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המרכז למחקר בכלכלה חקלאית

[Hebrew university]

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HUNGARIAN AGRICULTURAL POLICY IN THE 80'S:
ECONOMIC MANAGEMENT AND ORGANIZATION OF
THE HUNGARIAN AGRICULTURE

by

Csaba Csaki

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מאמרי המחקר בסידרה זו הם דווח ראשוני לדיון וקבלת הערות. הדעות המובעות בהם אינן משקפות את דעות המרכז למחקר בכלכלה חקלאית.

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Csaba CSÁKI

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HUNGARIAN AGRICULTURAL POLICY IN THE 80's:
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THE HUNGARIAN AGRICULTURE^x

Agriculture, as well as the agrarian sphere in a broader sense, played a very significant role in the economic life of Hungary right up to the present day and this is not likely to change in the future. Building upon the relatively favorable natural conditions of the country, Hungarian economic policy treated food production as an important basis for the well balanced and proportionate economic progress of the country, for the development of industry and the development of the economy as a whole. The Hungarian agriculture's share of the national gross product amounts to about 17 %, representing a sufficiently constant ratio. Its share of the national income is continually decreasing, but still represents about 16-17 %. Particularly important is the role of Hungarian agriculture within the foreign trade of the country. Agricultural and food products contributed 24,5 % to the exports settled in convertible currencies and 13,5 % to those accounted for in roubles in 1987. The Hungarian agricultural foreign trade is the source of a surplus which is of fundamental importance for the balance of payments of the country.

Hungarian agriculture of course is only a particle when compared to the agriculture of the world and the role of

x Dr. Csaba Csáki, Professor of Agricultural Economics, President Elect, International Association of Agricultural Economists, Rector, Karl Marx University of Economic Sciences, 1828 Budapest, IX., Dimitrov tér 8, Hungary

the country as a whole within the world trade of foodstuffs is very small. There are, however, certain products in the area of Hungarian agriculture which might well be considered as "great powers", e.g., sunflower seeds, poultry meat and eggs. The export of Hungarian agricultural products reached about one third of total production in the course of the last 10 years. In the last decade the export structure of agricultural products changed. The share of processed products increased from 56 % in 1970 to 67 % in 1987. Also the ratio of the major groups of products changed: the share of animal products increased from 34 to 45 %, grains and grain products kept their ratio /11 %/ and fresh and processed fruits decreased from 27 to 22 %.

At present there is much talk about the agricultural difficulties which prevail in diverse socialist countries, and certain people speak about food production lagging behind the needs of the population as a general characteristic of the socialist economic system. The results of Hungarian agriculture demonstrate that socialist agriculture is also able to satisfy the entire food demand of the population and even able to produce considerable surplus. These facts serve as an explanation for the great interest shown in both East and West with respect to Hungarian food production. Herein is rooted the international importance of the experiences gained in the food economy of this country.

1. Hungarian Agriculture: an International Comparison

The survey outlined in this paper can by no means provide a thorough picture about the present situation of Hungarian agriculture. It can, nevertheless, serve the purpose of providing a framework for the analysis of the management system of Hungarian agriculture and help to form an opinion about the specific features of this system.

1.1 The Resources of Agricultural Production in Hungary

The territory of Hungary comprises 9,3 million hectares, a relatively great part of which, i.e., more than 70 % /6.8 million hectares/ is suitable for agricultural cultivation. Within this agricultural land, the ratio of arable acreage represents the high figure of 70 %, pastures and meadows amount to 18 % and that of gardens, vineyards and orchards 12 %. The availability of land in Hungary is relatively favorable and the per capita arable acreage of the country is one of the greatest in Europe. Cropland offering relatively good conditions for agricultural production is the most important natural resource of Hungary. In recent years both favorable and unfavorable conditions prevailed at the same time with respect to the utilization of arable land. In spite of the considerable increase of yields, not enough attention was paid to the meaningful use of land, i.e., to the maintenance of the natural productive capacity. Unfortunately, the relatively rapid decrease of land under agricultural cultivation and mainly of the arable acreage continued. As a result of several efficient measures taken in recent years, the decrease of cultivated land is expected to slow down.

