PLENARY PAPERS

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RESOURCE ADJUSTMENT AND EUROPEAN AGRICULTURE

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PLENARY PAPERS

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Papers:

Growth and efficiency in the Hungarian agriculture

Following world-wide tendencies technical and biological progress have radically changed the efficiency and growth path in the Hungarian agriculture. Today as much as 70 per cent of all production costs are attributed to materials of industrial origin.
A substantial part of the produces is exported to Eastern and western markets.

Growing and consolidated large scale farm production has applied update techniques, new organisational methods mostly in the fields of cereals and meat production.

During the last 15 years the gross value per hectare of agricultural production has risen in gross value production by 80 %, the net value production by 40 %, whilst the inputs of materials and machinery has grown twofold.

Today the small-scale farm production plays a significant role, especially in vegetable and fruit production and in animal breeding, all of which are labour-intensive activites.

Large scale farms have improved techniques, and increased significantly the efficiency of live labour. Farms covering a land area of between 5 - 10 hectares, accounting for 60 - 65 % of all large scale cultivated soil. These give in the field of the cereal production 60 - 65 % of total output. The average production on large scale farms breaks even at 1000 fts between investments and production performance value. An the other hand the vegetable and fruit production and the breeding of ruminants has been lagging behind the requirements and the least efficient in terms of output, technology, and profitability in Hungary.

The major tasks of increasing effciently and promoting agricultural growth are to assist further cooperation between small and large scale farms as well to develop and synchronize processing, production and marketing procedures and oragnization.

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Increase and efficiency in the Hungarian agriculture

Efficiency may explain and measure in different ways. On national economy level we used to characterize mostly with the growth rate of the gross production, with the contribution degree to the national income in the supply and export respectively with its part in the forming of the foreign trade ballance.

The gross production of the agriculture /on constant price/ shows an increasing rate which were 3,5 % per year between 1971-1975, 2,9 % per year between 1976-1980 and 2,2 % year between 1981-1985. In spite of the downward tendency in the last five years the rate of growth was quicker than the development of the Hungarian industry.

The following details demonstrate the importance of the agriculture in our country.

	1970	1980	1986
The gross production rate of the agriculture a, %	17,1	16,6	17,2
The net production rate of the agriculture %	21,3	18,5	2o,2
The rate of the active occupied population %	24,o	19,5	19,1
The rate of the fixed assets stock %	1o,4	1o,5	1o,2
The rate of the energy-consumption %	4,o	6,2	5,4
The rate of the food exporting economy %	23,8	21,8	19,5
The rate of the food importing economy %	12,4	7,7	6,9
The balance of the food-foreign trade economy billion Ft	29,47	27,85	51,87

a, at constant prices

The tendency of late years shows that the agriculture in creased its part in the gross and net production and it had a great funktion in the improvement of the foreign-trade balance while the decrease of the used up man-power-, fixed assets- and energy-rate show the prosperous tread of the efficiency.

The unfavourable trend of the value and the rate of the food-export first of all have a connection with the decrease of the manipulated world-market-price. In spite of the increasing quantity of the food export, in the years past, we had to tolerate a great fall in prices and in incomes because of the low world-market-prices and the discriminating skimming. I wish to make it clear that this isn't an economical problem, first of all this is a political question, surly the well-developed coutries equalize the high home production costs partly wirth price-support - in consefquence of it with higher internal producers' prices -, partly they restrait the import of the cheap foreign products or charge it with great skimming.

So the international competitiveness of food production is not appreciable on the present world-market-price or only with great correction.

However the detailed analysis proves the efficient development and competitiveness of the Hungarian agriculture.

The tendency of development in the Hungarian agriculture.

In the last 15 years the gross production value of the agriculture increased more than 60 %, the net production value with 40 % and the producer's consumption became more than double.

The growth came true beside the decrease of the cultivable land /with 5 %/ and the agricultural workers' number /with 15 %/. As a result of it today the agricultural production value TS 36.600 Ft per hectar /equal to 780 ^{x}/ and 280.000 Ft per capita /6000 ^{x}/ in the large agricultural concerns.

