structure, etc. are fitting differently into the future labour division and their development chances and adjustment possibilities are also different. Surveys were carried out in ten small tracts within the county.

2. The work continued with processing the statistical data collected between 1951 and 1957 in the course of regional research for micro regions; in selecting the period a determinative role was played by the fact that circumstances prevailing at that time correctly reflected the effects exerted by the natural conditions on both the yields and the production structure.

3. After this forecasts were elaborated on the yields based partly on the aforesaid outlines and experts' evaluations as well as on the genetical potential and technical conditions known at the present and this concerned the assessing of the producable outputs and quality standard which can be attained for the turn of the millenary. The expert estimations were supported by the compilation of an information basket.

4. The intensive survey and critical evaluation of the agro-oecological potential reveal the climatic and soil conditions prevailing in the county, the situation of meliorations, the hydrological conditions, the

ratios of land use or with other words those of the kinds of cultivation. These are published in the form of expert contributions.

Things to do for a longer term are included in the expert contributions but from this also the short term ones can be derived according to the sense.

5. In cooperation with the experts those possible ways of utilization as well as their conditions were elaborated which may come into question and they embrace the forecasts concerning arable crop production, mass forage production including also the grassland, fruit and vegetable production, viticulture and the processing of the agricultural products to finish with the expectable changes in forestry and primary timber industry.

6. In the next step the paper searches with mathematical methods those combinations, relationships and interactions which are promising to be optimal ones according to certain purpose. These calculations give answer to the questions: what is the production structure at which outputs can be increased in the county and what are the inputs needed for the intended growth. No less important is than the above considerations the problem: what kind of process will be started in the whole chain by the changes taking place in one or another constituent of the respective tasks, circumstances and conditions and in such cases how and with what results can the oecological conditions be concerted with respect to the changing requirements of the market.

7. Within the scope of utilization the paper is dealing also with the challenges of the future. Correspondingly as far as the biomass is concerned great attention was paid to the utilization of agricultural by-products and wastages, to the possible more complete utilization of the dendromass in forestry, to energy saving, environment protection, etc.

8. The paper forecasts the expectable number of population and compared to the effective consumption it takes into account also those quantitative and qualitative changes which can be predicted for the turn of the millenary.

9. Considering this and all the aforesaid, forecasts are made about the food demand of the county, feeds needed for the livestock, the seeds demanded for sowing, the losses which can be planned and the surplus which can be delivered to the market in the county or in other regions - in this country or abroad - realized in fresh or processed state.

Io. Social, organizational and economic problems are playing an important role in the future development or in the realization. Therefore they are also outlined in the paper.

The part including proposals alludes to the possible further development and its conditions but compared with the expert contributions it gives preference to the near future and searches the ways how the prospects can be linked with the forthcoming years. It suggests moreover certain ideas based on which the farms of the county may gain advantages - which are realizable in secondary incomes - if compared to others.

Miss DÉNES, Katalin - Miss GÁBOR, Éva: A munkamegosztás és együttmüködés a többszektoru husiparban. /Labour division and cooperation in the multisectoral meat industry./ Gazdálkodás, No. 9. 1988. p. 1-14.

The development pattern of labour division, concentration and specialization in the meat industry is similar to that being generally characteristic for food industry.

Meat industry became after 1945 a large-scale industry in a way stimulated by the state. The former specialization and labour division were

replaced by the establishment of concentrated and combined types of enterprises. The concentration process was performed within the scope of the state owned industry.

The enterprise size in the state owned meat industry was adjusted to the scales of the supply of the population and of the export activities, the profiles were formed in compliance with this and demonstrated great similarity.

Specialization is insufficiently in the state owned meat industry and the diverse phases of the production process were not separated from each other and were not organized to independent scopes of enterprises or firms. The reasons for this should be sought partly in the conditions under which domestic meat industry came into being and not least in the insufficient development of the technical and technological standards, of the deliveries and in the absence of interestedness.

Labour division and cooperation between the enterprises of the state owned meat industry are not too broad. Its most important spheres are the delivery of live animal and the delivery of semi-finished products in less significant quantities. Relationships of this kind were established mainly in consequence of the important territorial differences existing between raw material production and processing capacities. But so more as their independence increased the enterprises urged the establishment of direct relationships in the sphere of the acquisition of livestock for slaughter /of live animal/.

Reason and basis was offered for the encouragement of the not state owned meat industry /functioning in the spheres of agriculture and commerce/ - after 1968 - by the bad meat and meat product supply of the rural population and of the small settlements as well as by the endeavour of the enterprises operating in the agricultural and commercial sectors to increase

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their incomes.

Conditions for the development of the activity were provided through the establishment of up-to-date large-scale agricultural production.

The specialization of activities and technologies came into being neither in the not state owned sector. The enterprises equally perform slaughter and processing. Most of their products are semi-processed ones of the medium phase. As far as meat processing is concerned the labour division between the non state industrial sectors and the state owned meat industry are also insufficiently developed.

Consequently also the cooperations existing between the meat processing plants of the state owned and not state owned industrial sectors is mostly occasional and initial.

The development of the meat industrial activities in several sectors, however, resulted the improvement of the supply.

It is characteristic for the enterprise scales that larger enterprise scales came into being in the scope of the state owned meat industry while smaller ones were established in the agricultural and commercial sectors /farmers' cooperatives, state farms, joint ventures, ÁFÉSZ = general consumers' and realization cooperatives/. Medium-scale enterprises /with a capacity of 30-100 thousand pigs/year/, however, are present within the enterprise scale structure only in small number.

Just until the recent past the development of labour division in the meat industry was considered to be implementable only on the basis of central principles, plans and rules.

The market mechanisms did not function. Economic management based on the planned allocations keeping the obligation of supply in view existed /and exists/ while the fix prices were low and supported, etc.

Since the market does not yet regulate and the directives do not regulate any more therefore also the forms of labour division and cooperation are in transformation.

Expectably the progress of labour division will be influenced in the future by the development of market relations, by the orienting role of the market. Direct enterprise responses which take the market requirements into consideration may bring about changes in the profile, profitability and scales of the diverse enterprises and plants and also in the increase of specialization of diversification.

For the progressing of labour division and cooperation, of the relationships adequate interestedness as well as correctness and confidence in respect with the partners are needed.

DORGAI, László: Ingázás és foglalkoztatás egy gazdaságilag elmaradó térségben. /Commutation and employment in a region of undeveloped economy./ Gazdálkodás, No. 1. 1988.

In respect with the economic development excessive differences can be observed between the diverse regions of the country in Hungary. It occurs in several regions that a significant number of the employees of active age earn their living in settlements situated more distant from their domiciles and they are commuting throughout long years.

The paper was prepared on the basis of a survey performed by the Institute and it is dealing in details with the characteristics of commutation in a region situated in the Southern part of the county Nógrád between the Northern more industrialized district of the county and the capital. A region is here in question where 31 thousand people are living in 35 settlements and in 8 of these settlements the number of the population does not amount even to 500 heads. 66 per cent of the active earners is

commuting and 9o per cent of them travels day by day to work their majority taking thereby 4-5 hours travelling time upon themselves daily. There are some settlements from which the daily number of commuters amounts to about thousand heads. In consequence of the shortage of jobs the population of the region is continuously decreasing, in course of the recent 2.5 decades the number of the inhabitants decreased by about 16 per cent.

In course of our survey we made detailed fact-finding investigations about the commutation /the number of commuters, their sex and age structure, their qualification, possible earnings, motives of commutation, etc./, about jobs in the capital where commuters are employed in greater number and about the situation of the agricultural and industrial enterprises managed in the respective region. At a final end the investigation served the purpose to find an answer to the question whether is it possible or not to create new jobs in the region and to reduce thereby the scale of commutation and if yes then what are the conditions for this.

Amont our conclusions we may stress that 56 per cent of the commuter labourers has no qualification at all and this ratio is even less favourable for the women since only 12 per cent of them has any qualification. More than 6o per cent of the commuters are employed in building industrial organizations but there are also some non building industrial organizations which employ such a great number of commuters that they could establish even a plant unit in the region in question. This is, however, very aggravated and practically impeded by the fact that the infrastructure and other conditions needed for the displacement of the plant are actually failing. Possibility could be offered for the increase of employment in the large-scale agricultural enterprises through enlarging the ratio of the traditional agricultural activities and through the increase of vertical production organized upon them /food processing/ on the one hand and

with industrial production more or less independent from agriculture on the other hand.

Beside the shortage of jobs the major motives of commutation are the existing differences between the possible earnings since at the average by 30-35 per cent higher personal incomes can be achieved at worksites in the capital than in the economic organizations operating in the region.

The final conclusion of the paper is that commutation cannot be significantly reduced in the short term and results can be hoped only in the case if diverse preferences would be granted for those who create new jobs /tax allowances e.g. and preferential credits/ and if the basic infrastructural developments for production and for the population could be implemented in a way supported by the state.

DORGAI, László - Mrs. FÓRIZS, Margit - SZABÓ, Mátyás: Vetésszerkezet a termőhelyi adottságok mérlegelésével. /Crop structure elaborated by weighing the production-site conditions./ Gazdálkodás, No. 9. 1988.

In the recent years it is characteristic for the agricultural enterprises that compared to the previous years their development sources decreased, they can counterbalance the growing prices of the industrial means of production and the augmenting withdrawals with increasing difficulties through the improvement of efficiency. Many people are at the opinion that the reserves for the improvement of efficiency became already exhausted in the enterprises. In this situation we consider all those procedures to be very important which may contribute to the increase of the incomes of the enterprise without any surplus investment.

In the present research we outlined a possible way for this. We started out from the fact that production-site conditions are variegated

even within the scope of one and the same farm. If we can realistically assess the performance /productive/ capacities of the diverse production-sites and we can allocate the crop rotation so that the agronomical limitating factors are satisfactorily taken into account through meeting the production-site demands of the respective crops at the fullest possible extent then this would bring economic benefits for the large-scale enterprise.

A survey like this can purposefully be performed only on the basis of realistic economic data since this could invest the results with probative force. Just for this end we selected three farmers' cooperatives of diverse production-site conditions operating at a high economic standard where we collected 5 years' data of the allocation of crop rotation /what crop is or what crops were grown on the diverse plots/, of the per plot yields and of the fertilizing and manuring inputs.

Our work can be devided into two parts which are interrelated but in spite of this they can be separated. The first part is represented by the definition of soil subtypes and then by the assessment of the effective productive capacity of the diverse plots which at a final end can be regarded as the crop-centric further development of the production-site evaluation. The second part is the optimization of the territorial allocation of crop rotation by means of the linear programming method. We adapted the programming method which is applied in several other fields and a joint model to this concrete task so that it should be easily operated and solved with those computers which are generally used in the practice of the enterprises.

The major conclusions and recommendations can be summarized as follows:

- Getting to know the performance capacity of the production site is important also at agricultural production of high standard. The assessment

of the performance /productive/ capacity should be carried out for each crop which is grown /or which can be grown in compliance with the suitability of the production site/ per each soil subtype and based upon this for each plot. Thereby such a data basis can be established which can be modified easily in the case of necessity /e.g. replacement of variety, reclamation of soil/. Organized on computers this data basis can be used at the same time also in a way that if we intend to introduce a new culture /e.g. seasoning crops, medicinal plants, hemp, etc./ needing particular site for its production into the crop structure then the most suitable plots or their soil flacks most suitable for this can be "recalled". In addition it is serviceable also as a basis for the per plot adaptation of technologies which is frequently insisted on but exists in fact only formally.

- The realistic cognizance postulates that relevant output-input data should be available for each plot. Reasonably the information system of the enterprise should be further developed so that it should satisfy this demand. In this case the per plot economic calculations as well as the economic content of the objective function in the linear programming can be concerted in fact with the enterprise tasks and also an objective survey of the input-output relations can be performed.

- The recognition of the productive capacity of the production site and the territorial allocation of the crop structure upon this basis can bring in fact surplus results. In the surveyed farmers' cooperatives of high management standard this surplus amounted - under strict limiting conditions - to 3-5 per cent but we may suppose that more significant results can be expected there where the standard of farm management is lower. One can similarly reckon with greater results in those farms where greater differences can be observed between the soils of the diverse plots.

- The nation wide assessment of the productive capacity of the production sites would help in the improved utilization of the agro-oecological potential and also in the establishment of concert between the production-site conditions and the production structure in the diverse regions. The method which we outlined can be applied also in the macro sphere.

- On the basis of the special literature it can be proved that the productive capacity of the diverse varieties is significantly different if the production-site conditions differ. Taking this also into consideration the elaboration of an experiment system seems to be purposeful in the qualification of varieties which is suitable to assess the performance of the respective varieties under different production-site conditions. Based on the experimental results of the large-scale agricultural enterprises the most suitable varieties can be selected if the concrete production-site conditions of the enterprise are known.

- The systems of interestedness and the internal types of undertakings related with the actual performance are increasingly gaining ground in the large-scale agricultural enterprises. In one certain point the interests of the large-scale enterprise and these of the unterpreneurial groups are conflicting. The large-scale enterprise is interested, namely, in the raising of relatively high requirements while the enterpreneurial group is interested to assume relatively low performances. In such cases the cognitive process we applied is suitable for the formulation of scientifically based realistic performance targets in the arable crop production.

DORGAI, László - SZABÓ, Mátyás - Mrs. SZOMOLÁNYI, Judit: A gépüzemeltetés számítógépes információs rendszerének nagyüzemi tapasztalatai. /Experiences of the large-scale farms with the computerized information system of machine operations./ Gazdálkodás, No. 11. 1988./

The implementing of the national economic tasks requires in each sphere of economy the increase of competitiveness. One of the most important conditions for the up-to-date grounding of enterprise decisions is the rapid and correct information system.

More than one third of the fixed assets pool of the agricultural enterprises is represented by machines, vehicles and other equipment. The efficiency with which this significant fortune functions can be a determinative factor of the competitiveness of the enterprises. Costs related with the operation of machines - as services - make nearly one third but in several cases even the half of all the direct production costs. This alone gives reason to the demand that broad and relevant informations should be available about this far reaching activity.

In the present days microelectronic equipment are applied for the collection, storage and processing of these informations.

We revealed in the paper the major lines of the microelectronic supply of machine operation and we emphasized those results and problems which are - in our opinion - serviceable for the establishment of an integrated computerized machine operation control system.

Since no comprehensive informations were available from the sources of special literature therefore we performed independent fact finding investigations in 401 large-scale agricultural enterprises with the aim to obtain a realistic evaluation of the situation. The analysis of the informations received was carried out by means of a computerized system which we elaborated.

The conclusion can be drawn that the software supply of the diverse auxiliary servicing processes within the enterprises shows a very variegated picture. Microelectronics are mostly applied in the accounting of fuel consumption and in the processing of transport performances.

As a continuation of our research we collected those programs and systems related with machine operation which are used at the present and which we received from their elaborators.

We could experience that the recognized programs embrace almost each part sphere of the machine operation but they supply relatively less information about the relationship between the performances and the inputs and they hardly render useful assistance to the operative management.

Data processing programs were elaborated first of all for those tasks where the greatest quantity of data should be collected and analyzed.

Such programs which stimulate and optimize the tasks, indicate the progress and perform activities related with the production were not elaborated so far for micro computers.

We think that the chronological description of the development of the computer technical means and of the programs elaborated for them will remain a basis for the integrated computerized information system to be established in the future even in respect with those algorythms which describe the necessary fundamental professional informations, or the outputs demanded by the practice, necessary for the functioning of the real system, obtained from collecting or calculations and also their input-output relations.