At present 18,2 % of the working population is employed in agricultural enterprises, although 20 years prior to that 40 % of the population earned their living from agriculture. The number of people working in agriculture decreased rapidly at first and later on, at a lower rate, after the socialist reorganization. The regrouping of the labor force to other branches of the national economy has presently ceased, and since 1978 a certain increase of the number of people working in agriculture can be observed. The structure of the labor force working in agriculture changed for the better in the 70's. A gradual rejuvenation in agriculture, due to the new generation, started mostly in the farmers cooperatives where the average age of the members is presently 41 years, compared

with the average of 54 years 10 years ago. The number of skilled workers increased at an accelerating pace. At present the ratio of skilled workers amounts to 37 % in the cooperatives and to 44 % in the state farms. Through these changes a valuable basis of labor force was established with respect to the further development of agricultural production.

The inflow process of modern production means into agriculture, which has continued until the present day, started in the middle of the 60's. The influence of new technologies, the extended use of industrial materials as well as the development of new methods gradually transformed the nature of agricultural labor. The value of the pool of fixed assets of Hungarian agriculture increased 2.7-fold in the course of two decades. The investments were characterized earlier by an emphasis on building construction, since the means of production of the small peasant farmers had to be replaced by the construction of large scale farms. Since the beginning of the 70's gradually more and more machines and equipment were installed in the large-scale agricultural enterprises. In the 80's about 14-16 % of all the national economic investments were devoted to the agricultural and food industry. The distribution of the investment activities between agriculture and food industry was represented by a 75:25 rate. In spite of the undoubtedly great amount of investments, however, important investment targets could not be achieved, mainly in the area of infrastructural construction.

The technical development is well demonstrated by the fact that the kW performance capacity of tractors surpassed in 1987 by more than 50 percent the capacity of tractorpark in 1970 and the transporting capacity of the trucks tripled /Table No. 1./. Already 182 kW motor capacity was available for each 100 hectare arable acreage in 1987. Production inputs and the share of inputs of industrial origin considerably increased, the latter share grew from 25 %

in 1970 to 58 % in 1987. The development of the domestic industrial background lagged behind the needs of agricultural production and thus the share of imports augmented within the material inputs of agricultural production. The application of chemicals played an important role in the increase of the level of production. The active ingredient of fertilizers amount to 304 kg per one hectare agricultural land in 1987.

1.2 The Level of Production and its Increase

The most interesting picture about the agriculture of a country and its development-however complicated-can be drawn by means of an international comparison. From 0.1 % of the world's agricultural land, Hungary makes up 0.7-0.8 % of the total world production. Hungary is considered the only East European country that has reached a real agricultural self-sufficiency and displayed consistent positive agricultural trade balance.

Table No.2. presents the growth of agricultural production for the ten-year period 1975 to 1985 for the CMEA-six countries. As can be seen in Table No. 2. the growth of agricultural production in Hungary increased 46 percent over the fifteen-year period 1970-85, the second largest increase following Romania /96 percent/ among the countries listed.

As a consequence of the changeable climate of the country, the nature of the various types of agricultural products is of a mixed character. Grain is one of the major crops produced; wheat and corn heading the list of grain production. Wine production is significant and the production of sugarbeet keeps the country self sufficient in sugar. Horticultural production is relatively significant and also the growing of certain vegetables, apples and berries. Pig husbandry and poultry make up the most important items of livestock husbandry, but beef and mutton, as well as milk, can be considered as significant.

The pattern and concentration of Hungarian agricultural performance can be more clearly seen by looking separately at the crop and livestock sectors.

The development of crop production in Hungary can be characterized by the indicators of grain production /Table No. 3/. The level of grain production reached more than 5 tons per hectare in Hungary by the mid 80's.