In the years past the yield of crop was more than 1,3 ton per capita, the bony raw meat productions was 120 kg per capita, the egg production was 400 piece per capita and these guarantee an illustrious position for the Hungarian agriculture in the international competition.

The social-technical-biological development, passed off in the latter years, made a radical alteration in the level and composition of the agricultural production-forces. The assuring of the condition of the large-scale production made possible the adaptation of the modern production,- technical-, organizational methods and first of all the economical organization of the industrial mass-production in the corn-and-meat-producing.
In Hungary, in the latter 15 years, the growth rate of the corn-and mat-producing rose above the average of the well-developed capitalist countries. The specific yields increased greatly too. In the period under survey the average yield of wheat came close to duplicate and the maize's became more than double. In the average of 1981-1985 years the average yield of the wheat was 4630 kg the maize's was 6100 kg. The meat production in 1986 was 475 kg per cattle dar, 1927 Kg per sow, 150 Kg per breeder stock of poultry and the milk production was 4500 L per CDW - all over the country.

The quantitity and quality index of the development in the man-power demanding branches are considerably more disadvantageous. The Production Systems, which organized the systemic character of growing and the practical suggestions, helped the quick raising of the production level.

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^{x}LIS $

The efficiency of the production-factors

The efficiency in the agriculture appears in the growing of the soil productivity and man-power productivity, in the decreade of the invested work's costs of means and material for the unit of output and in the bettering of the input-output ratio. Because of it the inquiry of the efficiency means the examination of the territorial productivity, the man-power productivity, the input-output ratio and the rentability.

The condition of the quick yield-growing was that the productive concumption exceeded the gross and net production rate, within this the increasing industrial material-consumption and the modern production instruments. But the character of the agricultural production is that, the efficiency of the instruments, the man-power productivity actually the continous costs are greatly depend on partly the soil quality, partly the structure of the production, in fact more and more depend on the level of the management. In compliance with it our calculations demonstrate the difference between the worst and the best soils: there are were than double difference in the production values per hectar, two and a half in the net production and nearly four fold according to the economy balance of the enterprise. Because of it the future way of our economic policy is the quicker increasing of the production on better quality soils.

Supplying with modern fixed assets was determinant for the whole agricultural sector. But the greatly improving technical conditions brought quick rising in the productivity only in a few branches. One part of the fixed assets served the substitution of partly the territory partly the living bour and the ransoming of the hard manuel work. In the stat arms /till 1975/ and in the cooperatives /till 1978/ the ef iency of the production-instruments decreased in consecuence the structural changing productive forces.

In the latter years, the quick rising of the yields and the level of the agriculture resulted the improvement of the means-utilization and means-efficiency. The production value which falls to every 100 Ft of fixed assets TS more than 100 Ft in the whole agricultural sector even in both large-scale farm sectors one-by-one too. Compare with international datas we can conclude that - don't calculate with the value of the soil - in the well-developed west europen capital contries, based on the small-farms, to produce 100 US/$ production value need more, hundred US/$ value fixed assets.

The large scale reorganisation of the agriculture, the favourable tendency of the production-structure, the high technical level of the bigest volume branches /corn production/, the cooperation between the large- and the small-scale farms made possible the efficient utilization of the contracted assets in the production. Today in the state farms to every 100 Ft fixed-assets falls 117 Ft gross production value, and 26 Ft net production value, in the cooperatives these are 109 Ft and 34 Ft.

The production value falling to 100 Ft fixed assets, in the agricultural large-scale farms, approach the same index of the industry and this is internationally nearly unprecedented. I shows the modernity of the Hungarian agricultural production and the economical realization of its industrialization.

However the fixed-assets-demanding of the certain brauches one very different. The production value falling to 100 Ft fixed assets rise above 140-160 Ft in the modern, motorized corn cultivations, but on the plantations and in the milk production doesn't reach the half of it.

The firms developed the more fixed - assets- demanding brauches - plantitions, cattle keeping - only with great

subsidization. When the subsidy ended this developments stopped or greatly went back. Increasing is demonstrable only in the machine-stock and the storage capacity, linked with the World Bank subsidized cornprogram.