In order to make progress in the development of the computerized information system of machine operation the present information system should be extended to each sphere of the machine operation.

It would be reasonable to make the computers the direct worktools of all the managers of production and operation and for this end - maintaining

at the same time the data processing parts - the services of the program systems should progress toward such informations which appear within a short term or immediately.

For the sake of further advance a greater part of the primary informations should be recorded and transmitted by means of microelectronic devices fixed directly on the respective tools.

Changes are necessary also in respect with the computers used. Instead of the computers of smaller performance and storing capacity which are generally used at the present rather the IBM PC compatible family /XT, AT/ would be serviceable for the establishment of such a complex data basis of machine operation which could efficiently help the management and accounting of the enterprises.

ÉLIÁS, András: A huságazat külpiaci kilátásai. /Foreign market outlooks of meat trade./ Vágóállat és Hustermelés, No.3. 1988.

Since 1981 times are unfavourable for the agricultural exporters; world market prices significantly decreased. This is true also for the international food trade and to meat trade within its scope.

The produce quantity offered for agricultural realization of almost all agricultural and food industrial commodities but especially of grains, sugar, meat, meat products and live animal surpassed the respective demand.

The continuously strenghtening traits of autarky occurring in the agricultural production as well as the unfavourable trend of the solvent demand resulting from the impact of stagnation experienced in the world's economic progress fundamentally contributed to the disadvantageous development of world food trade. These all led to the great intensification of competition at the market and to the increased subsidization of the exports.

The significant devaluation of the money market position of the $ played also a part in the decay of the world market prices.

The importance of meat trade in our national economy as well as in our agricultural economy demands that we should find a response on the development of the world market position of the products of this trade and a way for a more resultful adjustment to the world market.

In the 198o-es perceptible changes took place in meat production, meat consumption and meat trade throughout the world.

Under the impact of external and domestic economic factors the response of the diverse countries was, of course, different but the tendency evolved that the increase of beef and veal production became slower while the rate of pork, mutton and poultry meat production grew more dinamically.

Consequently the ratio of beef and veal is decreasing within the world's total meat production while that of poultry meat grows at a more rapid and that of pork at a more moderate rate. In 1985 pork was represented by 39.3 per cent, beef and veal by 31.8 per cent, poultry meat by 2o.9 per cent while mutton and goat's meat by 5.6 per cent in the total meat production.

Based on the expectable production, consumption and world market tendencies we may reckon for the future with the fact that beef could continue to loose of its weight and the most rapid gaining ground at the market could take place in the poultry meat and then in pork trade. Though at a slower than rate that nevertheless mutton trade could also loose of its weight.

At the beginning of the 198o-es meat trade could take pride in an export /without the dairy milk products and those of the sheep business/ of 54o million $ in the non Rouble relation. Under the impact first of all of the drastic decay of market prices abroad and then of the increase of

realizations in Rouble in course of the recent years the value of this trade's $ exports reduced to 390 million $ for 1985 and to about 330-320 million $ for 1986-1987. The value of sales in Rouble came near to 130 and to 160 million in the respective years. Financial subsidization significantly increased in course of this period since a price reduction of 40-50 per cent /compared to 1981 for 1986/ could not be counterbalanced. /Also the raising of the state purchase prices and the increasing acquisition costs of other materials and means should be added to this./

In respect with the foreign market outlooks of meat trade the summarizing conclusion could be drawn that by adjusting more flexibly to the requirements of the market the Hungarian export commodity funds will find a way to be placed under slowly improving conditions. Taking the impact of the production policies of the biggest beef exporter and importer countries into consideration one can reckon with a moderate revival of the market situation and so our chances may grow. In the case of our entrance to the member countries of the European Economic Community we may hope for certain that in an international climate similar to the present one or even more favourable than this the still existing disadvantageous discriminations compared to others will gradually disappear. So we may take part in the market competition with improved chances in the future which alone, however, does not provide realizable profits.

But making use of the realization opportunities which will open in the future is inconceivable without the improved competitiveness and marketability of our products.

In the increasingly strained world market situation the requirements grow still higher in respect with the export products and quality and endurance demands are playing greater role.

Attention should be drawn to the fact that in the recent period the number of quality claims and complaints hardly lessens and in one or another field progress seems to be slow or perchance our position worsens.

It is well known that several factors exert influence on the quality of the product. We may mention among them those of technical-technological, economic or social nature. Quality defects can most frequently be attributed to sophisticated reasons where problems of interestedness play also certain role and in most cases this cannot be regarded as independent from labour and technological discipline, from labour organization or from quality control.

In summary the conclusion can be drawn that in compliance with the export requirements in respect with live animal and food industrial products we should gradually make progress in the breeding of suitable varieties in the safeguarding of uniformity in the livestok and in the application of adequate keeping and breeding technologies. The extended use of the objective qualification and the gradual establishment of concert between the slaughtering and processing capacities are inevitable. Lasting success of the exports is impossible without the increase of the cooled, refrigerated and deep frozen storage capacities, the modernization and improvement of production technologies, packing and transports.

The better exploitation of the expectable export possibilities postulates in addition to the aforesaid also the improvement of the productive activities of the agricultural and food industrial enterprises, the increase of flexibility and the more consequent assertion of the mutual interestedness in the whole verticum including also that of the enterprises which commercialize the final product. For this end, however, the contracted, organizational and interestedness relations existing between the enterprises acting within the meat verticum should be rendered more

perfect than at the present including also the informations about the foreign markets and the way how external effects can be made more perceptible. An important obstacle would be brushed away thereby in the way of a more flexible adjustment to the differentiated commodity demands and this would bring us nearer to the release of conflicting interests and to the improvement of interestedness relations.

ÉLIÁS, András: Mezőgazdasági és élelmiszeripari termékkivitelünk szerkezetének javitása. /The improvement of the export structure of our agricultural and food industrial products./ Tudomány és Mezőgazdaság, No. 5. 1988.

In the paper we try to find answers to questions related with the outlooks for agricultural and food industrial products at markets abroad as well as with the future structural changes of our food exports.

It is well known that since 1981 or in the case of certain products since 1982 the agricultural world market prices significantly decreased. The important reduction of the export prices can be attributed first of all to the great decrease of the solvent demand. The unfavourable conditions, of course, made the rivalry for solvent markets very intensified. The position of the agricultural exporters was even more worsened in consequence of the strenghtened efforts for autarky.

There are certain estimations according to which the subsidization of agriculture in the progressed capitalist countries reduces the world market prices of the agricultural products by 16-2o per cent. Therefore the abolishing of the protectionist agricultural policies of the progressed countries would act toward a moderate raising of the world market prices and bring us nearer to the easing of very critical balance troubles with certain products as well as it could create an increased

sphere of movement for the asserting of comparative cost advantages.

The present world market outlooks are highly contradictory and they are in no case reassuring ones. Advantage is brought to Hungary also by the geographical neighbourhood with the Soviet Union which is one of the most important food importer countries and with the CMEA. Therefore we may consider the Soviet Union to remain a market for Hungarian agricultural products as well in the near future as for a longer term too.

We can reckon with the fact that a not negligible part of our mass product exports /grains, meat, fresh and processed vegetables and fruits/ may be disposed to the Soviet Union. Efforts should be made for the end that the Soviet Union should represent an increasing market for our highly processed products and specialities of high quality. The exploitation of the above outlined possible exports can be implemented, of course, only if based on long term agreements.

Our opportunities for West European realization are limited. An illusion would be to hope that the agricultural policy of the Common Market could become open - even in the case of agreements advantageous for us - at such an extent whereby our market positions which existed before 1973 could be re-established. Opportunities for increasing our food exports to the EEC countries could moderately augment particularly in respect with meat and poultry as well as with the horticultural activities in the case if the conditions of our competitiveness would be continually improved.

Except the Community the receiving capacity of the West European market is but small. Considering, however, their proximity and knowing their traditional commodities we may reckon with these countries /Austria, Switzerland and the Skandinavian countries/ as markets remaining important also in the future. The conditions for this are also a transition to the meats and meat products highly demanded by the buyers and the rapid ad-

justment to these demands.

The progressed overseas capitalist countries, first of all the USA, Canada, Australia and Japan seem to represent markets where significant extension can be achieved.

As far as the group of solvent countries on the way of development and disposing therefore of particular resources is concerned like those which - except the oil countries - could implement greater economic prosperity /e.g. South Corea, Taivan, including the port and city-states/, those earning significant incomes from the tourism /mainly islandes and shores in the sphere of the Mediterranean and Caribean Seas/ and some Latin American countries disposing of industry concentrated of a considerable scale, they are worthy of great attention in respect with the establishment of markets. The group of the countries on the way of development represent at the same time possible market for the means of agricultural and food industrial production, for equipment, seeds, veterinarian medicaments and preparations, devices and know-hows.

The national economic branch has to assume a role which should not be underestimated mainly under non Rouble accounted relations in the establishment of equilibrium in the national economic foreign trade balance and thereby in the balance of payments, in the maintaining of solvency, and then in the reduction and gradual liquidation of the stock of debts. We can dispense with an export of adequate scale neither in the socialist relations in order to counterbalance our imports.

The realization of an increased adjustment of production to the market, the more reasonable use of arable land situated under unfavourable conditions, the protection of the environment, therewith related the so-called alternative agricultural production, higher phytopathological requirements, the continuous improvement of the export structure, the finding

of ways and methods for the augmenting of competitiveness in markets abroad, the increasing of the income producing capacity of the economic branch, as well as the better concerting of interests in macro and microeconomics, in the whole process of production: these are all important requirements.

One can reckon with the fact that the harvested area will be reduced only to certain extent within cultivated land. Smaller changes can be expected in this respect to the benefit of corn, winter and summer barley. The acreage of leguminous plants will perceptibly grow while that of the industrial and oil yielding plants will do the same at a somewhat smaller extent. Rice remains practically at the present level while the cropland of sugar, tobacco and of the vegetables will somewhat decrease. Changes may take place in the crop structure of the arable forages through the introduction of certain forgotten, already produced or new forages into the arable crop production.

On an unvaried sown acreage the fiber crop demand of industry can be satisfied at an increased extent.

A moderate reduction of cropland for vegetables will serve also the improved satisfaction of export demands if the assortment of varieties produced could be enriched, irrigation would be extended and the yields could be increased at the same time.

The better adjustment to the requirements of markets abroad may call forth the increase of cropland for seed production and the extension of the acreages sown by aromatic and volatile oil crops as well as by medicinal plants.

In the case of fruit gardens the task is to maintain the existing productive funds i.e. to delay the clearing of the orchards and than to carry out changes in the cropland structure /the increased plantation of new and much demanded fruit kinds or certain drupulets/.

By improving the management of pastures and meadows the stabilization of the results achieved in the first half of the 1980-es is the task in animal husbandry.

In order to increase mutton and milk production the stopping of the unfavourable tendencies and the augmenting of the stock can be set as a task in sheep breeding. This could result in the increase of the available export commodity funds.

Our production conditions, traditions and possible feed supply demand that pig and poultry breeding should be treated with greater attention.

Beside the well organized management of the stock of games at a high standard also the exploitation of the foreign currency earning opportunities offered by hunting or through the export of games on foot or shot as well as of processed products and other small commodities deriving from that should be put on the agenda.

Related with the agricultural production flour, farinaceous products, vegetable oils, processed fruits and vegetables, soft drinks, quality wines, meat and poultry industrial products deserve distinguished treatment in the development of food industrial production. The better satisfaction of domestic needs postulates the increase of feed production and beer making too.

Perceptible changes took place in the export structure in course of the past years; the share of animal products grew if compared with those of vegetal origin and compared to the raw or semi-processed products the ratio of the finished products increased; the assortment /nomenclature/ of the exports apparently enlarged /nearly 2000 commodities/ and the market continued to diversify /products of the economic branch are delivered to more than 100 countries/. These results, however, are insufficient for a promising future.

Adjustment to the demands of markets abroad will require also in the

future to maintain the variegated character of our agricultural production or to continue its enlarging. Favourable opportunities are offered for this by the enterprise structure of the country - including as well the large-scale as the small farms - and by the available labour which can be organized.

The permanent adjusting of the production structure of the economic branch and of the export structure to the demands as well as the increasing of competitiveness greatly depend on how and in which quality will the domestic industry and - through the imports - the domestic trade satisfy the needs of this economic branch. The different conditions of entrance to markets abroad, the rearrangement of the markets and the flexible adjustment to market demands require and postulate variegated types of foreign trading, including the joint ventures and producer enterprises as well as their associations and their direct presence at the markets abroad.

Miss GUBA, Mária: A kertészeti kisüzemi termelés fejlesztési lehetőségei hazánkban. /The possible development of small-scale horticultural production in Hungary./ Agrárvilág, No. 3. 1988.

The household farms of the cooperative members and the auxiliary farms of the population had and have an increasing role in the growth of production, in the decrease of regress as well as in the adapting to the consumers' demands. Presumably significant quantities of the horticultural products produced in the small-scale farms will represent crops still for a longer period. In addition to the fact that these products are labour intensive ones another characteristic is that in respect with both the non recurring and current inputs they became such crops which demand at present many means and investments not only in the large-scale enterprises but also in the

small-scale farms. And the amount of the realizable incomes as well as their ratio to the invested capital and to the worktime consumed are standing now in the focus of interest. Therefore the increasing demand for a growing small-scale production would be inconceivable if the conditions of interestedness would not be settled. In order to augment their incomes the small-scale producers undertake /mainly if there is no opportunity offered for its realization with smaller risks/ the production of more investment- and labour intensive crops in compliance with the local conditions even at the expense of higher risks. This inclination is still sufficient in general at the present but the small-scale producers are particularly sensitive when responding to the changes of market and income relations. Therefore a very important task is to render the system of regulation incentive. But also the well organized integrating activities which are managed by taking demand consciously into account as well as the creation of cooperation types through the establishment of interestedness in the final product and the implementing of the system of production and realization will play an important role.

The traditional integrators of small-scale horticultural production are the ÁFÉSZ-es /General Consumers and Realization Cooperatives/ which support it mainly through contracted production and collection. The processing enterprises are in indirect relationship with the small-scale producers mostly through the buying up of their products. In the variegated system of relationships existing between the large-scale enterprises and the small-scale farms the arrangements based on collective and individual interestedness could survive. In addition to "integrating" relationship existing between the cooperative trade and the large-scale agricultural enterprise which frequently do not mean more than the simple collection of the products also the establishment of organizations aiming at the realiz-

ation of the small-scale producers' products /e.g. associations of the producers, produce disposal cooperatives, etc./ even with the joining of private capital as well as of the wholesale trade of the small-scale undertakers which is efficiently adapted to the small-scale production and the creation of their business federation organizations seem also to be necessary. This is necessary also in the case if apparently - and also in fact - an increasing presence of the small-scale producers can be observed in the markets of realization directly to the population and in the producers' markets serving the tasks of fresh consumption.

An important sphere of the development and organization of small-scale production is the establishment of competent advisory services.

The weakness of production is the machine supply of the producers. The well proven, flexible types of the integration of the small-scale producers is represented by the specialized groups from which the following benefits are expected:

- facilities in the purchase of materials, means and machines needed for production,
- the collective acquisition and use of the costful equipment of high performance,
- opportunity offered for postgraduate professional training,
- more advantageous realization of the products,
- possibility for joint intervention in the case of conflicts, etc.

In order to provide safety for the producers also an efficiently operating system of intervention would be needed in the entire sphere of horticultural production and trade, paying careful attention, however, to the requirement that the disintegrating balance of demand and supply should not be conserved thereby.