Hungary produces enough grain to not only support a substantial livestock and poultry industry /as we will see in the next section, Hungary has the highest percapita meat consumption in Europe and is net exporter of meat and meat products/, but to remain East Europe's largest net grain exporter. Hungary has been the only permanent net exporter of grain and other agricultural products in Eastern Europe. /Hungary's agricultural trade surplus in 1987 amounted to US\$ 670 million, compared with a total trade deficit of US\$ 361 million./

Table 4 presents the per capita meat production for the ten year period 1972-85. Per capita meat production almost doubled during the ten-year period concerned.

Recently, several investigations were carried out in Hungary concerning the international competitiveness of our agriculture. The conclusion of these investigations was that the technical level of agriculture is only slightly below that of our competing West European countries. However, we are significantly lagging behind with respect to the capital stock in food processing. The organization level of arable crop growing is considered in these comparisons as exemplary on the international level, while on the other hand, the organization of livestock husbandry is judged to be relatively inadequate.

The Ministry of Foreign Trade made a thorough survey of Hungarian agriculture under the aspect of the costs and of efficiency. According to this survey the cost level of Hungarian agriculture is much more favorable than the European average, mainly because of its modest pool of assets and too low labor expenditure. The return of both non-recurring and continuous inputs can be qualified in general as favorable, while at the same time, the productivity of labor is unfavorable and represents a low level when compared to the developed capitalist countries and primarily with the United States.

2. The Enterprise Structure of Hungarian Agriculture

Before the land reform of 1945, Hungary was a country of large estates. Approximately 1,5 million farmers, i.e., 94 percent of the farms cultivated 32 percent of the land while two thirds of the land belonged to 6 percent of the owners. The land reform affected more than one third of the land of the country. On average each man received 2,9 hectare land without paying compensation and 400.000 new small estates were established. The agricultural structure of the country is composed of small estates comprising mostly of 3-4 hectares which proved to be very viable. Already in 1949 agricultural production surpassed the prewar level. The government, on the other hand, reached a crossroads in 1949 and the question was how to go on. Two paths were open:

- let us permit or even support the establishment of small capitalist peasant farms, many times larger than the existing ones permitting at the same time a proportional difference,
- let us begin the establishment of large-scale cooperative farms and in addition, by means of creating machine stations, let us facilitate the application of modern technology also for the small estates.

The question was rapidly, possibly too rapidly, settled by the political situation of the country at that time. In the autumn of 1949 the organization of the cooperatives was started under vigorous political and economic pressure without adequate preparation and their numbers continually increased until 1953. The coercive organization method of the cooperatives and their weaknesses also led at first in 1953 and later on also in 1956 to a failure.

The upswing of the establishment of the cooperatives manifested itself again after 1960 but based upon an almost entirely new political and economic basis. The Hungarian Socialist Worker's Party drew conclusions from earlier failures and elaborated in 1957 a new agrarian policy which

- confirmed the abolishment of compulsory delivery,
- introduced new agricultural prices which covered the costs of production,
- allotted the leading role in the development of agriculture to the large-scale enterprises and among them to the cooperative farms.

The collectivization carried out between 1959 and 1961 can be evaluated at present as a useful, well prepared but undoubtedly difficult step. It should be particularly stressed that the organization of the cooperative farms was not accompanied by the decrease of production. The prosperity of agricultural production between 1957 and 1959 can be attributed to the radically improved and renewed political climate of the country and to the well functioning economic interest. The varying solutions of the organization and remuneration of labor in the recently established cooperatives were adapted to the local needs on the one hand and the basis was constructed on the other hand for a system of interest which is continually developing since then. It is characteristic that the diverse types of remuneration, which are still in effect today, were

often named in special literature from certain villages or from the president of the cooperative farm who applied it first. The type of cooperative farming which was often called the Hungarian type in fact was a very heterogenous one and it has remained so until the present day. In my opinion the official reluctance to insist on uniformity is one of the most important factors of the satisfactory result.

Members and employees are working in the cooperatives. Their comparative share within the total personnel is 9 to 1 and it has remained constant for a number of years. Differences between the status of members and employees are diminishing. As a general rule it is worthwhile to be a member in a good cooperative, whereas it is better to be an employee in a weak cooperative farm. The majority of the employees, however, are working in the industrial units of the cooperative and a large majority of them are skilled workers.