The rise of the man-power productivity - in my opinion - is the most important source of the economic increase, but the main characteristic of the social efficiency too, became the technical equipment of the work assert in it. Though the Hungarian Agriculture TS behind in the man-power productivity from the international level but, in the latter 15 years, in the growing pace it preceded all of the developed European Countries and the home industry too. The man-power productivity increased to more than the two and a half in the latter one and a half decades. However in certain modern branches the production value per person reaches the international agricultural and home industrial vanguards. So the production value per capita exceeded the 1 million Ft in several corbinate and cooperative farm. And in several farms in the pig - and poultry-keeping branch one worker produces more than 2 million Ft production value yearly. The product-mass in wheat is 2000 kg per hour, in maize 2500 kg per hour which are the 2/3 and the 1/3 parts of the same results of the USA. The rates are similar in the poultry- and pig-production /60 % and 55 %/. But the home labour productivity in the tending of the ruminant animals TS hardly more than 10 % of the USA average. We are far behind from the world level in the labour productivity of the vegetable and fruit growing. These arise from the climatic factors but first of all from the disadvantageous technical equipment.

The /mostly portion/ worktime productivity of the small-scale producer is essentially behind from the big estates.

Of course, first of all, it's connected with the structure of the production but shows the possibility that the disposable great labour force capacity, with right "little"-mechanisation, can be the source of the production and the up growth of the social productivity.

The critical points of the large-scale production are the horticulture and the animal husbandry-because of the high demanding on implements and the low productivity and rentability. The stowing down of the growth rate or the stagnacy of these fields could keep back all of the agricultural development-because of the high specific gross and net value.

We have to mention seporately, inside the production structure of the farms, the rapid growth of the industrial activity. As a result of the technical development, work-force got free in the agriculture, from the middle of the seventies. We found the possibility for the economical employment of this free work-force at the expansion of the industrial producer- and services-work on the farms. In the latter 10 years the manufacturing-, industrial-, and services-"business" increased two fold and a half, inside this the specifically industrial work increased three fold. Today the 60 % of the price-incomes of our large-scale farms come from the manufacturing, industrial-, and services-works. /Must be noted that the 58 % of the agricultural farmers' activity aren't agricultural work./

The industrial work, beside the employment - because of the advantageous rentability - greatly corrected the income positions of the agricultural farms. In the state farms the 50 % and in the cooperatives the 40 % of the earnings come from the manufacturing-, industrial-, and services-works. The industrial services work first of all formed in the region of the big towns /which have manufacturing industry/ while the solving of the employement in the less industrialized areas is a great problem at present.

The state farms, in the first place, organized the food industrial manufacturing connecting with the basis function; the fodder-mixing; the wine and soft drink producing and the meat-processing while in the cooperatives other industrial and services works came to the front, helping better the employment.

The economic contiditons and the efficiency

The characteristic of the past years was the disadvantageous tendency of the agricultural prices and costs. The opening of the pairs became faster gradually in the eighties. In the latter years the significant increase in the prices of the industrial means of production and the social costs of the man-power /social insurance contribution/ afflict first of all the agriculture and it foremost, inside this the animal-breeding, the vegetable and fruit growing which branches demand much live labour and material. So the farms have no any choice but decrease the losing branches. The decrease of the cereal and sunflower of the agricultural large-scale farms caused the relative decrease of the vegetable-, cattle-, sheep-branches and the stagnation of the production. The industrial work became [illegible] of the basis function inside the firm and the farms with it the production structure. [illegible] and profitable branches and [illegible] - usually with the [illegible] stabling and warehouse [illegible] of the released [illegible] the restriction of the [illegible] farms and more [illegible] [illegible].

The closing-down of the specialized production - just like the liquidation of a branch-, the rearranging or utilization of the belonging means and labour forces, may be the great source of the farms' loss in fact the national economy deficit. Because of it I think the arrangement of the price and earnings of the agricultural production is prominently important, because we can influence the company-decicious first of all with the price and earnings rates.
In the last years the changing of the sectorial price rates was in contradiction with the world-market-price-moring and efficiency. Our priceratas preferenced the out-of-date and high-cost backward branches, first of all the vegetable growing and the cattle- and sheep-farming, instead of the modern and efficient corn cultivation. The preference was realized mostly with the quicker price rising and the rearranging of the subsidy.