Miss GUBA, Mária - RÁKL, Zoltán: Az energiatakarékos technológiák gazdaságossága és jövedelmezősége hazánkban. /The efficiency and rentability of energy saving technologies in Hungary./ Agrárvilág, No. 2. 1988.

In the energy rationalization project of agricultural production distinguished tasks were the improvement of the energetic efficiency of the existing equipment, devices and technological processes, the reduction of the specific energy consumption and the utilization of heat wastages. There is, however, a precondition for the introduction of energy saving technologies and this is that it should be remunerative for both the farm which applies it and the country. The reduction of energy consumption should have no impact on the needed rate of the growth of production and should not impair the quality of the labour performed. So purposeful economy of energy means that the necessary and satisfactory mechanized labour should be performed with a good organization of labour and with up-to-date /energy saving/ and well maintained machines and machine-junctions of good technical condition whose performance is most adequately adapted to the implementation of the respective tasks. Regarding from this aspect the situation with the operating of agricultural machines rather worsened than improved in course of the recent years. Taking the gradual outdating of the machine pool into consideration the fact that the energy consumption of the tractors remained at an unvaried standard even under conditions like this can be evaluated as an outstanding result. Further results could be achieved in this sphere first of all and most rapidly through the modernization of the machine pool which is rendered difficult in consequence of the poorness of the investment sources and of the limited opportunity offered for the purchase of machines.

As far as savings achieved in the energy consumption of artificial drying are concerned the following items can be stressed among its sources:

- the production of dried green lucerne meal /lucerne and grass/ significantly decreased /part of the equipment serving this end were put out of operation/,
- as a consequence of the recent years of draught the humid content of the harvested grains was considerably smaller than the average and they demanded less drying,
- the energy prices increased,
- operation and fuel management became more professional,
- the energetic modernization of the dryers started and in certain respect continued.

It is to be pondered, however, that how large quantity of energy can be saved through the application of energy saving methods or through the substitution of energy materials. The diversity of the financial sources of the current inputs and investments and the grade of determination in the orientation concerning their use have, of course, also an impact. Energy saving should be treated very flexibly. So the energy economy in drying can be regarded as reasonable only in the case if losses in the product remain unvaried or at least do not exceed the value of energy savings. The topical task of preservation and storage is to maintain at the greatest possible extent the value of the inner content of the produce which highly influences the competitiveness of the diverse procedures.

In the economic management of the enterprises energy is not more than one of the elements of the inputs. So energy saving is only as important as any other factor influencing the results of the enterprise.

The economic effect of energy rationalizing investments on both the enterprise and the national economy is composed of two factors. On the one hand absolute energy savings were realized already also in the substitution of energy materials related with the modernization and the savings were

considerable in the case of traditional energy rationalizations while on the other hand the respective productive /or more correctly consumptive/ activity could become less expensive through the substitution of energy materials. Under the rapidly varying energy material price ratios, of course, the economic result deriving from savings and substitution shows significant differences. The reimbursement of the energy rationalizing investments demonstrates a sophisticated picture. The refunding of investments at domestic prices is favourable. The situation is more differentiated if world market prices are applied.

HALÁSZ, Péter: Kistermelés nagy eredményekkel. /Small-scale production with great results./ Agrárvilág, No. 3. 1988.

Within the scope of the agricultural structure developed in Hungary they are the household plots of the farmers' and specialized cooperative members, the plots making part of the salaries of people working in the state farms, the auxiliary plots of non-agricultural workers situated around their dwellings, production performed mainly for subsistence in weekend plots as well as private farms which belong to the sphere of the so called small-scale production. This type of production affects directly more than one and a half million families and 7oo thousand other families carry on agricultural activities of a smaller or greater extent in their hobby gardens. Moreover also those small-scale producers can be grouped to this category who practise agricultural production as a main job in family undertakings within or outside the scope of the large-scale agricultural enterprises. In summary more than the half of this country's population live in families dealing with agricultural production but in an indirect sense even more people are attached to this type of production and mainly to the results achieved there.

At the present it is characteristic for the commodity producing household and auxiliary farms as well as for the diverse undertakings of small-scale producer nature that with a very few exception only they are operating in a way attached to the large-scale agricultural enterprises. In most cases there are only simple commercial relations between them and generally not even on the basis of equal rights since the small-scale producers are more or less defenceless against the large-scale partners. The integrators are, namely, in a significant number of the actual cases - either as buyers and collectors or as organizators of the production - in a monopolistic position. Of economic or technical reasons this is inevitable in certain places but its present scale is in no cases desirable. For the future it would be reasonable if the organization of and assistance rendered to the small-scale producers and small-scale undertakers would not be performed exclusively by or through one and single large-scale enterprise but also the purchaser and processing organizations could have a sphere of activity in this respect. This way, namely, the number of the channels of commercialization would increase, the independence of the small-scale producers would augment and also market relations should better assert themselves. This would be one of the preconditions for the development of a small-scale producer and small-scale enterpreneurial layer which is independent from the large-scale enterprises or more correctly they are linked with them only through correct "optional" contracts. One can reckon with the establishing and consolidation of a layer like this mainly in the regions of unfavourable natural conditions where the productive activity of the large-scale agricultural enterprises will expectably decrease while their servicing activities will enlarge. Another important condition of the creation and consolidation of the independent agricultural small-scale producer and enterpreneurial layer is that the

agricultural subsidization should be sector neutral i.e. it should be related with the produce. Without this the competition of the diverse enterprise types and their reasonable labour division upon that basis is inconceivable.

Another condition is the establishing and correct functioning of the well proportionated and independent business federations. These can, namely, partly counterbalance the disadvantageous effects of the market and partly exert an advantageous influence on the political and economic esteem of the small-scale production. Besides this an important task of the business federations is to transform the present structure and activities of the wholesale and retail trade inserted between the producers and consumers which deform the real market relations.

In order to ease the harmful conflicts of interests between production and trade - which equally afflict the producers and the consumers - and to eliminate the unneeded chains such produce disposal cooperatives are to be established which are initiated by the producers. Instead of forced centralization the reasonable decentralization and the concerting of the producers' and consumers' interests would be characteristic for their functioning. Thereby an opportunity could be offered for the agricultural small-scale producers to deploy their influence also in such fields where no possibility exists for this under the present commercial conditions.

HALÁSZ, Péter - SZIJJÁRTÓ, András: A termelőszövetkezeti vezetőknek a közös- és háztáji gazdaságok viszonyával kapcsolatos véleménye és magatartása. /The opinion and behaviour of cooperative farm managers regarding the relationships existing between the collective and household farms./ Publication of the Research Institute for Agricultural Economics, No. 1. 1988. 181 pp.

It frequently happens in the Hungarian social and professional public opinion and even in economic political considerations that the contradictions and conflicts of interest occurring between the collective and household farms are misjudged, time by time overestimated, or underrated. But the efficiency of small-scale production which supplies one third of the domestic agricultural production and the future progress of its portion is the question first of all of how much the settling of its relationship to the large-scale farming succeeds and how their interestedness can be rendered mutual and their mutual dependence can be made obvious.

The relationship between these two organization types of Hungarian agriculture depends at a significant extent on the opinion of the managers of the farmers' cooperatives as both managers - and, of course, as small-scale producers - about the variegated aspects of household farming. In order to explore these opinions we performed in 1985-1986 a survey the result of which were 510 questionnaires ready for evaluation. Based on the analysis of these sheets we endeavoured to draw a picture about how the questionned managers consider the most important problems of the household farming of the members and their own household farming activities in respect with the relations between collective and household farming and what do they regard as the least settled symptoms which impede resultful cooperation. In our survey we dealt with the household plots of the farmers' cooperative members i.e. with their household activities performed on the basis of membership rights and we did not treat the conflicts

which accompany those types of small-scale undertakings which grew over the traditional scope of household farming.

The major conclusions of our survey can be summarized as follows:

The fitting of the household farming into the organization of the large-scale enterprise lags behind the increase of its economic weight. In course of the surveyed period the small-scale farming was organized by household farming committees in almost the half of the farmers' cooperatives and a sectional organization existed only in 4o per cent of them while departmental organization functioned in lo per cent of the enterprises. And the managers' opinions unambiguously demonstrated that the activities of the household farming committees is satisfactory at farthest for the organization of small-scale farms producing mostly for subsistence only; while the specialized, commodity producer small-scale farming requires an organization type which provides the possible greatest independence at the level of sections or departments.

According to the opinion of the questioned managers two thirds of the members are dissatisfied with the support provided by the farmers' cooperative for household farming. The reason of this is partly that in consequence of the deformed informations received through the diverse media of mass communication the small-scale producers claim - mostly unfounded - a "more altruistic" support from the large-scale enterprises; on the other hand, however, the financial interestedness of the collective farm is not realized everywhere in the support provided for the household farms. A promising opportunity will be opened for those farmers' cooperatives which are operating in the form of specialized cooperatives because of their conditions to transfer the main point of their activities to the supplies, assistance and equipping provided for the members' household farms.

The cooperative managers are dealing with household farming approximately at the same or at a somewhat smaller scale than the average of the members do. The way, however, how they make use of the household plot, whether they cultivate it personally or receive a compensation in corn or mayhap in cash is highly influenced by the economic standard of the respective farmers' cooperative. In the more resultful farmers' cooperatives only 48 per cent of the managers cultivate their household plots while this ratio is 71.5 per cent in the poorer farms. It is appare t that the cooperative managers prefer crop production in the household commodity production because it needs less time and energy and they take a much smaller part practically in any activity of the animal husbandry. Otherwise their commodity producing activity is determined first of all by those factors /tradition, given conditions, obligations of integration, the business cycle, etc./ which influence the household farming of the other members and much less by such subjective factors like the age of life, qualification or their job.

The farmers' cooperative managers are very strongly attached to their household farms. More than 4o per cent of those cooperative managers who perform commodity production increased the scale of their household farming in course of the past 4-5 years. The significant reason for this is that the profitability of agricultural small-scale production continuously worsenes and in order to preserve the amount of their incomes the producers are pressed to increase the scale of production. An important observation is that managers belonging to the younger age groups prepare themselves mainly for the development of their household farms.

The managers of the farmers' cooperatives are working for a daily average of 2.5 - 3 hours in their household farms, which added to their labour performed in the collective farm generally surmounting eight hours

daily represents a fairly great stress. Therefore 94 per cent of the questioned managers feel that household farming is a very great burden for them and 7 per cent is explicitly at the opinion that the surplus burden caused by household farming is "almost insufferable". In spite of this only few of the farmers' cooperative managers are in a situation where they could dispense with the supplementary incomes which can be earned from the household farm though four fifth of them declared that if their remuneration could correspond to their demands - which makes two-two and a half times more than the present one - then they would gladly cease household farming in order to spend all of their energies to the fulfilment of their obligations in their respective jobs.

Generally the collective farms are interested at not a small extent in the organization of the household farming of their members even if this interestedness is not prevailing completely in each field. The questioned managers ranked the large-scale overcharge to the first place among these interests which is followed in the ranking by the localization of the members, then by the contribution of the household farms to the production value of the cooperative, the returns gained from services performed by the members and the margin on the products sold to the members at retail prices. The relationship between the collective and the household farms is not at all unclouded. But the greatest problem is already not the argument that the household farming distracts labour from the collective activities, rather the shortage of transport capacities causes troubles in the labour peaks if the integration of the two organization types does not function satisfactorily. The weight of the misappropriations from the collective means to the advantage of household farming also dwindled to an insignificant scale. Personal conflicts related with the household farming also are considerable only in the poorer farmers' cooperatives.

Therefore the conclusion can be drawn that the well settled order of the relations with the household farms belongs more and more closely to the purposeful behaviour of the enterprises. Also transposed conflicts occur, however, concerning the relationships between the collective and household farms and those generally in the thinking and conception of the managers. The professional manager representing the collective interest and the small-scale producer considering his own interest are embodied, namely, in one single person. Though this conflict is not excessive nevertheless it appears in a very sophisticated form. The managers experience, namely, very well the difficulties impeding the concert of sticking to the duties at an equal standard both in the collective and in the household farm. And since in a foreseeable time it is inconceivable that the managers of the farmers' cooperatives acting in diverse jobs could be able to earn the money needed for maintaining their living standards already achieved in the collective farm therefore a restriction of the household farming activities would be groundless. Those managers who enjoy the participation in the collective activities and feel them responsible for it but willingly work at the same time also in the household farm of which they are explicitly in need represent specific figures of the Hungarian socialist agriculture and will remain so in all certainty for the foreseeable future.

From the aspect of the improvement of the relationship between the large-scale enterprises and the household farms and of the concerting of their interests therefore the bringing to perfection of the conditions of small-scale production is very important. In order to keep the standard of its incomes the small-scale producer is forced to increase continually the scale of commodity production. As a consequence of the irrealistic costs of the investments /mechanization/ and of the uncertainty and unor-

ganized state of the commercialization and services the questioned managers spend much more time and energy in the household farm than needed or justified. Under circumstances like this the situation of the managers dealing with household commodity production is rendered particularly difficult. Related with the improvement of the conditions for small-scale production the questioned managers mentioned the increased safety of realization at the first place and the possible enlarging of the sphere of services and of the acquisition of the diverse basic materials at the second. The required conditions could be improved in both respects through the consolidation of market relations and altogether through the extension of the scopes of the market. The greatest drawback of the small-scale agricultural production is at present the unsettled state of market relations or in certain cases their anarchy. If we are seeking an answer to the question: what kind of renewal is demanded in the sphere of small-scale production within the scope of the national economic reform then perhaps the consolidation of the market relations and their putting on new bases should be emphasized. Such a - state owned and private - commerce is needed where types of interestedness at least approximately similar to the small-scale production are ruling.

HARZA, Lajos - PÖPP, József: A hozzáadottérték-adózás általános és élelmiszergazdasági kérdései nemzetközi tapasztalatok alapján. /General and food economic problems related with the TVA as experienced internationally./ Candidates' dissertation. Defended in May, 1988.

Through our candidates' dissertation we should like to make a contribution to the understanding of the theoretical and practical functioning of the TVA system - on the basis among others of foreign examples. It seems to be obvious, namely, that before advancing in the modernization process we should look for information in our environment: is there ny consideration or experience worthy perhaps for adapting? We should constantly search for such types of taxation which encourage production, the establishment of a profitable and competitive produce structure, intensify the domestic turnover and the exports and maintain at the same time the balance of the budget.

We are at the opinion that the success of the introduction in this country depends highly on the extent at which experience gained abroad can be made useful and the difficulties occurred there in course of the introduction can be forecasted. If this task would remain explicitly unimplemented then no conclusion should be drawn in a transposed sense about the unforeseeable difficulties of the application in this country. We were not contented with providing only information about the TVA systems applied abroad but we contrasted the major conclusions with the conditions prevailing in Hungary. We hoped that there will be time enough for the economic management to make use of our conclusions and major theses.+/

+/ The dissertation was presented in June 1987 but the surveys which served as a basis were carried out already in 1976 and in 1987. The date of the introduction of the reform of the taxation system was the 1st January of 1988.

Our major conclusions

- The turnover tax system which was practised in Hungary before 1988 included all those "symptoms" /the accumulated taxation of the productive consumption, administrative troubles, the numbersome exceptions/ which prompted at that time in Danmark the transition to the TVA. The multiple taxation raised the level of both the producers' and consumers' prices. This way our turnover tax system repre ented - ceteris paribus[+/] - an inflatory factor.