The cooperatives are farming on land partly owned by the cooperative farm itself and partly by its members. The members receive a land rent for their privately owned and collectively cultivated land. The privately owned land of the cooperative members is inherited by their children. But when the children are not members of the cooperative they are obliged to sell the inherited land to the collective farms and thus it becomes collective property. It is also worthwhile to mention that since about 10 years lands owned by the state but cultivated by the cooperatives may also become collective property.

The cooperative farms established in 1967 their national representative organization, the National Council of the Cooperative Farms. This board has the legal right to express its opinion with respect to all those central regulations which concern agriculture, and for the cooperative members it fulfills a similar function to that of a Trade Union. Its role in the practice of domestic agrarian policy is very important and very

positive. The laborers of the National Council and of the Associations in the counties are not state officials or civil servants and they receive wages from the funds annually subsidized by the cooperative farms. Neither the national nor the regional organizations are entitled to give orders to the member cooperatives. The leaders of the boards are elected every four years.

The cooperatives are enterprises and social institutions at the same time. Their independence is increasing in both ways. As enterprises the cooperatives cover their expenses from their returns and the cooperatives also pay guaranteed monthly wages. At the end of the year, 6-20 percent complementing share is added to the guaranteed sum and this share depends upon the financial result/gains of the enterprise.

Cooperative democracy forms the basis of the management of the farmers' cooperatives. The general assembly is the supreme decision making body of the cooperative. The activity of the cooperative farms is directed by the leading body which is elected by the general assembly and directed also by the president in close consultation with the diverse commissions elected by the general assembly.

The second type of enterprises, besides the cooperatives, are the state farms. The purpose of their establishment was that there should exist such enterprises which can apply modern techniques, present examples, and give assistance to the cooperative farms. They have fulfilled this role more or less successfully so far and a reasonable labor distribution was established until now, but no doubt a certain rivalry does exist between the state and the cooperative farms. Generally it is characteristic for the state farms that they work at a high technical level and have a high productivity rate. The cooperative farms on the other hand produce with somewhat greater flexibility, with less up to date technology, but are cheaper than the state farms.

The number of the farmers' cooperatives decreased between 1960 and 1987 from 4500 to 1262. After numerous merges the average acreage of the cooperative farms increased from 860 to 4032 hectares. The number of state farms dropped from 333 to 129 in the course of 27 years and proportionate therewith the average farm size increased from 2900 to 7644 hectares. The largest agricultural enterprises doing complex activities were transformed into agricultural combines. There is great dispersion behind the average data. However, according to Hungarian agricultural economists this is a reasonable process since there is no optimum farms size existing independently from space and time. The size of the Hungarian state and cooperative farms will for a long time still be sufficient to accept the most up to date techniques.

The difficulty of establishing direct interest causes problems. However, the cooperatives have progressed further than the state farms in finding a solution to the problem. It is a new trend that also the state farms apply a number of methods /labor for proportion of yield, remuneration of small groups, etc,/ which were regarded earlier as "primitive" ones.

In addition to the above two types of large scale enterprises, half million plots and small farms are under cultivation.^x The employment structure and social situation of the population is quite varied. The comparative share of large scale enterprises and small farms in Hungary is 89 to 11 with respect to the agricultural land and 63 to 37 with respect to the gross value of production. These different proportions indicate first of all the different structure in production and also the different way of land use and not at all the supremacy of small scale farming. The large scale enterprises produce the bulk of wheat and corn at a relatively high level. There is furthermore no sugarbeet and sunflowers and no significant green forage production on the small scale farms. On the contrary, however, these small-scale farms deliver about half of the total production of vegetables, fruit and wine. Livestock husbandry

x There were 535 000 small scale producers in 1987, 57 percent working in agriculture, 20 percent pensioners, 23 percent non agricultural employees.

is conducted in both types of enterprises and the distribution of labor between the small and large scale farms is not so clear. The share of the large scale farms is increasing more and more with respect to cattle husbandry, poultry keeping and sheep farming. The role of the small scale farms is still greater than that of the large scale ones for the production of pork, eggs, and hare meat. The labor distribution between large and small enterprises was finally established on the basis of production techniques and capital demand. We consider this at present not only simply advantageous but both policy and economic management grants fully support to it.