The prices of the modern branches rose slower than in the less-efficient branches, where the rise in prices was quicker. The potato's price in the percentage of the wheat price in 1965 was was 66 % and in 1984 it was 119 %, the grape's priceratio changed from 179 % to 226 %. The changing of the animal products' price rates - as compared to the wheat - was more quicker. In the period under survey the priceratio of the slaughter-cattle rose from 622 % to 1354 %, the slaughter sheep's priceratio from 531 % to 1827 % at the same time the chicken's /for roast/ price-rate rose only from 787 % 831 %.
From this we can draw the conclusion that with the modernization of certain branches will be shown the advantage of the professional production in the favourable cost- and price-trend, while the costs and producers' prices of the backward branches rise quicker. But the world-market-price-rates give reason for considerably different price-rates.

From the trend of the home- and world-market-price-rates we can draw the conclusion that the up-to-date can realize only the less part of the efficiency-advance in the prices, the sociaty admit her claim about the backward branches' products with the charge of the value-relations and with higher price-rise. So with the unequal development of the labour forces the sectorial price-rates are in permanently motion. From the price-trends we can draw the general conclusion that the buyer's market is price reductive /for instance poaltry business/ but the seller's market has always price raising effect. Because of it the main condition of the price stability is the buyer's market, the creation of the competition.

The price system, based on increasing price dispasity and great consumer's subvention, be could kept be kept less and less. The price system like this equally restrain the solution of the home economic reform, the expansion of the international economic connections and the real economic and social judgement of the development aims.

We have do deal with separately with the position of the small-scale production. Because, in the last decade, near the large-scale production, it developed greatly even in close integration with the big frams. The 1,5 million small-scale producer make more of the 50 % of the net agricultural production and the 35 % of the gross production /the 36 % of this is plant- and the 64 % is animal product/, and do it with the 17 % of fixed assets, on the 13 % of the territory /the private and the household together/.
The fullfiled 2,7 billion workhours per year in the small-scale production run to near the double of the large-scale production worktime-spending. So the small-scale production serves important employment and income-getter task, even this form of production can mobilize great sources of development.But the small-scale producers funcitonally

connecnt with the large-scale farms. Their production is based on the cheap cereals of the big farms, the breeding animals and the services work what they get. The small farms disposed the 50 % of their vegetable products, the 80 % of the grape and wine product, the 95 % of the beef cattle and the 75 % of the porker through the large-scale farms. The farms sell circa 3,5 million tons of feedstuff per year and provide more than 2 billion forints value services for the small producers. The wide-spread mood of the division of labour TS that the big farm do economically the planting of the plantation, the cultivation and the plant protection works while the working process which claim to quality hardwork do the small producer individually or family cultivation - on the base of the final-product interest. This production and cooperation connection will probably increase in the following time. The large-scale farm can make, both its and the small farms production, more successful with the organization of the vegetable-fruit storage, hardling and sale.

The possibility of the development and the efficiency

It last must speak about the question of the further development. In our present position we have no possibility for great investments and the reorganization of the branch-strcuture. Because of it, in the first place, we must develope the more satisfying of the requirements - correspond to the market - and the value increasing stages, instead of the quantitative development. At the present time think the increasing of the seeds, the breeding animals' weight and the more processed products, beside the qualitative improvement of the favorable efficiency industrial mass-production is parallel with the above-mentioned.

Ma conviction that the best utilization of the present well-qualified labour force and specialists possible on the field of the qualitative development, while the emplayment of the released to labour force solvable with increase of the verticum - handling, mann factoring. But the condition of the verticum increasing are the modernization of the large- and small-scale production's technical level and the modernization of the processing-capacity and the development of the packing technology and the infrastructure. In compliance with it the modern biotechnology and compute-technic will get greater part in the technical development, while the increase of the weight of the processing, packing, storing and the better organizing of the sale make possible significant valne increasing and on this way it warrautable the slower but continous of the live- and dead-labour's productivity.

So in the next period of time, in the agriculture, the increasing of the efficiency may reach not with the increasing of the industrial mass-production first of all but with the intellectual- and valne increasing acitivty.