- Hungary could operate a TVA system which would tax also the turnover of the products of food economy according to the general rules only in the case if the standards of productivity and the living standards of the population would suddenly improve. Since - for a foreseeable period - one cannot reckon with the implementing of either the one or the other process therefore the only and single viable way remains for us that the turnover of the foods should be taxed preferentially in the scope of the TVA system.

- From the TVA practice of the FRG all the three types of taxation /the normal, the lump and the small- ale enterpreneurial ones/ can be transplanted to the Hungarian practice.

As far as the taxation practice of the FRG is concerned it can be informative for us that an option should be offered for the agricultural producers just therefore since there are very significant differences in the conditions of farming, in the capital supply, in the professional qualifications, in the general culture, in preparedness and conceptions and in other circumstances. It is probable, namely, that certain type of the taxation /that in lump, normal with preference or any other system with a zero

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+/ So even in the case if the state would not augment the tax burdens.

balance or just a taxation at 0 per cent/ would be "satisfactory" for the overwhelming majority of the tax payers but even in this case a significant layer would remain the taxing of which would be reasonable in a way differring from the general rule. An opportunity should be offered e.g. for the small-scale producers to choose the taxation type of the large-scale enterprises in the case if they are able to satisfy its requirements. In specific cases /e.g. in the case of greater investments/ it would be more benefitial for the small-scale producers if they should not pay the tax in lump but preferentially according to the normal rule since they could distract then the tax paid in advance and could reclaim the difference of the input and output taxes from the revenue office if a negative balance is accounted. The small-scale producer should assume, of course, also the burden of book-keeping connected with this type of taxation.

- Simultaneously with the introduction of the TVA and of the personal income taxation also the regulation system of wages and earnings should be modified at all events.

Since several decades a regulation system of wages and earnings adjusting to certain index is applied in this country and the inflation which became lasting for the present is a proof of the fact that none of them was serviceable in the establishment of a balance between the commodity fund and the spending capacity. This is not incidental since arrangements like this /mainly if they are exclusive ones/ are unserviceable for this end. The inflation was and is caused mainly not by the amount of the outflowing wages but by the profusion of the unsettled problems.

Though a regulation system of the wages and earnings adjusting to a new other index might ameliorate the situation nevertheless sooner or later we would arrive to the same as we did in the case of all the former types. The situation will not change essentially after the introduction of the

personal income tax since the excessive outflow of the wages can be impeded only by a realistic market.

Theoretically the amount and structure of the withdrawals will significantly change through the redirection of a considerable number of taxes from the sphere of production to the sphere of turnover - i.e. through the introduction of the TVA. As a result of the redirection of certain items having net income nature the producers' price level can be decreased on the one hand and a "sounder" tax structure than the present one can be established on the other: the revenues of the state deriving from the taxation of the enterprise incomes can be reduced, the sharing of the turnover taxes - and after the introduction of the income taxation also that of the personal income taxes may increase. Altogether these could mean that the inflatory pressure of net income nature may lessen. /Other factors - like the simultaneous reduction of the consumers' price supplementing, the narrowing of the sphere and extent of subsidies granted for the producers - may, of course, neutralize or even surpass this effect and therefore the inflatory pressure may also increase at the introduction of the TVA./

- One of the most important targets of the taxation reform is to create a situation neutral to the competition and to achieve that the net income earning possibilities of the participants of the market should be influenced mainly by their adjusting capacity to the market and not by the diverse conditions of the taxation. With the introduction of the TVA system presumably the /political/ economic perspicacity would increase in Hungary, the new tax would encourage the development process of a more economical produce structure and contribute to the improved competitiveness of our products. But the TVA alone does /can/ not settle our economic troubles. The elements of economy are linked with each other like cog-

wheels and therefore if any of the elements would be disturbed then the whole mechanism could not /correctly/ function. So an all-embracing reform is needed where market relations /banking and crediting systems, interestedness in the property, institutions, organizations, investment system, etc./ should have a significantly broader sphere of action than they had so far. Though the TVA will modify also the price system and so its introduction can be interpreted also as a price reform of certain extent nevertheless it is obvious that the prevailing systems of subsidization and withdrawals, of prices and wages needed also profound supervision. Besides the system of pension, the prices of dwelling "should also be touched" - and even then we did not touch the legal - accounting - financial technical problems and did not speak moreover about the fact that we shall have plenty of troubles in connection with the introduction of the personal income taxation. /Among others we must establish a concert between the TVA and the personal income taxation./

- The effect of the TVA on the economic processes depends also on the kind of the period when the system is introduced. Theoretically it could be introduced most purposefully at a date when the conditions of the business cycle are favourable[+/], when economy is not in an "inflatory situation" since the development of the price level is decisively determined by the business cycle and the competitive position. Neither in this sense is Hungarian economy "prepared" to accept the TVA. Just therefore we must reckon also with the possible case that our hopes will not be fully realized or but hardly. As a result of the introduction of the TVA we expect that more reasonable price relations will be established and the inflatory pressure will easen or disappear. But if the market elements would be

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[+/] Most of the advanced West-European capitalist countries introduced the TVA system before the first oil-price explosion.

introduced and amplified relantedly or too late then we might induce the process of price raising in two respects: through the introduction of the TVA /a single non-recurrent price raising/ on the one hand and through the "traditional" way on the other, so namely, that - if the market, the competition does not say a stop - the enterprises continue to find a way-out mainly in the raising of the prices /continuous price raising/. In this case the relationship "the re-direction of a significant part of the taxes from the sphere of production to that of the turnover - decrease of the producers' price level - the TVA covers the missing revenues of the budget - through the reimbursement of taxes the funds needed for the subsidization of the consumers' prices come into being" remains not more than a presumption.

- The seriousness of our economic situation would demand that the /radical/ methods which are regarded to be correct should be transplanted into the practice as soon as possible. Nothing can be, however, so urgent that we should restructure our pool of means hurriedly without sufficient considering. Just therefore we must endeavour to introduce the new elements - and the TVA among them - only after satisfactory preparatories. The way of turnover taxation to be introduced represents an efficient but rather sophisticated system. If we do not leave time enough to think over the problem and to elaborate the relationships - taking the differences existing between the opinions and conceptions of the supreme authorities and the other controling organs into consideration - then the worry would be rightful that the whole national economy should pay the piper of all the protractions and hot hastes.

An unsatisfactorily prepared taxation reform may even increase the camp of the opposers of the reform.

So because of the multitude of problems the concern is rightful that until the envisaged date of the introduction of the TVA /the 1st January of 1988/ we shall not be able to adequately prepare the taxation reform /promulgation of the respective decrees and legal rules, their studying and "acceptance"; establishment of the official machinery; publication of pressworks, brochures, descriptive booklets, manuals, etc.; the preparation and realization of courses of lectures and post graduate training; other legal - financial - taxation technical problems and difficulties, etc./

Just therefore also the possibility should be investigated whether it would be reasonable to "delay" /at least with half a year/ the date of the introduction. A delay like this would not yet endanger the implementing of the economic management modernization plans and conceptions but we could more extensively prepare the reform of taxation.

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The time passed since the introduction of the taxation reform justified our anxieties and observations: neither the economic nor the social processes developed in the expected way. The leading of both the state and the party acknowledged that the reform of the taxation was not satisfactorily prepared.

KÓBOR, Kálmán - TOLDI, Miklós: Jövedelemtermelés a husipari feldolgozásban. /Income production in meat industrial processing./ Gazdálkodás, No. 3-4. 1988.

From the middle of the 197o-es on the food industrial income production shows a decreasing tendency. Compared to industry and agriculture the net value ratio of the food industrial production is low and in course of the past 5 years it reduced from lo to 2 per cent.

The basic reason which gave rise to the reduction of the net value ratio of production is the quicker growth rate of the productive consumption and amortization than that of production itself. The remark should be made here that the unfavourable situation came into being under a professional structure of the food industry which remained unvaried since about 20 years. Mainly the situation of the export oriented professional branches aggravated.

Within food industry the situation of meat industry became the most critical so that it had to be grouped among the crisis branches. In 1985 the growth of the total productive consumption in the meat industry exceeded by 22 percentage points the increase of gross production and so the net production value became negative. The reduction of the net incomes was even more drastic than this.

Inner and external influencing factors equally played a part in the situation developed this way though they had not the same weight. The external factors which influenced the production of income were the following:

- the development of the world market prices and the worsening of the exchange rates;
- the prices and input value of the raw materials of agricultural origin;
- the cost inputs of the consumption of industrial materials;
- the particular price and subsidization systems;
- the fact that the commodity structure of meat industry is relatively determined.

The most important internal factors are the following:

- the efficiency of the consumption of materials, fixed assets and labour /the factors of production/;

- the particular character of organization and management in meat industry;
- the system and efficiency of cost economy.

In our opinion and corresponding to the results of the survey which embraced detailedly the period passed between 198o and 1986 the prevailing situation can be explained first of all with the very unfavourable development of the external factors influencing the production of incomes and only at a smaller extent with the inappropriate growth of the inner productivity in meat industry.

For the improvement of the situation such a series of undirectional measures is needed which is promotive of a structural transformation tending to further competitiveness. Beside the coercive effect of the inner and external factors any other measures could bring only occasional or local advantages. Without structural changes only less important results could be vouched for by the exploration of the inner reserves, by cost reduction and economy and moreover measures of this kind can be remitted to the competence of the enterprises.

For the end of the structural transformation of meat industry the meat exports should presumably be restrained or at least a reduction of the conpulsory exports will be needed. Under unvaried national economic conditions a process like this suggests the partial substitution of meat industrial exports by other branches and spheres of the national economy.

Mrs. LÁSZLÓ, Gyöngyi: Gyors broilerhizlalás - rossz szaporodási képesség. /Rapid broiler fattening - bad reproduction capacity./ Magyar Mezőgazdaság, No. 50. 1988.

The breeding of up-to-date rapidly growing broiler chicken is one of the really successful results of poultry genetics. Those attributes, however, which contribute to the rapid growth of the broiler chicken are in a negative relationship with the reproduction capacity of the breeding stock. This circumstance rendered necessary the modification of the feeding and treating programs of the breeding stock in a way that in the meanwhile the growth of the parents was observed, their production parameters were controlled and efforts were made at the same time for the maximum production of the progeny.

From their age of 4-5 weeks on young broiler type chicken receive a strictly limited quantity of feeds also in this country. This restricted feeding is necessary for the end that we could delay the egg laying of the pullets. We impede their early fattening in order to achieve an egg ratio suitable for better incubation and an improved chicken meat production performance.

The results of experiments performed abroad also prove that it is the gain weight which exerts the best influence on the early reproductive capacity character of the breeding stock. On the other hand the body-weight depends on how the program of restricted feeding is managed and implemented. The program of restricted feeding must be implemented so that the pullets should not only achieved the wished body weight at the envisaged date but their weight increase should be uniform in course of the whole period of growth but mainly during the last 6-8 weeks.

Several experiments call our attention to the fact that the protein content of the feeds exerts a favourable influence on the increase in num-

ber of the breeding eggs. But the protein standard of the feed consumption has no significant effect on the dimensions of the breeding eggs. The energy intake exerts at the same time an effect on both the dimensions of the eggs and the result of hatching.

In most cases early production had a negative effect on the quality of chicken and later on also on the growth of the broiler chicken. The progeny deriving from a young breeding stock can be reaired generally at the expense of more death. The slower growth and the greater number of death rate does not encourage the farms to put the breeding pullets into early production.

The survey of the experimental results is instructive because the weakest chain-link of broiler breeding is represented in this country by the keeping of the parent flock. The progeny per parent flock is very little. Therefore the baby chicken are expensive and their quality is also objectionable. The fundamental reason is that the poultry breeding farms are managed like enterprises which are interested in the income increase based on quantitative production and not in the improvement of quality. Since chicken is a product of uncontrolled price and also a product being in shortage therefore chicken not fit to live and several times weak in hatching can be realized at prices equal with the ones of high quality. This practice is not serviceable for the breeding broiler type chicken competitive in each /quality, costs, etc./ respect.

Mrs. LÁSZLÓ, Gyöngyi: Az alkalmazkodóképesség növelésének feltételei, lehetőségei a baromfi vertikumban. /The conditions and possibilities of the improvement of adjusting ability in the poultry verticum./ Gazdálkodás, No. 11. 1988.

Poultry breeding is one of the most vigorously progressing activities in Hungarian food production. It seems that this will remain the same case also in the forthcoming years. Several factors support the suggestion that the share of poultry breeding within animal husbandry should be maintained also in the future. The role played by poultry breeding in both the domestic supply and in the exports, its good food utilization capability, the small arable acreage needed and engaged by it, the capital turnover quicker than in the case of other livestock, its smaller need for export subsidies, etc. all multifariously prove that the increase of the weight of poultry farming is a correct production political task. As a result of our economic situation the labour division existing between the small-scale and the large-scale enterprises will become even more necessary in the future than has been so far and by means of a correct economic policy /interestedness, credit and taxing conditions, etc./ its maintaining can be continued.

6o per cent of the industrially processed poultry products find buyers in markets abroad. Therefore the changes taking place in the international market /surplus production, efforts made for autarky, competition in quality and prices, etc./ are of a determinative effect on the situation of Hungarian poultry breeding and on our long term conceptions. The share of Hungarian poultry export in the world's poultry meat turnover amounts to 12 per cent. However significant should be this ratio for us nevertheless it is insufficient for exerting a substantial effect on the surplus production or - with the exception of goose liver - on the development of the prices. So our disposal problems are not the consequences

mainly of surplus production but among others of the way how the quality demands are satisfied.

The produce assortment of Hungarian poultry breeding and processing which dispose of great traditions dating back to the past century is so large that only France can be competitive with it at the present. But in spite of this we cannot be satisfied in each respect. As a result of the particular requirements ruling the market, the special quality of our products, their way of processing and package are not always competitive in the comparison with the poultry products being in the international circulation. And the qualitative particularities of the processed and reprocessed poultry products will exert a determinative effect also in the future on the upper limits of the realizable quantities for each product and in all markets including also those functioning in this country.

Consequently to safeguard our position among the greatest poultry exporters of the world /USA, Brasil, EEC/ will not be an easy task. The more so as beyond the borders of this country not only the products but also the systems of subventioning which prevail in the diverse countries are competing with each other.

In almost each exporter country the prices of the poultry products were detached from the real inputs already since a long period. Therefore if all the characteristics are equal then that product will win in the competition which is less expensive or which is benefitted with greater subsidization on behalf of the state. This way quality and prices are important factors of the marketability already in the present.

To hold the ground in the market means for the poultry processing enterprises a struggle for survival. In this situation development, innovation, receptivity for the new, the increased role of the market are all acting as constraints. Without the accepting and implementing of new tech-

nics and technologies resultful participation will be possible neither in the domestic, nor in the socialist or capitalist markets for the future.

Substantial preparatories for qualitative production should be granted in the agricultural stage, in all its productive phases /breeding, commodity production/.

The final quality of the poultry products produced for the market, however, comes to an issue in the processing industry. No produce of high quality can be made even from basic materials of the first class if their processing and package etc. are obsolete and do not satisfy the demands of the buyers.

In order to improve the quality of the export greater care should be taken of the full observance of the processing, packing, refrigerating and hygienic requirements. Such a modification is needed in the conception which makes quality to be the most important aspect in the kernel of research and technical development. We arrived to a stage where productivity becomes the only strategy of survival leading to the resultful improvement of quality. The modernization of the processing industry is needed for this end in order to enable us to keep pace with the countries disposing of rapidly advancing and progressed poultry breeding and processing. This is the only way of being competitive in the world market. This is a particularly important consideration for the present when the guarantees of the profitable export are disappearing and interestedness goes through significant changes at the same time.