Small scale farming means for the producers additional activities and sources of income. It is very natural that in cases where there are poor possibilities for improving the living standard from central resources then the demand with respect to small-scale farming begins to increase. The present situation of this country is like this and therefore small scale enterprises are more encouraged and supported by the government. Still it is necessary to stress that this policy is not new in Hungary although it is more purposefully and thoroughly considered than has been the case so far.

A particular trend of enterprise development in Hungary is the establishment of collaboration and joint ventures between several agricultural enterprises.

Among the inter-enterprise relations the technically organised production systems /TOPS/ should be mentioned first, since they are outstanding with respect to the volume and efficiency of their labor compared with other joint ventures. At present they already make up a significant part of arable crop growing, horticultural, and livestock breeding activities. The TOPS is - according to Hungarian terminology - the form of the application of production techniques formulated by making use of modern technical and biological as well as of the la-

test scientific results. The core of the TOPS is a farm disposing of adequate intellectual and material background, i.e., the so called "master of the system". The large scale agricultural enterprises which voluntarily join it are supplied by the TOPS with the technologies needed for up-to-date production techniques, with professional advice and services, and at the same time the system offers a guarantee for a well defined increase of output. The enterprises which avail themselves of the services of the system are obliged to pay a fixed charge for them. The first TOPS was organized by the Agricultural Combine of Babolna in the area of poultry breeding.

Another type of economic cooperation is represented by the joint ventures which operate in particularly varied forms. Their establishment began in the second half of the 60's. At present their number surpasses already 500. Joint ventures were founded for the performance of such activities which surpass the possibilities of the single enterprises. They were established by the state and cooperative farms which took part in the undertaking which united a certain part of their capital and completed it with bank credits and if possible by applying for state subsidies. There are certain joint ventures which operate as independent units in the framework of a cooperative farm but it is also common that they themselves became both legally and economically independent enterprises. The founder farms settle the distribution of the profit realized on the basis of their share in the capital contribution. Among the joint ventures the most frequent ones are the undertakings of building industry, food processing, marketing as well as of services and other agricultural activities.

The most recent type of economic collaboration is represented by the agro-industrial unions. Four agro-industrial unions are working at present which combine the activities of cooperative and state farms and food industrial enterprises. They are responsible for coordinating the entire activity of the enter-

prises in a certain region and taking care of their complex development. By maintaining the independence of the participating enterprises, they endeavor to implement this task by definition of reasonable land use, by the harmonization of development tasks, by the useful allocation of investments and most important they endeavour that a part of the development funds of the partaking enterprise is amalgamated in a collective fund and this fund will be used in correspondence with the collective plans.

3. The Characteristics of Present Day Hungarian Agricultural Policy

The principles of Hungarian agricultural policy that are predominant in the present stage of development were established in the course of the last quarter of the century. They are:

- voluntary gradualness,
- independence,
- material-financial interest,
- socialist democracy and
- support from the state.

This agrarian policy made possible the effective implementation of the socialist transformation of agriculture and offered already before the reform of economic management, an opportunity for the introduction of new elements in management of agriculture. Furthermore, it is used at the present time as a basis for the state management of Hungarian agriculture.

In the second half of the 70's Hungarian agriculture reached a turning point in several aspects. On the one hand a modern well equipped food industry was established and proved to be operative, and significant further growth potentials were achieved especially in the large scale farms. On the other hand, it became obvious that the usefulness of quantitative development in food production came to an end. Production,

considerably surpassing the self-sufficiency of the country, grew steadily, but the demand for Hungarian food products on foreign markets fluctuated much more than in the past. Finally, the importance of increasing the efficiency of production became obvious, and at the same time, /but not in contrast/ the necessity to obtain convertible foreign currency through food exports was also confirmed.