The purpose of technical development is to establish such poultry processing enterprises which can satisfy the highest hygienic requirements, dispose of suitable infrastructure and of flexible manufacturing lines. Produce development aims at the production of such products in which increasingly more intellectual labour is included and whose inputs

are better acknowledged by the buyers in the markets at home and abroad. In addition to the increase of processing capacities proportionate with the growth of agricultural product the significant augmenting of filletting and piece cutter equipments as well as a more moderate increase of the re-processing lines and of the poultry conserve producing facilities may represent realistic tasks.

The Hungarian poultry products obtained till now heretofore a good name and reputation among the partners. This statement is supported by the fact that our poultry export progressed with an uninterrupted dynamism even under the conditions of a supersaturated market during the most difficult years. It is present also in the much demanding international market with adequate importance. The intention is not only to safeguard this position but also to further improve it in the future. For this end, however, it is insufficient if the enterprises continue to make decisions only in the generally arising technological, technical, organizational and economic managerial problems. They should deal more intensively with the activities of realization and commercialization, with the marketing activities in general.

Mrs. LÁSZLÓ Gyöngyi - Mrs. MIKLÓS HORVÁTH, Erzsébet: A kisüzemi liba- és kacsatenyésztés közgazdasági kérdései. /The economic problems of goose and duck breeding in small-scale farms./ Mezőgazdasági Könyvkiadó, 1988.

Variegated enterprise types are characteristic for Hungarian poultry breeding. In addition to the farms operating as property of the state and of the cooperatives also almost one and a half million small-scale producers are dealing with the breeding and fattening of poultry. Beside those poultry breeding plants which dispose of industrial programs also

the household poultry breeding embracing only a few poultry or more significant stocks exist and prosper even at the present.

In respect with the conditions of production, of its technical standard and commodity output this new /commodity producer/ type of the small-scale farms cannot be compared even with the practice of the past years. Following the example of the large-scale farms and based upon their integration the modernization, specialization and concentration of the small-scale activities is in a progress of very rapid rate. Also in this sector the progress takes place in compliance with the demands of the national economy.

At present nobody doubts already the conception that small-scale and large-scale goose and duck breeding should be maintained simultaneously. Moreover, just because of the structure improving effect of these branches a more deliberated development is necessary. In fact the household farms represent a significant part of the internationally acknowledged results of the cooperatives.

The number of geese among the grown up poultry stock amounting to more than 36 million pcs is not more than 878 thousand pcs, of which hardly 4o per cent are kept by the small-scale producers, somewhat more than turkies which takes place but rarely. The breeding of ducks is on the other hand more widely popular in this sector. Out of the 2 millions stock of breeding ducks in the country 1.8 million pcs /9o per cent/ enrich the poultry meat supply offered by the small-scale farms.

In this country production value of 2.6 thousand million Ft was produced through the goose breeding for slaughter /in 1987/ whose 6l per cent was delivered by the small-scale producers. So their share within the production is much greater than that within the stock.

In the duck breeding activities there is a reverse situation. The production value of ducks for slaughter amounts to 1.15 thousand million Ft but the share of the small-scale producers does not represent in this a value ratio greater than only 4o per cent.

Taken all the goose and duck products /including also the feathers/ into consideration the small-scale producers produced in 1987 a production value of 3.1 thousand million Ft in contrast with the 1.8 thousand million Ft produced in the cattle husbandry.

The small-scale producers of this country are interested in almost each branch of livestock husbandry but their role in poultry breeding is outstanding.

At present public opinion is already uniform about the importance of small-scale production. Their multifarious activities do not only increase the commodity fund but it is also of great significance that the labour intensive products representing a production of favourable % output are delivered by this sector. Besides they improve the food supply of the rural population and increase their incomes by means of fragmentary labour.

The income producing capacity - in a way similar to the large-scale farms - here also worsened in course of the recent years. Small-scale goose fattening, however - under the current system of premia awarded for goose liver - figures among the profitable undertakings though the returns from sales attainable for its meat only do not cover in general the costs. This is the reason why both the resultfulness and profitability of the fattening depend equally on the quality and on the premium awarded for goose liver which remunerates the former.

The development of small-scale production is particularly important in goose and duck breeding since the technical and economic conditions of

the production of labour intensive products are failing in the majority of the large-scale enterprises. In addition they are those activities which offer the most favourable foreign currency earning opportunity for the fragmentary worktime of active labourers living in the villages.

Mrs. MEMHÖLCZER KAPITÁNY, Gabriella - Mrs. VISSY TAKÁCS, Mara - SZAJKÓ, Pál: A tejtermelés hatékonysági és jövedelmezőségi problémái a mezőgazdasági nagyüzemekben. /Efficiency and rentability problems of milk production in the large-scale agricultural enterprises./ Gazdálkodás, No. 7. 1988.

The starting point of the survey was the obvious fact that manifold differences can be experienced in Hungary between the standard yields of milk production and so in its rentability. The differences continued to exist for a long period and though the standard yields almost everywhere increased nevertheless the differences between the extreme limits remained nearly unvaried.

The existing situation indicates that the maintaining or stopping of milk production is the result of not merely economic decisions and that the enterprises do not ponder only those economic results which exert a direct effect.

In order to implement a more specific survey we performed the detailed analysis of production in four pairs of farms. We selected these pairs of farms so that both their ecological and economic characteristics should figure possibly next to each other. This way hardly any differences could be observed in respect with size and quality of land, the financial results of farming as a whole as well as with the scale of the cow stock. There is only one substantial difference, that namely, that the standard yields of those farms which are considered as good ones /"A"/ from the aspect of milk production is significantly higher - by about 1300 l - than

in the so called weaker /"B"/ farms. This way incomes surpassing the average were realized in the "A" farms on milk production while the same activity was deficitary in the "B" farms.

The detailed analysis embraced the following three major fields:

- the management of the fixed assets and of labour,
- the management of forage, and
- the milk production.

Surprisingly the standard and wear and tear of the technical equipment was almost equal in each farm and corresponded to the general - fairly poor - situation. The differences in the labour use were originated merely by the standard of the yields. So we may draw the conclusion that the experienced facts are neither the reasons of the established differences in the standards nor impede development.

In the sphere of feed management and mainly of the production of forage, on the contrary, significant differences could be observed in both the level of inputs and the costs accounted for the former. We could establish that the efficiency of the "B" farms is poorer and their cost level is higher in this respect. It was also obvious at the same time /surveying also the growing of commodity crops/ that this is not so much an ecological or "capability" problem as rather the problematic fact that the "attendance" of a poor activity remains also poor.

We could observe not only the disadvantages and deficit sources caused by the standard yields. Dairy farming in the "B" farms partly supported the unreasonably high costs of the "neglected" production of forage and through this they improved the results of the growing of commodity crops. On the other hand, however, the "expensive" feeds were prodigally used and they covered a greater part of the overhead costs in these farms than in the "A" ones.

In spite of this all both types of farms carry out their production with a stock of practically unvaried size since a longer period which means that the above described survey results are not causes but consequences. In course of further surveys we arrived to the following conclusions:

- Economic interest is adherent even to the maintaining of those dairies which were registered as deficitary ones since this makes a contribution to the easing of employment problems and create a basis for the supporting of the "overhead" costs. Moreover through its continuous returns it improves the situation of the farms in respect with their liquidity.

- It can be considered as an already fairly indirect but still economic motive that if uncertain conditions of regulation prevail then the establishing "at any price" of a large produce structure provides certain safety of the incomes.

- In the activities of the "B" farms it can be observed at the same time that the share of the basic activity - and particularly that of animal husbandry - within the production of incomes is small. Therefore its "neglected position" is comprehensible while its maintenance can be explained only by the aforesaid reasons.

As a result of the surveys, however, the unambiguous conclusion can be drawn that real specialization and the exploitation of the opportunities offered by the environment cannot be implemented under conditions like this.

MÉSZÁROS, Sándor - Miss SPITÁLSZKY, Márta: A buza és kukorica árhatásvizsgálatai. /Wheat and corn price effect investigations./ Gazdálkodás, No. 5. 1988.

The paper presents report about an analysis performed on a computerized model which is serviceable for the survey of the possible versions concerning the producers' and consumers' prices of the agricultural and food industrial products. Grains and the meat products are included in the model and the expectable short term effects of the price changes are evaluated on the quantities of production, consumption and exports on the development of the relations with the budget. In respect with the increase of exports under non Rouble relations a price raising penetrating to the consumers' prices seems to be the most advantageous for both crops, of a greater scale in the case of wheat and at a smaller scale in the case of corn.

The computerized program for the analysis of agricultural prices with which the macro-economic /national/ effects of the changes taking place in the major producers' and consumers' prices can be surveyed was elaborated in cooperation by the Research Institute for Agricultural Economics and the World Bank. We wished to present in this paper a report about the first analyses performed after the testing /verification/ of the model.

We started out from the actual effort to find a way how make price regulation better serviceable for the encouraging of the capitalist export than has been so far. We selected the producers' prices of wheat and corn since these products lagged behind the world market prices at the greatest extent. In certain variations of the pricing we let the changing prices of wheat and corn continue to filtrate in the producers' prices of animal husbandry and moreover also in the consumers' prices which means that we

reckoned with the simultaneous moving of the producers' and consumers' prices in compliance with the conception included in the working program of the MÉM /Ministry of Agriculture and Food/ for the years of 1988-1990. The price effects analyzed with the model are related on the one hand with the quantity and structure of production, consumption and exports while on the other hand with the development of the relations with the budget which latter includes the implicit /i.e.to the world market prices compared/ subsidies and taxes connected with the consumption and exports. Although the calculated price effects are valid only under presumptions made about the scale of the producers' and consumers' price responses /the concrete per product values of the respective price elasticities/ nevertheless the orientation in the production political and production regulating problems serving the improvement of foreign trading performance will be more reliable if they are known.

The evaluation of the versions

The raising of grain prices without letting the producers' prices in filtrate into the consumers' prices should be considered as disadvantageous mainly because it would encourage the significant reduction of the production of the animal products and therefore the quantity of the agricultural production included in the model would lessen. The infiltration into the producers' prices of animal husbandry alone does not seem to be reasonable because this would considerably increase the demand for consumers' price supplements and this would represent an extraordinary burden for the budget of the state. Consequently the infiltrating of the grain price raisings into the consumers' prices seems to be purposeful. In this case the reduction of the production of animal products would be smaller, the burdens incumbent to the budget would be more moderate and the exports in the non Rouble relations would grow the most in this version.

The raising of the producers' prices tending one-sidedly toward the corn is unreasonable since it would be accompanied in each version with the reduction of the foreign currency returns deriving from the exports in the non Rouble relations. The one sided price raising of wheat seems to be most advantageous from the aspect of the convertible foreign currency returns but it would encourage at the same time the changing of the wheat:corn acreage ratio at such an extent by which in the case of a wheat price raising of 2o per cent the share of the wheat acreage would surpass the critical 6o per cent. Therefore a joint price raising seems to be the most reasonable which could maintain the balance of the wheat acreage ratios.

Concerning the measure of the producers' price raisings the application of all the three surveyed grades may come into question /1o, 2o and 3o per cent/ for the short term and even a maximum price raising of 3o per cent would not have an insupportable effect on the development of food consumption. One must take, however, into consideration that under the effect of the greater price raisings the export /and also the exports in non Rouble relations therein/ would continuously increase and greater and greater burdens would incumb on the budget of the state. In respect with the sharing of the two products such a producers' price raising seems to be reasonable where the raising of the wheat prices would be somewhat greater and that of the corn prices would be somewhat smaller. Our investigations demonstrate that e.g. a wheat price raising of 2o per cent coupled with a corn price raising of 1o per cent would increase the exports in the non Rouble relations just as much as a joint raising of 3o-3o per cent respectively would do that but with a significantly more advantageous development of the balance of the budget and also the share of the wheat acreage would increase only to 57 per cent in this case.

The effects exerted on the quantity and structure of the production -in the case if infiltrating continues till the consumers' prices - are demonstrated - in details - on the following Table.

The effects exerted by the price raisings of diverse scale on the production

	Facts of the year 1985	At price raising only for wheat			At price raising only for corn			At joint price raising for both w eat and corn		
		changes in percentage								
		1o	2o	3o	1o	2o	3o	1o	2o	3o
The quantities of production										
Wheat /thousand t/	5692	7.7o	15.42	23.11	-5.54	-11.o9	-16.92	+2.15	+4.33	6.5
Corn /thousand t/	6o23	-4.93	-9.87	-14.8o	9.8o	19.59	29.36	4.87	9.72	14.56
Sunflower /thousand t/	673	-2.65	-5.3o	-7.94	-1.16	-2.32	-3.47	-3.8o	-7.62	-11.42
Forage /thousand t/	7565	-o.11	-o.22	-o.33	-o.27	-o.54	-o.81	-8.38	-o.77	-1.15
Milk /million l/	2644	-o.22	-o.44	-o.56	-o.33	-o.67	-1.oo	-o.55	-1.11	-1.66
Beef /thousand t/	2o4	-o.o5	-o.11	-o.16	-o.21	-o.42	-o.63	-o.26	-o.53	-o.79
Pork /thousand t/	597	o.o9	o.18	o.27	o.28	o.56	o.84	o.37	o.74	1.11
Poultry meat /thousand t/	391	-o.o2	-o.o4	-o.o7	-o.1o	-o.2o	-o.29	-o.12	-o.23	-o.35
Production value in the										
large-scale enterprises		2.63	5.52	8.65	3.57	7.44	11.6o	6.o3	12.25	18.65
small-scale enterprises		o.82	1.64	2.46	3.98	8.13	12.42	4.8o	9.76	14.88
Total		2.14	4.46	6.95	3.69	7.63	11.82	5.69	11.56	17.61

Mrs. MOGYORÓS, Katalin - Miss STAUDER, Márta: A fejlődő országok mezőgazdasági és élelmezési helyzete a 80-as évek közepén. /The agricultural and food supply situation of countries on the way of development in the middle of the 1980-es./ Tudomány és Mezőgazdaság, No. 3. 1988.

Among the unresolved problems of the world the liquidation of the tensions occurring in the food supply and of the famine will remain urging tasks just until the turn of the millenary. Under the effect of surplus production low prices were established for certain products in the diverse years. The solvent demand, however, is insufficient to make possible the satisfaction of the latent food demand in these countries. Hungary is highly interested in the development of international cooperation also in the spheres of the production and trade of foodstuffs. This is the reason why this paper surveys the situation and the expectable trend of the world food supply and first of all that of the countries on the way of development therein.

Taking a longer period into consideration the world's agricultural production uninterruptedly grew and so the food supply of the world's population generally improved. As a consequence of the differences existing between the growth rate of production and that of the population, however, the picture is very variegated in the diverse regions.

As far as regions on the way of development are concerned the situation is the most disquieting in Africa where compared to the years of 1974-1976 the index of agricultural production was 116 per cent in 1984. In the 197o-es the average growth rate of agricultural production represented 1.6 per cent while the growth rate of the population amounted to 2.7 per cent yearly.

The economic decay, financial instability as well as the inflation and unemployment, the deficits of the balance of payments, indebtedness

which could be experienced in the greater part of the world together with the uncertain agricultural and food supply situation make the part of the 1980-es which passed so far the most difficult period of the post-war era.

According to the estimates of the FAO the protein and energy demand of almost 500 thousand million people is insufficiently satisfied and about 99 per cent of them are living in countries on the way of development.

Can starvation be eliminated till the turn of the millenary?

The food production of the world should satisfy for the turn of the millenary expectably the food demand of 6.2 thousand million people. According to the "A" version of the FAO estimates the growth of food production in the countries on the way of development will be annually 3.7 per cent between 1980 and 2000. This will make possible the significant improvement of the food supply situation in these countries for the turn of the millenary.

The countries on the way of development themselves have much to do for the end that their food supply troubles should be eased or gradually resolved. In spite of the growth of production, however, some of the countries on the way of development will be in the need of food relief received from the progressed countries even at the turn of the millenary.

Hungary can provide serious assistance through the transfer of the comprehensive experiences gained in the past and this does not contribute only to the accelerated development of agriculture in the countries on the way of development but in an interaction it can have a favourable reaction also on the development of Hungarian agriculture.

Mrs. MOGYORÓS, Katalin - Miss STAUDER, Márta: Az EGK agrárpolitikájának főbb vonásai. /The major characteristics of the EEC's agricultural policy./ Tudomány és Mezőgazdaság, No. 1. 1988.

In most countries of the world the food supply of the population at an increasing standard and mainly through domestic production is put in the centre of agricultural policy. The same is true for the European Economic Community /hereinafter EEC or Common Market/ with the significant remark that the agricultural policy represents the most resultful field of integration.

The task of the Common Agricultural Policy /hereinafter CAP/ was from the outset to provide such advantages for the member countries from which the non-member countries are excluded.

The Agreement of Rome formulated five tasks of the CAP:

- the improvement of productivity in agriculture,
- the increase of the living standards of people working in agriculture,
- market stability,
- provisions for a safe supply, and
- the establishment and maintaining of fix consumers' prices.

The CAP means a unified European market, collective financing and preference granted for the trade within the Community. Until now it was agricultural policy which caused most debates and problems as well as the greatest expenses in the history of the Common Market and the agricultural machinery continues to remain a key problem. For the present almost each agricultural product falls already under the competence of the CAP.

The positive results of the CAP are the following: the annual average productivity of agriculture grew in the EEC at a more rapid rate than that of economy as a whole did. Also the situation at the market of the agricultural products could somewhat be stabilized though this was implemented through the raising of the prices. The CAP proved to be advantageous for the producers of several products - e.g. of milk and wine - and this happened under such circumstances where the supply was greater than the demand.

The greatest deficiency of the CAP is that the EEC administration is unable to keep the prices at a level acceptable by the consumers but neither the incomes are satisfactory for the producers. The producers' prices of the agricultural products are almost always higher in the Common Market than the world market prices.

The market mechanism makes possible the uncontrolled development of the prices among the member countries. The customs and all those means of subsidization which imped the correct rivalry are theoretically excluded.

Most of the agricultural products are affected by the regulations of the market and price policies. The common market regulation operates through four diverse machineries and the sphere of those products for which diverse preferences are granted are strictly delimited but four major types exist: supporting prices, external prices, direct subsidization and price subsidization.

In summary we may draw the conclusion that the efforts of the countries in the Community to charge third countries and the international agricultural trade with most of the burdens will continue also in the future and this is a fact which must be taken into account by the Hungarian agricultural exporters too.

NAGY, Kálmán: A mezőgazdasági vállalatok infrastrukturális ellátottsága és vállalatközi kapcsolat az infrastruktura fejlesztésében. /The infrastructural supply of the agricultural enterprises and inter-enterprise relationships in the development of the infrastructure./ Publication of the Research Institute for Agricultural Economics, 1988/2.

External factors play an always increasing role in the development of agriculture. One of these factors is infrastructure.

The agricultural infrastructure came into being under the joint effect of the infrastructure developing measures of the economic policy and of the development activities of the large-scale agricultural enterprises. Demands were raised on both the quantitative and - for the reliable technical supply of production - the qualitative sides. In spite of the vigorous progress taken place in course of the 197o-es no success could be achieved in the changing of the lagging behind and posterior nature of the infrastructure if compared to the social-economic processes.

The scale of infrastructure and its weight within economy can be characterized with the number of labour employed and with the capital engaged in it. The number of workers employed in the agricultural infrastructure - in spite of the decreasing number of all people employed in agriculture - increased. This can be explained mainly by the growing number of the subsidiary activities and services provided by the enterprises. The opening of new commercial and catering units created new jobs for the rural inhabitants and enforced the development of infrastructure. The greatest qualitative progress was represented in the employment by the mechanization of the material handling and storage, the replacement of draft animal with mechanized transport and by the improved efficiency of conveyance.

After the reduction of investments belonging to the competence of the state the enterprise became the primary basis of the development of agri-

cultural infrastructure. Subsidies granted by the state are serving selective purposes /e.g. the construction of granaries, the building of interconnecting roads, etc./ in the infrastructure. The increasing investment intensity of infrastructure refers to the worsening efficiency of production. The reason for this is on the one hand that the enterprises spend little to the development of the infrastructure and on the other hand that they are pressed to take part in the substitution of the failing infrastructure /e.g. public roads, water courses, etc./ of the other national economic branches. The restrictive economic political measures assisted in the diminishing of inclination for investments. This strained the enterprises to economy, e.g. to apply cheap home-made building constructions, to base their mechanization on their existing and sometimes too outworn machines. In course of the period between 1981 and 1985 the greatest infrastructural investments were the constructions of storage buildings. Mainly the granaries and feed storing capacities increased.

The quality problems of infrastructure - with the exception of electric energy supply - could be observed at a smaller or greater scale in each field.

The network of roads built for agriculture is small both in absolute and international comparison but the greatest problem is represented by the state of these roads. Estimates show that hardly half of our stabile roads is of acceptable state. The meliorations and the road building connected with the creation of large-scale patches significantly improved the agricultural earth roads. The enterprises do not spend much for the maintenance and repair of the roads of solid pavement. For the present we can speak only about the delaying of the deterioration of the roads.

In relation with the increase of water use in agriculture also the quantities of technological dirty water and of liquid manure are year by

year augmenting. In the livestock breeding plants complaints are expressed mainly about the water output and lifetime of the wells. The treatment and the placing of the liquid manure produced is almost unresolved at present.

The shortage of agricultural storing capacity occurs mainly in a qualitative sense. Only closed and built storers are serviceable for qualitative storage. The development program implemented with a loan of the World Bank somewhat improved the situation characterized by the shortage of granaries in the grain storage but even this did not provide a final solution. The most important problem in the storage of fertilizers is caused by the contradiction between the continuous production of the manufacturing industry and the periodical use in agriculture, this is the problem of stockpiling. As an emergeny measure such buildings are transformed to the storage of loose fertilizers which were drawn out from the production and cannot be used for other purposes. These can but difficultly be mechanized. The settling of the fertilizer storage problems of agriculture is possible only gradually during a longer period. Two extremities are characteristic for the storage of fertilizers: in addition to the up-to-date storage buildings the bulk of the storage is implemented under the open sky or in emergency storers at the expense of great losses. The introduction of the liquid fertilizers brought a break-through in the storage of fertilizers.

The situation of telephone communication represents the neuralgic sphere of the infrastructure. Half of the telephone network is also physically outdated and the number of the call-stations does not amount even to the half of the European average. In addition to the small density of main routes also the out-of-date state of the subcentres restrains the serviceableness of the internal networks to a standard which prevailed in

the early part of the century. In consequence of the dispersity of the agricultural areas and of its less monopolistic character than that of industry this economic branch is ousted to the periphery of the telephon services. The agricultural enterprises compelled to live together with the shortage of telephone communications apply telephone replacing arrangements /e.g. correspondence, telex, CB and URH radios, hired direct lines, etc./.

The outdated standard of infrastructure is an obstacle before the increase of production and the safeguarding of quality. Infrastructure is that system of means which markedly demands the cooperation of the enterprises. The shortage of the sources in the enterprises increases their mutual interdependence. The cooperation of the large-scale agricultural enterprises embraces mainly the cooperative activities related with production, processing and commercialization. Mainly cooperations in the production are playing a determinative role. Within the infrastructure the joint venture types of cooperation developed mostly in the field of the agro-chemical centres and of water management.

Lower but lasting types of the cooperation between the enterprises are the diverse contracts. The contracts concluded with the public transport companies are realized generally in the form of agreements on cooperation. The success of the cooperations depends on the exploration of the real demands and on the continuous concerting of the tasks between the contracting partners. The contracts on socialist cooperation encourage mainly the cooperation between the farmers' cooperatives, the agro-industrial associations and the public truck transport companies of the counties. These relationships are impeded by the lack of their interestedness. Among the more advanced types of the associations for inter-enterprise cooperations the most prevailing ones are the joint ventures,

the deposit companies and the unions. The agro-chemical centres established organizations of all the three types of association but also the joint ventures without legal personality are frequent. In the period after 1980 all the associations established for the propagation of the wet corn storing technologies chose the type of the joint venture. The joint ventures of water management are deposit companies which in addition to the water supply, canalization and drainage of the localities perform also tasks related with the agricultural water utilization /irrigation, meliorization/.

An experimental telephone network building economic association was established under the organization of the Hungarian Post. Later on this may represent a model for such cooperations in which also the participation of the agricultural enterprises can be reckoned with. The purpose of the creation of this association was the automatization and enlarging of the telephone network of the participating communities and its contacting with the national network.

A possible new type of cooperation is the establishment of associations organized on the basis of the regional principle. These are such efficient types of the regional specialization which take shape in the organization of micro regional cooperations /integrations of small regions/. Practically they implement the development of the agricultural enterprises situated in the various regions respectively and the concerting of their activities without the amalgamation of their organizations. We are at the opinion that good opportunities are offered to the micro-regional cooperation in the collective use of the grain storing capacities and in a collaboration promoting the equalization of their capacities.

Mrs. ORBÁN NAGY, Mária: Verseny a tartósitóiparban. /Competition in the conserve industry./ Gazdálkodás, No. 6. 1988.

The development of a market oriented attitude and management in the enterprises is impeded by several factors in food economy. The following problems are to be elucidated: is the market centric management of the enterprises possible in the present economic environment on the one hand and have the enterprises an interest of prime necessity to respond to the market effects on the other? We sought the answer by taking stock of the fulfilment or lack of the conditions of competition and by surveying the interestedness relations in the market selection.

There is no absolute shortage in the domestic market of the conserve industrial products. In respect with the quality, assortment and prices, however, the supply is inadequate with the demand and therefore the signs of a buyers' market are dominant. In contrast with the positive tendencies which prevailed in the 197o-es the realized quantities of the canned vegetables, bottled fruits, preserves, jams and quick-frozen fruits reduced by 4-3o per cent between 198o and 1986. The turnover of fruit juices, on the other hand, grew to the triple. The reduction of the turnover which affected the decisive majority of the conserve industrial products was the consequence of the rapid raising of the prices and of the decrease of the purchasing power and this was the reason why home-canning increased again.

The share of the import within the domestic conserve consumption is small amounting to 5 per cent.

The commodity fund appearing in the domestic market is highly influenced by the export. The socialist, capitalist and inland markets became detached from each other. In consequence of the anomalies which oc-

curred in the regulation of the export subsidization and of the dependence of the enterprise results on the export subsidization the satisfaction of the domestic market demands can but follow only the accomplishment of the exports.

An important criterium of the conditions of competition is the simultaneous presence of manufacturers of the possible greatest number in the market. According to the special literature the competition can be efficient in the case if the market share of the four greatest enterprises does not surmount 4o per cent, the market ratios are not steady and the prices flexibly develop. In the commodity groups of food and meat conserves as well as of mashes and jams the concentration is very high at the domestic conserve market. The picture is more favourable in the case of the canned vegetables while the concentration is law in the market of the fruit juices and pickles.

Competition can be met only in the market of the fruit juices from among the diverse commodity groups. Reasons for this which can be stressed are that the production of fruit juices is the most profitable among the conserve industrial products, many producers are present in the market, no export of this product is realized under Rouble relations and the demand is still increasing.

The function of the prices in making the competition efficient can be fulfilled only in a sellers' market. In the market of the conserve industrial products - eccept the fruit juices - there is no competition in respect with the prices. A behaviour came into being in the assessment of the prices which presses the consumer to acknowledge and at a final and to pay all the cost increases irrespectively with the fact whether only one or more producers are present.

Our survey results concerning the conserve industry support the general experience that joint steps are needed for the coming into being of a market conform production and competition. No competition is induced by the increase in number of the actors in the market, the disintegration of the trusts or the easing of the price limits separately.

Mrs. OSZOLI, Ágnes: A jövedelemszabályozás 1988.évi változásának hatása az élelmiszeriparban. /The effect of the changes carried out in the income regulation of food industry in 1988./ Gazdálkodás, No. 5. 1988.

In course of 1987 we made calculations in the Research Institute for Agricultural Economics about the extent of the changes which may take place in the situation and income relations of the diverse enterprises under the income regulation planned from 1988 on, and we sought an answer at the level of the specialized branch to the question: at what extent will be affected the food industrial producers' prices by the planned changes?

Our calculations concerning the development of the producers' prices were performed - under diverse methodological presumptions - on the basis of the totalled data of the balance sheets for the industry. We forecasted the concrete effects on the enterprises through analysing the balance sheet data of the state owned enterprises belonging to the poultry processing industry.

A result of our calculations important also from the methodological aspect was that the input-output balance of 1981 - based on which also the calculations of the central organs /the National Planning Board, the Ministry of Finances/ were carried out - does not already express the real input ratios for 1986. The technical-technological development as

well as the changes taken place in the price ratios and in the exchange rates caused changes in order of magnitude in the input structure e.g. in respect with the energy and import consumptions.

The data of the industry indicated that different efficiency requirements were raised against the diverse specialized branches and as a result of the different systems of accounting, of the different rates of taxes as well as of the subsidization each branch of the industry could register certain amount of profits. As far as, however, food industry as a whole is concerned such small profit rates developed under which differentation is hardly possible and no reserves could be accumulated sufficient even to support the consequences of the unfavourable years and of price decays in the market. So the central intervention became almost regularly continuous in order to "prevent" the diverse specialized branches against the effects of the always changing world market. The changes of the regulation proclaimed for 1988 planned practically to preserve the disadvantageous income position of food industry and did not realize an approach between the domestic and world market prices.

Our calculations concerning the producers' prices proved that the changes could be deduced first of all to the reduction or stopping of the subsidies. The changes of the normative income regulation affected but moderately the producers' prices. The planned effects of the reduction of export subsidies could be compensated through the domestic price raisings since the inputs of the unprofitable export which are not returned in the realization prices increase at a final end the domestic price level. The detailed calculations demonstrated that inner contradictions strained between the concrete purposes and restrictions declared when changes were carried out in the income regulation. The reduction of the expenses of the budget, the safeguarding of the income position of the

enterprises and the maintaining of interestedness in the exports cannot be simultaneously implemented. Another also irrealizable condition is the maintaining of the employment situation.

In course of forecasting the effects on the enterprises it became clear that the effects starting from the cost and income sides remain between the margins of error of the calculations and lag far behind the inflatory effects occurring year by year. Significant changes were caused by the reduction of the subsidies. The repeated central interventions i.e. a return to the starting situation are rendered almost regular hereby. According to the final conclusions of the survey the economic problems cannot be settled through the means of the regulation of the enterprise incomes but more profound relationships must be taken for a basis. The relationships of labour division and cooperation, the scales of the enterprises and organizations, the arrangements of realization as well as the propriety relations must all be supervised and modified from the aspect of the resultfulness of economic management.

Mrs. SEBESTYÉN, Katalin - GAZDAG, László: Termelési rendszerek és verseny. /Production systems and competition./ MŰSZI INFORMÁCIÓ, No. 3. 1988.