Let us now consider the major characteristics of Hungarian agricultural management during the first years of the 80's.

As it was mentioned already the fundamental principles of present day Hungarian agricultural policy were established at the end of the 50's and in the 60's. The application of these fundamental principles, however, was and still is adapted as far as possible to changing conditions.

1. It is a fundamental goal of Hungarian agricultural policy that the agriculture and food industry should totally satisfy the quantitatively increasing and qualitatively changing domestic demand with respect to all products which can be produced in the country, and should produce as much a surplus for export as possible, mainly in the area of US\$ transactions.

From the beginning of the 70's, Hungarian agriculture has been able to satisfy the needs of the population and to increase the quantity of produce delivered to the consumers. In the 80's the increase of food consumption has become slower. /The average annual increase of food consumption is between 1 and 1,5 percent./

2. Agrarian policy considers the socialist large-scale enterprises, the cooperative and the state farms to be the bases for the increase of production and the fundamental pillars of the agricultural system. The large scale production of the agricultural enterprises increased rapidly in recent years. The

acceptance and rapid propagation of advanced techniques and methods, the significant support granted by the state, the improved profitability, as well as the more flexible state management, offer together an advantageous possibility for the development of the state farms and the cooperatives.

3. In spite of difficulties from time to time, in general the development strategy of agriculture adjusts itself to the socioeconomic and financial possibilities of the country. Parallel with the implementation of a top ranking technical level, a definite effort can also be observed in the agrarian policy which aims at the efficient use of local resources and capacities. The former means the development of large-scale agricultural production which is based upon advanced techniques, using production means of industrial origin to an increasing extent, sparing labor force and producing the use of existing productive capacities of diverse technical levels, prompts the maintenance and then the support of small-scale agricultural production and the opening of new paths for the rapid and efficient extension of the area of activity of large-scale farms.

4. Small scale production, which is organically linked with the development of viable socialist large-scale enterprises, form an integrated part of Hungarian agriculture. In the 70's parallel with the development of the cooperative and state farms small-scale agricultural production continuously increased and consolidated. In the course of this process its character was also transformed from self-sufficiency farming to that of commodity producer. Under this aspect the establishment of financial-material interest, the ready and permanent availability of small scale production. The household plots of cooperative members are regarded as an integral part of the large-scale enterprise and the interrelations between the collective and household farms in the area of production and marketing are in an extension of large-scale farms. The agricultural activity of people not employed in agriculture cannot be underestimated either.

5. Better utilization of local resources and the satisfaction of local demands at a higher level is an important aspect of the agrarian policy and attributes to the non-agricultural and servicing activities of the agricultural enterprises. The so called subsidiary and auxiliary activity of the agricultural enterprises which proved to be advantageous for both the individual and national economic interest, and also satisfied real social needs, significantly broadened in recent years.

Agriculture has compelled to extend its activities in several respects. Because of the inadequate industrial background, the production of inputs and servicing activities needed for the development of crop growing and livestock husbandry had to be established within its own organization. As an extension of the process of agricultural production certain processing activities also appeared in the agricultural enterprises which produced in 1987 already 20 % of the food industry production. Agricultural large-scale enterprises in addition replaced the small and medium size production capacities which were lacking in industry in several areas and they performed their tasks of production without any great investments. The income earned with auxiliary activities contributed not only to the improvement of the living standard of the rural population but considerably augmented the development resources of the large-scale agricultural enterprises. In the course of the 80's this auxiliary activity more than doubled at constant prices, and it produced in 1987 about forty percent of the gross returns of the large-scale agricultural enterprises.

6. The multiplicity of enterprises types as well as the effort to apply those types of organizations which can best be adapted to the conditions, is characteristic for Hungarian agriculture. As a result of this policy the enterprise structure of agriculture is particularly diverse. State farms, agricultural combines, associations, joint ventures, large and small farms, enterprises both extremely specialized and with a fully tradition structure,

agricultural cooperatives dealing only with agriculture or mostly industrial activities, can equally be found in Hungary.

7. An essential element of Hungarian agricultural policy is the consequent application of the principles concerning the independence of the enterprises and the financial-material interest. The new system of state management was established in 1968 when the reform of economic management was implemented. It is well known that this reform replaced the centralized management which was based upon direct orders with indirect means, i.e., with economic regulators for managing the activities of both the producer enterprises and the whole national economy. The independence of the agricultural economic units continued to increase in the 80's.

4. Economic Regulators in the Management of Hungarian Agriculture

As it was already mentioned, the consequent application of the principles of enterprise independence and financial interest, represents an important motivating force in the development of agriculture in Hungary. The state farms and the farmers' cooperatives were legally independent right from the beginning. In the early stages of their establishment, however, a considerable amount of unjustified intervention in their management took place, and also the conditions of financial independence failed. Great changes resulted from the reform of economic management, which was implemented in the second half of the 60's. As a result of the reform, the fulfilment of the national economic plan was accomplished by planners, mostly through indirect economic means. The large-scale agricultural enterprises are fundamentally interested in the results of farming and this result determines not only the possibilities of development, but also that of personal income and wages. Today the major elements of the system of economic regulation in agriculture are prices, taxes, regulation of wages, credits,

and diverse subsidies which are granted by the state. This system of indirect regulators was established at the end of the 60's. The regulators are in fact similar at present, but the concrete method and conditions for their application have often changed, depending on several circumstances. The application of the regulative means is of course adjusted to the particular conditions of various activities.

The financial conditions of the decentralized management of the large-scale agricultural enterprises were established by comprehensive financial measures taken in the second half of the 60's. At the beginning of the 70's, producer prices and the relatively broad area of subsidies granted by the state, created financial-material interest in the development of production. In the course of the 80's, the agricultural producers' price level increased at a rate approximately corresponding to the export price level expressed in Hungarian Ft of the agricultural products in non rouble transactions. The domestic price movement of the major agricultural and other products, however, adapted itself better to the development of production costs than to the same world market prices.

The agricultural price system

The most important means of the regulation of agricultural production are prices. The selection of the rules applied to the producers' price calculation of the diverse products depends upon their ranking in the respective price class. There are four basic types of prices:

- fixed price assessed by the price authority with obligatory force,
- maximum price is the highest price set by the price authority,
- guiding price which is also set by the price authority as a fixed price prescribing at the same time the extent to which sellers may deviate from it,
- free price, which can be set according to the actual market conditions.

Fixed price is only valid for milk from 1988 on. Wheat, sugar-beet, sunflower, pigs, cattle, milk and wool used to be fixed price products until the end of 1987.

Prices of industrial materials and equipment used in agriculture are free, except for chemical fertilizers, whose prices are maximized.

The sphere of free prices has become much wider even for consumer prices of foodstuffs. As a result of a larger possibility for the parallel movement of producers' and consumer prices, the vertical relations between agricultural production, food-processing and sales will become stronger. producers' prices of agricultural and food-products will be differentiated according to quality in several groups of products.

The earlier practice, in which the increase of prices for agricultural products was much lower than of prices of industrial materials and equipment needed in the agriculture, will probably not continue. But it has to be taken into consideration that more elastic prices in food-production will entail higher consumer price increases of foodstuffs.

The system of agricultural taxation

The major tax categories of the large-scale enterprises are the following:

- a/ The General Turnover Tax
- b/ Land tax is progressively growing in function of soil quality and according to the diverse kinds of cultivation /arable land, meadows, pastures, plantations/ it is differentiated.
- c/ Profit tax. The rate of profit tax applied to industrial activities of large-scale farms equals the general one

/50 %/, while as to the agricultural activities of the "Agriculture" the rate is 40 per cent. Enterprises with outstanding profitability receive some tax-reliefs.

- d/ Earnings regulating taxes: their most important function is the regulation of purchasing power and the co-ordination of commodity fund and of the wages. Enterprises or cooperatives may increase the mass of earnings paid by them tax-free, if the proportion of earnings/added value of the previous year is maintained. If this proportion changes in favor of earnings, a prohibitive tax on earnings has to be paid.
- e/ The social insurance rate amounts to 40 percent of the wages.