The production system can be interpreted as a cooperation between the member farms and the system centre. Among the production systems operating in the same specialized economic branch competition is going on mainly for the member farms which form the market of the services offered by the system centres. The number and acreage of the member farms are not only interesting from the aspect of reputation but they have economic consequences in respect with the system centre. By joining to a

system, by maintaining or ceasing their system membership the member farms also qualify the actual system.

Important role is played by the performances of the member farms and system centres in the competition. The performances of the member farms can be evaluated mainly according to the outputs and incomes of the system branches. In the different performances of the member farms, of course, also the variegated labour and performance of the system centre appear. This, however, cannot be measured at an exact manner and cannot be separated. The performances of the system centre are characterized by the assortment /quantity/, standard /quality/ and prices of its services and by its financial results. Competition, however, can be observed not only between the diverse production systems but also within one and the same system between the member farms. Even at the present this reflects a quantitative way of looking since ranking is carried out not on the basis of rentability but on that of the outputs. It is a distinguished honour in each production system if a farm is ranked to the first, or second place in wheat or corn etc. production or figures among the five or ten best farms.

An increasingly important position is taken in the competition by the processes of collecting informations, research, innovations and adapting which can be called comprehensively the process of learning. The most important chain links in the processes of learning and modernization which are going on in the cooperation between the member farms and the system centres are the following: the processing of the special literature and of informations, the maintaining of direct relationships with the research organizations, the financing of research projects and the travels abroad of the professionals of both the system centre and the member farms in order to exchange technical experience. The experi-

ence accumulated in the system centre is transferred to the member farms through education and training, through advisory services and through the demonstrations and publications organized by the system centre. Not only the member farms are learning from the experts of the system centre but that practical knowledge is almost of the same importance which is gained by the professionals of the system centre in course of their consultations with the member farms about the practical results on the one hand and about the problems to be solved on the other. This knowledge is in fact the motive force of the development of the systems.

Mrs. SIMKA, Éva: Szándék - eszköz - eredmény. /Intention - means - results+/ Analysis of the content of articles published in the daily papers Szabad Nép and Népszabadság about the top-ranking farmers' cooperatives./ Budapest, 1988/7.

The presumption about the existence of an all people's national economic interest which if realized might render possible for the long term like a tendency the implementation of their own tasks for both the members and economic organizations of society could survive during the past 40 years.

The implementation of tasks declared to represent topical national economic interest can be tried through political-economic and ideological methods. Their ratio, content and success are different in the course of various periods. An important and characteristical means of the ideological influencing is the campaign in the course of which the economic orga-

+/ In No. 7. 1989 of the periodical Gazdálkodás /pp. 37-46/ the author published an article with the title: "A példa erejével?" /With the power of a good example?/ Its subject and content are substantially the same as those of the present paper and therefore no summary was prepared from the article.

nizations and the national citizens are mobilized for the realization of certain new political-social or economic task.

Based on the slogans of the diverse campaigns a picture can be composed which is characteristic for those who follow the topically desired enterprise behaviour. The most vulgarized way how these behaviour patterns are formulated in the daily press is the demonstration of those economic organizations which following the slogans of the campaign being just in course achieved outstanding results and became top-ranking ones.

How many times and in which way did the picture drawn about the top-ranking economic organizations in the press vary during the past 4o years? Is it worthy to follow these official behaviour patterns? Is it useful for the managers and members of an economic organization to be ranked always at the top in each respect and at any price? These are the questions to which I would like to find an answer in course of my work. I regard this paper as the first step of a longer lasting research. At the present I undertake only to describe how that behaviour pattern varied during the past 4o years which if followed by a farmers' cooperative this latter could claim the top-ranking title.

My analysis is not of economical management type. It does not embrace the demonstration of the real economic results achieved by the farmers' cooperatives regarded as top-ranking ones but shows only the picture which was drawn about them in the press by summarizing the slogans of the respective campaigns.

As a method of research I selected the analysis of the press since perhaps just the articles published in the daily papers present the most palpable formulation of those expectations the fulfilment of which may render a farm presumptive of the top-ranking title. Based on the analysis of the content of reports published about the top-ranking and under-

fulfilling farmers' cooperatives in the Szabad Nép and Népszabadság between 1949 and 1987 we can describe those political attributes and economic management methods with which the top-ranking farms could be characterized in the diverse periods of the organization and management of the farmers' cooperatives.

Among the daily papers I selected the Szabad Nép and the Népszabadság therefore since they were the official paper of the MSZMP /Hungarian Socialist Workers' Party/ or of the MDP /Hungarian Working People's Party/ respectively and in this capacity their articles can be regarded as normative ones also for the other newspapers.

As a first step of the content analysis I elaborated the code list. I grouped the expressions most frequently used for the characterization of the top-ranking and underfulfilling farmers' cooperatives into 102 comprehensive categories. The respective headlines can be found in alphabetical order among them.

The titles of the respective articles were copied out on a separate list. In the case of each article we registered the date of publication, the exact title, the page where it can be found, how long it is, it speaks about a farmers' cooperative or a president, which subject is illustrated by the introduction of farmers' cooperatives or presidents, whether the farms used as examples evidence a behaviour worthy of imitation or on the contrary a reproachable one. Thirty expressions could be coded per one article and three expressions per one title. Data processing was performed on computers.

To avoid any misunderstandings I should like to remark: I don't believe that those farmers' cooperatives which figured in the newspaper as example to be followed were really always correctly managed.

I suppose that the contributors of the Népszabadság knew in each period - and if they did not know then they were informed about it - the kind of campaign which had to be started and the slogans or economic management methods of which the readers had to be made aware. A farmers' cooperative had to be selected for this end. A part could be played in this selection by the instructions received from the editor, by the recommendations suggested by the local political and social organizations, by the distance and by the place where the pressman has personal contacts.

I describe those campaigns and desirable behaviour patterns which were followed by the farms reported in the press according to the opinion of the authors of the articles and became this way top-ranking ones in a total for the whole period and separately for the diverse phases of the organization and management of the farmers' cooperatives /1949-1956, 1957-1965, 1966-1974, 1975-1982 and 1983-1987/. I am aware of the fact that this is a rough categorization since turns of decisive importance followed each other in the agricultural policy frequently year by year. I divided the past 4o years in spite of this only into five periods because this way the differences occurring between the top-ranking farms can more markedly be formulated for the diverse periods.

The results correctly reflect the chaotic picture drawn by the representants of the press about the exemplary managed cooperative farms.

The blame for this cannot be put primarily upon the journalists. They are writing about obligatory subjects and in a way which is allowed. But the straiting point is failing. With a few exceptions they could not rely on a coherent and markedly formulated ideological system when writing their reports.

They endeavour to catch those slogans which "are present in the atmosphere". But these can be never composed to a unified picture.

Presumably - I think - this is due to the fact that a picture like this never existed. And if this lacking then the press tries in vain to exert an ideological influence which complies with the expectations of the current government in office. This confusion refers to the lack of a well weighed economic political conception.

From time to time the requirement raised in respect with those who aspire to a top-ranking title are contradictory not only in the press but also in the reality.

The tasks formulated in the diverse organization periods of the co-operative farms' are frequently changed and it is not unusual that they are just in contrast with the directives issued in the preceding period. The expectations communicated through the system of regulation and through the press to the economic managers may change their sign even within the same economic course. During one and the same period the tasks may become means and the means may become tasks. The government tries to achieve the change of the conceptions in course of the diverse periods or within a period and the acceptance of a series of practical measures resulting from this by starting newer and newer campaigns.

The lack of conception in the system of economic regulation or troubles occurring in the ideological influencing which reflects the deformation of these conceptions cause many damages to the farmers' cooperatives.

There may occur, of course, cases where making use of the direction of the economic political and ideological winds certain farms could achieve temporarily outstanding results but it may frequently happen that the earlier successes became later on failures and the results became vices.

These troubles, however, pressed those farms which were managed as a moderate average or really very well to the perception that in formulating their long term strategies they should consider the actual guideline as an external condition and not as a task to be followed. They envisage their production structure so that they should be able to attend preparedly all the changes and that their results - except excessive turnabouts - basically should not worsen.

Presumably the best cooperatives are since a longer period aware of the fact that they should settle but themselves those problems which are locally occurring in the practice. They do not select the means always in compliance with the intentions of the actual political, ideological and economic influencing. They are non the less acting against these latter but they are seeking a wayout from their troubles in a quite different sphere of thoughts.

The paper is completed with annexes including the code list, a table demonstrating the frequency of the major categories in the diverse periods and parodistic article patterns.

How frequently were the major categories mentioned in the diverse periods

Categories	Periods 1949-1956	1957-1965	1966-1974	1975-1982	1983 1987	Total
Agrotechnics	23	41	104	170	100	438
Amalgamation, union	2	17	23	89	6	137
Brigade, work-group	5	3	50	52	6	116
Builder, building	8	35	83	60	31	217
Collaboration, cooperation	-	2	20	65	28	115
Collective	-	2	31	2	7	42
Costs	1	10	40	78	70	199
Credit	-	12	14	12	54	92
Crops	34	247	404	597	313	1595
Democracy	4	14	17	27	24	86
Earnings, personal income	-	2	4	18	21	45
Economical	-	6	22	69	45	142
Efficient	2	3	4	39	35	83
Export	-	6	21	37	38	102
Farmers, cooperative	63	-	2	4	6	75
Funds	1	9	25	18	31	84
Given conditions	1	22	60	53	85	221
Household plot, homestead	6	28	104	130	97	365
Human factor	-	1	3	23	14	41
Import	-	-	-	5	7	12
Income	10	5	35	38	53	141
Independen/t/ /ce/	-	3	12	17	17	49
Interest	-	-	4	8	15	27
Interestedness	-	-	-	11	32	43
Investment	5	18	50	42	37	152
Kulaks, fight against them	49	-	-	-	-	49
Labour	53	49	74	92	65	333
Labour organization	26	20	21	19	17	103
Land	4	12	29	36	35	116
Large-scale enterprise, farm	23	6	15	10	3	57
Livestock	39	132	355	398	219	1143
Machine	20	53	117	155	172	517
Management	18	59	74	64	40	255
Market	-	-	-	3	32	35
Material - financial	1	17	10	5	73	106
Member - employee	17	62	79	53	62	273
Moral /ethical/ principles, atmosphere	23	119	773	184	169	1268
New types of operation	-	-	-	1	42	43
Output, yields	10	4	27	26	10	77
The Party	24	10	18	6	5	63
Peasantry	43	-	-	-	-	43
Plan	25	6	11	4	1	47
President	19	29	27	14	10	99

Categories	Periods 1949-1956	1957-1965	1966-1974	1975-1982	1983-1987	Total
Processing	-	2	48	62	31	143
Production	12	14	82	156	110	374
Professional, expert	4	38	74	108	52	276
Profit	-	2	11	50	122	185
Progress, development	4	16	20	27	28	95
Regulation	4	5	8	25	98	140
Reserves	4	3	6	13	15	41
Result	30	16	30	30	32	138
Scale	-	35	41	39	13	128
Sharing	-	2	16	7	10	35
Social care	-	19	78	105	50	252
Sponsors, backers	-	7	2	26	16	51
Style of economic management	7	60	118	155	181	521
Subsidies granted by the state	7	7	25	36	49	124
Supplementary activities	-	4	70	78	144	296
Supply	1	1	8	17	20	47
The system of internal interestedness	-	-	14	20	49	83
Traditional	6	8	20	20	16	70
Types of labour remuneration	14	125	77	76	77	369
Zanza - miscellaneous	18	43	101	163	327	652

SIROLA, Miklós - STEINER, László - Miss STAUDER, Márta: Élelmiszer-marketing tapasztalatok az NSZK, az USA és Japán gyakorlata alapján. /Food marketing experiences gained on the survey of the practice in the FRG, in the USA and in Japan./ Publication of the Research Institute for Agricultural Economics, 1988/4.

The paper tries to demonstrate the international experience gained in agricultural and food marketing by surveying the example of the three countries mentioned in the title.

Through the analysis of the activities of the CMA, the Central Marketing Association of the German agricultural economy the first part-survey dealt with the past development period of the West German agricultural marketing, with the conditions of its calling into being, with the diverse fields and problems of its activity as well as with a review about

the possible application in Hungary of the experience accumulated there.

As a summary it can be established that the CMA is the offspring of the changes which took place at the end of the 1960-es in the agricultural policy of the German Federal Republic and it represents at the same time a means of implementing the new political tasks. The objectives, position and role within the institution system of the FRG is fundamentally determined by these facts. The CMA as the executor of the central will of the state concentrates on the one hand the atomized material financial means of marketing and fulfils a double function on the other hand which as reflected in the factual data significantly improve the efficiency of its activities.

The CMA constitutes such a central means of marketing which couples the purposes of the private capital with the central objectives elaborated by the state while it continuously adapts itself to the changing conditions of the market. These all represent a knowledge of model value which is vitally needed by the economie whose aspiration is to sell in the capitalist markets and in the given case also by the Hungarian agricultural sector since without these informations they are in a disadvantageous position in the competition against other economic units.

Based upon all these facts the activities of the CMA are worthy of further consideration and it is paying to look for the points where the experience can be adapted as well as to strive for the establishment of such labour contacts with this organization which may result in the increase of the possible sales of the Hungarian agricultural and food industrial sectors.

The second part of the survey set as its task to demonstrate the most generally applied and the best working methods in the practice of the horticultural commercialization in the USA.

The vegetable and food trade of the USA independently from the site of production and from the season provides a continuous supply from almost the whole assortment of the respective products. The food trade of the USA is determined mainly by the market elements and only at a minimum extent by administrative regulations. The possible fullest satisfaction of the needs as well as the increase of the supply are considered to be its most important tasks and everything is done for this end. The trade serves the buyers since this is the only way to preserve its profits. The satisfaction of the buyer's demand at a high standard, however, does not mean a disadvantageous position of the production. The trade transfers the market demands to the production and so production if it takes them into consideration then becomes increasingly safe and economical. So trade performs its task which has to be achieved in establishing the concert between production and consumption.

The third part-study tried to outline the Japanese food marketing in a way embedded into a brief report about agriculture, food industry and customary food consumption.

The particularity of the Japanese diet is a lower caloric level compared to the Western one just up to the present and also the great share of fishes in the consumption of animal proteins.

Concentration, numbersome innovations, the great diversification of the products for the possible fullest satisfaction of the changing demands of the consumers are characteristic for the Japanese food market.

In respect with marketing the basic consideration of the Japans is that it is something which cannot be tought in the school. They are at the opinion that responsiveness to the wishes of the consumers can be learned only through hard work and experience.

Marketing activities in Japan significantly differ from the methods

being familiar in Europe the reasons for which are first of all their turn of mind and also the organizational structure of the market and their financial system.

Commercial houses have an important role in both the import and the domestic distribution. In addition to the trading activities the business houses also perform the financing and consequently in several cases not only the wholesale dealers but also the warehouses and the small retailers which are dealing with direct realization receive the imported commodities on credit.

Usually the consumers' commodities arrive with the intervention of several wholesale dealers to the warehouses and to the small retail shops.

The small retail shops play an important role in the food trade for the majority of which the little room for selling and the little number of employees are characteristic.

The role of the warehouses in the market organization is very important from the aspect that the turnover they realize is one of the most significant measure as far as the domestic consumption of Japan is concerned.

SZABÓ, Márton: Beltartalom szerinti tejárfizetés a fejlett tejgazdasággal rendelkező országokban. /Milk pricing according to the nutritive content in countries of progressed dairy farming./ Tejipar, No. 1. 1988.

The milk pricing systems went through significant changes during the past decade in the countries of advanced dairy farming. The most important development is that the part paid in proportion with the nutritive content grew within the price and for the beginning of the eighties - at least in Western Europe - a pricing according not only to the fat content but

also to the protein content became general.

In addition to fat also the protein content represents a factor of the public purchase price of milk in most countries of advanced dairy farming while as far as other countries are concerned the protein is also paid in certain districts.

In those countries where pricing according to the protein content was introduced /except the United Kingdom/ the share of those products whose output is sensitive to the nutritive content of milk was greater at the time of the system's introduction than is at present in Hungary. The share of these groups of products within the consumption and also in the production very rapidly grew in certain cases.

The most important arguments for the introduction of protein pricing were the following:

- protein demand as well as the market value of proteins increased and it would be fair and reasonable to transmit this to the producers and breeders,

- weak milk brings losses while - in the case of products whose output is sensitive to the content - the concentrated milk brings economic advantages,

- dietetic considerations are expressed in favour of the protein,

- pricing according to the protein content and fat content jointly cannot be replaced by pricing according to the fat content only while pricing according to the fatless dry material is not reasonable and has but a small incentive power.

In the diverse countries the unit price ratio of fat and protein varies generally between 1:1 and 2:1. The equalization in the course of time of the fat-protein price ratio is a general tendency. According to the special literature the returns received for protein amount usually to

5o-7o per cent of those for fat and they grow near to loo per cent - to the value, namely, which would be necessary for a selection oriented in the favour of protein according to the opinion of the breeders - only in the Netherlands. More recent informations indicate, however, that the returns from sales of protein significantly increased during the past years in certain districts of France, of the United Kingdom and of the FRG.

Compared to other countries the part paid in the domestic milk price in proportion with the nutritive content is small: not more than 55-6o per cent and if the price supplementing is also taken into consideration it amounts only to 4o per cent while the same ratio is 8o-loo per cent in Western Europe and even 78-87 per cent in Czechoslovakia and the GDR /price supplements not included/.

In the international comparison the part of the price paid after fat is not high in Hungary, only 4o per cent - calculated with price supplementing - while it amounts to 43-65 per cent in Western Europe and to 78-87 per cent in Czechoslovakia and in the GDR. The problem is here that the producers receive the remaining part of the price practically not depending on the nutritive content.

The opinion is fairly general that only a very slow increase of the protein content can be expected as a result of the fact that protein becomes a price factor. Substantial improvement will not take place within lo years. But if the decrease could be stopped then this would even represent a success.

The experts are at the opinion that the prices of protein and fat can be reduced reasonably from the prices of the finished products.

The transition from pricing after the fat and liquid quantity to the pricing according to the fat and protein content increases the dispersion of the producers' incomes. The producers who made already earlier efforts

for the increase of the fat content would not come to grief if pricing after the protein content would be introduced but they could earn generally greater incomes.

If introducing a new protein price the application of a price system of difference type and not that of unit type is serviceable.

As far as the pricing systems functioning in the advanced countries are concerned uniform protein prices are applied for the whole country in some of them and for the major regions in their majority while these prices are assessed in other countries at the level of the enterprises in compliance with the produce structure.

The gradual introduction of pricing according to the protein content is advisable. The first step can be made by informing the purveyors about the protein values and at the beginning this should not have any price consequence. The starting protein price should not be high for the end that the suppliers of milk of small protein content should not get in a very handicapped situation. Protein pricing is introduced in most cases initially only in the districts where certain types - e.g. cheese-maker - of plants prevail and this becomes general - if it becomes general at all - only later on.

Miss TÓTH, Erzsébet: Érdekeltségi megoldások a mezőgazdasági vállalatokban. /The solution of interest in the agricultural enterprises./ Gazdálkodás, No.6. 1986.

As a result of the initiatives made by the large-scale enterprises and of the up-to-date development of the regulation /opportunities offered for the creation of small-scale enterprises, the temporarily more flexible regulation of the earnings/ the modernization of the systems of

interestedness and organization in the agricultural enterprises accelerated from the beginning of the 1980-es on.

The modernization tended on the one hand toward the renewal in content of the organization units based on cost accounting and on the other hand toward the creation of various small-scale undertakings.

The former content of the cost accounting units which has been primarily of accounting technical nature significantly changed. Their functioning became enriched with the motives of economic independence. Units under central control without real economic independence of management can as well be found in the practice of the large-scale enterprises as organizations based on interestedness in the profit and on undertaking can.

In the calling into being of these latter the cautiously implemented organizational decentralization is of decisive importance which is determined by the scale, geographical configuration and production structure of the respective farm. When establishing the labour organizations then the number of their personnel is very important. The advantage of the smaller collectives in the worksite lies in their "auto-organizing" nature which implements the self-control of the performances. In the greater organizations - over 100 heads of personnel - the creation of smaller enterpreneurial groups is practicable or such incentives are to be looked for which make the interestedness of the labourers more direct.

In the case of cost accounting units interested in the profit the realistic definition of the planned tasks and the moderation of the basis related attitude are substantial requirements. The commodity producer activities are interested in the fulfilment or overfulfilment of the planned profit or of the amount of coverage. The interestedness of the workers of the deficitary cost accounting units depends on the reduction of the

losses while that of those working in the branches of energy supply depends on the possible saving of costs.

The efforts tending to the increase of the results are indicated by the fact that the cost accounting units are giving preference to and initiate the production of products of better income position and are seeking the diverse ways of cost saving. Incentives recognizing the quality of labour, the reasonable use of the inputs and the realized results are gaining increasing emphasis in labour remuneration. Efficiency waging becomes more and more general whose ratio to the total amount of the share of time waging significantly decreased and represents only 6-7 per cent. Profit sharing makes a substantial element of financial stimulation and depending on the realized results its distribution is differentiated.

In the case of products circulating in the market turnover the results of the cost accounting units can be measured with the application of market prices while in the case of products for internal consumption it can be implemented by applying prices of profit content. This is the way how it can be managed that the profit could be registered for that unit where it was really produced. Through prices expressing the value judgements of the market the consideration of economicalness, the competitive situation prevailing in the enterprise and the increase of enterpreneurial motivations become characteristic for the relationship system of the cost accounting.

The decision making competence of the cost accounting units gradually augments. Depending upon the scale of the economic independence the management of the enterprise transfers the right of decision making to the organization units first of all in the sphere of wage and labour management and then in the spheres of cost, means and stock management enlarging it later also to the processes of acquisition and realization.

The practical experience gained by the cost accounting units interested in the profit demonstrates that through the transformation of the systems of organization, management, planning and incentives the conditions of the internal functioning of the enterprises significantly improved. Personal interestedness if better asserted within the hierarchy of interests mobilized economic reserves, and the interests of the enterprise, of the groups and individuals came nearer to each other.

The other tendency of modernization is marked by the diverse types of the small-scale undertakings. Depending on their type and number of personnel they create a more direct interestedness of labour performance achieved in course or over the main worktime and in the utilization of fragmental worktimes. The increase of the labourers' incomes and the easing of the constraints prescribed by the regulation of earnings can be mentioned among the motives of their calling into being. Their operation is bringing advantages particularly in the labour intensive phases of production. Labour performed cautiously and in due time can, namely, increase the quantity and improve the quality of the final product and also augment the realizable income of the enterprise. Through the small-scale undertakings the advantages of the large-scale management and of the smaller and more flexibly operating labour organizations can be coupled.

In respect with the conditions of their functioning and their particularities the small-scale undertakings are very variegated. Significant differences can be observed between them in the following aspects:

- they are related with one or another phase of the large-scale enterprise activities or they embrace the whole production process of a given product,

- they are bound to the main worktime or they cover labour performance over this worktime,

- the undertakers use only their own working power by assuming surplus labour or this is coupled with the investment of their own capital /financial contribution/.

These differences exert a decisive influence on the scale of independence and of assuming risks in the undertaking. Independence and the assuming of risks is necessarily greater in those undertakings which embrace the whole production process and also make use for this end of the financial contribution of the undertaker. In the majority of the small-scale undertakings still short term interestedness is dominating and the scale of the financial contribution is fairly small. In spite of this, however, the more direct financial interestedness transforms the wage worker behaviour of the labourers to a behaviour guided by the owner's considerations which is expressed in their initiating ability and more economical management equally.

The consistency and the relative steadiness of economic management and regulation, as well as the receiving ability of the enterprises are equally indispensable conditions for the further gaining ground of the cost accounting units and of the small-scale undertakings.

Mrs. VISSY TAKÁCS, Mara: A nagyüzemi állattartás müszaki helyzete és a fejlesztés lehetősége a 80-as években. /The technical situation and development possibilities of large-scale animal husbandry in the 1980-es./ Publication of the Research Institute for Agricultural Economics, 1988.

In addition to the diverse conceptions about technical development also the economic and geographical environment, the infrastructural supply and the inherited conditions are fundamentally determinative for the technical-technological background of animal husbandry.

The quantity of means demanded by animal husbandry grew till the middle of the 197o-es and continuously decreased since that time. The increase rate of the value of the fixed assets slowed down significantly and also the scale of investments decayed.

Until the beginning of the 198o-es the technical developments of the previous years supplied those reserves which made possible that production could grow on an acceptable technical basis. In course of the 198o-es the increase of production took place with the maximum use of the existing stall for animals, by ommitting the sorting out and also the substitutive investments and with an impoverishing technical background. Although the increase of production like this temporarily reduced the demand for fixed assets nevertheless this led sooner or later to the deterioration of the productive capacities to a scale where they could not provide already the background needed even for the maintaining of the production standard.

Though the manpower of livestock breeding decreased by 21.4 per cent between 198o and 1986 nevertheless this tendency cannot be considered unambiguously as a positive one. Conclusion can be drawn on the one hand from this decrease to the improvement of efficiency and on the other hand it is well known that animal husbandry fights against serious troubles with the quality of manpower. Therefore the reason of the reduction of personnel is not unambiguously the improvement of efficiency but it is rather the manpower shortage resulting from the low wages and the hard conditions of labour the direct consequence being contraselection in the worker staff.

About 7o-8o per cent of the building of animal husbandry are suitable for development. The criteria for this are determined mainly by the functional adequacy, micro climate, state, geographical and economic en-

vironment of the plants and buildings as well as by their infrastructural supply.

The situation is critical in the machine supply of animal husbandry. In course of the past decade the machine industrial background could satisfy the demands of the sector but rarely in quality and not at all in quantity. The ratio of the fully amortized machines can be evaluated to about 5o-6o per cent.

The failing financial interestedness of the labourers as well as the disinterestedness occurring in the protection of the substance, in repair and maintenance played an important role in the development of this outdated pool of means.

The efforts made for the application of industry-like methods fully overshadowed both cost economy and the zootechnical requirements in the investments implemented in the second half of the seventies. The improvement of productivity played an exaggerated role while the problems of the assuming of responsibility, individual interestedness and the system of quality requirements were pushed into the background.

When pondering the opportunities of development also the increasingly reducing financial sources are to be taken into consideration. The future way should be defined so that the best implementable technical solutions could be achieved at the expense of the possible smallest cost inputs. Preferences should be granted to those alternatives of the technical development which most correctly assist in the fulfilment of the production's needs. The most important types of the investments will be represented by the reconstructions also in the future. The implementing of the reconstructions in the practice will correspond expectably to the forms established for the present.

From the aspect of the architectural construction variable buildings of several functions will come into prominence.

In respect with the machine supply much greater attention should be paid to the real size of the plants and to the demands of production than has been so far.

Over and above the scope of large-scale development those types of operation are increasingly gaining ground which are based on the integration of the large- and small-scale enterprises and on the interestedness of individuals and groups as well as on the changes which take place in the property relations. These new types of operation will need such versions of the technical development and such technical-technological changes in the future which were not applied in the past or fell into the background so far and whose paths are fairly unelucidated.

Mrs. VISSY TAKÁCS, Mara: Energiatakarékos technológiák gazdaságossága az állattartásban. /The efficiency of energy saving technologies in the animal husbandry./ Tudomány és Mezőgazdaság, No. 1. 1988.

The energy intensity of animal husbandry is characterized by the moderate fuel demand of the diverse transportations, by the thermal energy needed for the heating of the buildings and by the electric energy needed for the operation of construction mechanical and technological machines. Corresponding to the breeding of the diverse livestock varieties, to the utilization purposes and to the plant system the energy demand is very differentiated. At the present more than the half of the total energy consumption of animal husbandry is deriving from the poultry farming activities, while the share of pig breeding amounts to 28 per cent and that of cattle husbandry to 17 per cent. It is worthy of attention, however, that

calculated with the agricultural input prices of the consumed energy materials the share of the poultry farming activities in the costs is only of 42 per cent. The share of pig breeding is equal in both the quantity and in the costs. Cattle husbandry bears at the same time - because of the more expensive energy consumed - one fourth of the energy costs. Poultry farming and mainly broiler type chicken within its scope as well as the raising of piglets and porklings in pig breeding are characterized by high thermal energy demand. The electric energy demand of milking is dominant in cattle breeding. The energy demands of sheep breeding, as well as of the raising of young cattle and of cattle for slaughter on the other hand are minimal.

The sphere of technical developments belonging to the energy saving technological procedures can be divided into four major groups which are the following:

- the utilization of animal heat,
- making use of the milk heat,
- modernization of the heater equipment, and
- modernization of the heat regulator.

The recovering of the animal heat can reasonably be applied through heat exchangers mainly in those activities - poultry breeding, the raising of piglets, etc. - where much heat is needed.

By applying heat exchangers almost 45 per cent of the heating and refrigerating energy can be saved surpassing 2o per cent even in the summer season and growing near to 48 per cent in the winter.

Dairy heat recuperators are applied in an increasing sphere. Their propagation is unambiguously justified by the parameters of their economicalness.

The energy cost saving per 1 Ft investment value which can be implemented through the recovery of the biological heat of milk and through using it as hot water is in the case of diverse energy materials the following:

- as fuel substitute 3.14 Ft/Ft
- as natural gas substitute 2.1o Ft/Ft
- as electric energy substitute 7.3o Ft/Ft.

Radiant heating offers another possibility for the energy saving heating of the buildings in animal husbandry.

While the hot air rises high in the case of traditional room heating then the advantage of infrared radiant heating is represented just by the fact that the heating source is located in the body height of the livestock and the feeling of comfort is increased not only by the temperature of the air in the stable but also by the feeling of the radiating heat.

Radiant heating heats the zone of habitation and not the full cubic capacity of the stall and so its specific energy demand is smaller than that of the traditional heating.

The infra red radiators can be operated equally with natural gas, with propane and butane or with biogas as well as with electric energy.

The energy and cost savings which can be realized by applying radiant heating equipments are demonstrated through values calculated for a poultry raising building of 1loo m^2 ground space.

	Combustibles per 1 kg bodyweight	Heating costs
Stall heating with oil broiler	o.38 kg/kg	4.1o Ft/kg
Stall heating with natural gas	o.32 m^3/kg	1.54 Ft/kg
Natural oil operated radiant heater	o.2o m^3/kg	o.98 Ft/kg
Electric infra radiator	1.89 kWh/kg	4.55 Ft/kg
PB gas operated heat radiator	o.24 kg/kg	1.56 Ft/kg

Heat radiators operated with natural gas can be applied with the most favourable heating costs.

The useful effect of heating and the development of the heating costs, however, are the functions of several external factors. They are the isolation of the building and of the doors and windows, the correct selection of the scale of introduction, the method of ventillation.