The system of subsidization in agriculture

The categories of subsidies granted for agriculture and in food production are the following:

- production subsidies,
- subsidies for investments,
- subsidization of large-scale enterprises farming under unfavourable conditions,
- export subsidies.

The subsidization of agricultural production has until now been wideranging. This practice lessened the role of prices in stimulating changes in the structure of production and sometimes led to bureaucratic solutions. It was therefore reasonable to successively abolish a greater part of these subsidies first of all through raising producer's prices.

There are production subsidies in the case of:

- chemical fertilizers,
- domestic production of protein/soybeans, broa-beans etc./
- milk production,
- cattle-beef production.

There are subsidies on livestock raising investments. These subsidies amount to 30-50 per cent of the value of the investment.

Subsidies granted for cooperative farming of land with unfavorable conditions represent a special type of state subsidization. About 26-28 per cent of the cooperative farms belong to this category. The inputs of cooperative farming under poor conditions are partly covered by their returns from sales and therefore the state contributes at a fixed rate to the coverage of their surplus costs.

Credit system

The most important means of regulation with respect to the investing activities is credit. The contributions whereupon laid down by the National Bank of Hungary, in correspondence with the tasks of the plan. Credits of long, medium and short term duration can be granted to agricultural enterprises. In addition to the credit allocations envisaged for agriculture, credits can be granted for the agricultural enterprises also from those allocations which are available for investments increasing the output of products which can be realized in convertible foreign currency. This important source was developed over the past few years particularly for financing of investments of those agricultural enterprises which develop most rapidly.

The large-scale reorganization of the banking system was an important stage in the development process of the Hungarian economic reform. It's substance is that the central bank maintains it's task as a bank of issue - as well as of foreign exchange - and its commercial banking function are taken over by commercial banks, operating in the competitive sphere. This allows companies to choose freely their bank and that the banks should increasingly become profit-motivated enterprises.

The banking system consists of the following institutions:

- central bank,
- commercial banks,
- /small/ specialized financial institutions,
- bank for the population,
- institution financing development.

From 1987, the whole banking system operates in accordance with the new structure.

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Table 1.

THE DEVELOPMENT OF TRACTION POWER CAPACITIES IN AGRICULTURE
/AT THE END OF THE RESPECTIVE YEARS/ /1000 KW/

Item	In the years of				1987 in percentage of	
	1970	1975	1982	1987	1970	1975
Total traction power capacity	3928	5515	7930	8517	216,8	154,4
Thereof:						
traction power of tractors	2219	2512	3254	3581	161,4	142,6
trucks	868	1667	2350	2713	312,6	162,7
combine harvesters	639	943	1291	1432	224,1	151,9
other machines of auto-motion	-	232	761	960	-	413,8

Source: Hungarian Statistical Pocketbook, Budapest, 1982., 1988.

Table 2.

THE GROWTH OF AGRICULTURAL PRODUCTION IN
THE EUROPEAN CMEA COUNTRIES

Country	The increase of gross production (%) 1970 = 100			Annual rate of increase of increase of gross production (%) (%)		
	1975	1980	1985	1975/1970	1980/1975	1985/1980
Bulgaria	116	121	119	3,0	0,8	- 0,2
Hungary	126	141	146	4,7	2,3	0,6
GDR	114	121	136	2,6	1,2	2,3
Poland	120	108	122	3,7	- 2,1	2,1
Romania	137	165	196	6,5	3,7	3,5
Czechoslovakia	114	126	134	2,6	2,1	1,7

Source: CMEA Statistical Yearbook 1986. Moscow, 1987.
Calculated from table 64. p. 163.

Table 4.

PER CAPITA MEAT PRODUCTION

	1970	1980 kilogram	1985
Bulgaria	47	73	82
Czechoslovakia	77	93	94
East-Germany	75	107	109
Hungary	89	135	159
Poland	61	80	62
Romania	46	80	75
USSR	51	56	63

Source: Hungarian Statistical Yearbook, Budapest, 1971, 1981, 1986.

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