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ACTUAL PROBLEMS IN AGRICULTURAL POLICY IN HUNGARY

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POSITION OF HUNGARIAN WHEAT PRODUCTION
AND MAIN ECONOMIC QUESTIONS OF ITS DE-
VELOPMENT

By

Miss Margit Jánky

Hungarian cereal production is carried out on more than 60 per cent of the plough-land, its annual per capita output exceeds 1,1 tons. One of its most important branches is the production of wheat. On the average of the period 1976-1980 the share of its sowing area was 43 per cent of the total cereal area, while the share of its output was 41,5 per cent of the overall cereal output; the quantity of its output surpassed 5 million tons per annum. Its production takes place almost exclusively in agricultural large-scale enterprises, the wheat area of small-scale farms covers less than 1 per cent of the total sowing area. 86,5 per cent of the wheat area cultivated by large-scale enterprises may be found in farmers' cooperatives, while 13,5 per cent thereof belong to state farms and agricultural combines. The production is successful in all regions of this country, except on lands with poor soils /for example, sand-drift, etc./.

In recent years our wheat production has developed rapidly, the output has increased to a significant extent.

	Sowing area thousand hectares	Output thousand tons	Average yield tons/ hectare
Average of 1966-1970	1230,8	2996,0	2,43
Average of 1971-1975	1291,8	4294,9	3,32
Average of 1976-1980	1274,4	5180,2	4,06

The increasing output has facilitated multipurpose utilization of the wheat.

The quantity of edible wheat meeting the needs of the population did not change materially in the course of the past decades, it was around 1,6-1,7 million tons. The change in the structure of consump-

tion did not influence the quantity produced; it affected rather the composition in respect of the quality. The rise in the proportion of the fine products altered the requirements of the food industry respecting the basic materials. The proportions of the white flour, as well as of flours of superior value in the baking industry, increased in comparison to the overall utilization of materials in the food industry. Thus, the share of the domestic needs for edible wheat decreased as against the growing output. While in the period 1966-1970 the share of the domestic needs was almost 60 per cent in the total output, and in years with poor yields the imported wheat had to supplement the necessary quantities, in the period 1976-1980 one third of the wheat output proved to be sufficient to cover domestic human needs.

In the 1970's there were again marketing opportunities abroad, the edible wheat could be exported to foreign markets. Hungary had been an important wheat exporting country as early as the last century. After the liberation of this country wheat exports were temporarily suspended, the reasons being the rapidly growing domestic consumption and the shortfalls in production resulting from the reorganization of agriculture.

Our wheat exports of the period 1976-1980 approximated 700 thousand tons per annum on the average, viz. about 13 per cent of the total output. As measured by world standards this quantity is not significant. However, our exports resulted in considerable and secure foreign exchange earnings needed by the national economy. On account of the fact that the quantitative development of the wheat branch was not accompanied by the improvement of the quality, moreover in some years the baking industry value of our product deteriorated, the bulk of our wheat was sold as of standard quality. Our customers were mainly the socialist countries in the neighbourhood. The countries in Western Europe, our erstwhile markets, are purchasing primarily high-quality wheat with guaranteed protein content with a view to improving their own output of poor value in the baking industry.

A great proportion of the increasing output was designed to meet the cereal needs of animal husbandry. While until the middle of the 1960's only those items were used as fodder which did not meet the quality requirements of edible wheat, the fodder wheats gained ground increasingly in the 1970's. The extensive use of wheat as forage was

prompted by the large-scale development of animal husbandry and by the increasing proportion of breeds consuming forage. Realization was facilitated by the fodder wheats with great yields as well as by the economic conditions favouring the production thereof. The average yield of the fodder wheats surpassed in 1976-1977 by 17 per cent that of the edible wheats, while the buying-up price of the former was lower by 5 per cent only, thus their rentability was more advantageous. As a result of the aforesaid their sowing area increased rapidly, exceeding in 1977-1978 by 30 per cent the total area of autumn wheat on a national average. However, this large-scale production of fodder wheats tended to diminish the extent of the quantities meant for export, and impaired the quality of the edible wheat. In regions suitable for producing high-quality output, namely, the production of fodder wheat gained ground to an extent that far surpassed the average, the proportion even exceeding 40-50 per cent in some places, furthermore the storing and handling of the items of different qualities became increasingly difficult due to their mixing. Therefore, in 1980 new buying-up prices were introduced in conformity with the differing qualities. At the same time arrangements were made to the effect that new edible wheat types, bringing better harvesting results, should be grown on a large scale. As a result of these arrangements the difference between the outputs of the two varieties diminished, and their income proportions as well as their shares in the sowing area underwent certain changes.

	1976		1978		1980	
	edible wheat	fodder wheat	edible wheat	fodder wheat	edible wheat	fodder wheat
average yield tons/hectare	3,78	4,43	4,57	4,80	5,24	5,26
income thousand Forints/ hectare	3,4	4,2	4,3	4,1	4,8	3,3
share in total output %	73,6	26,4	68,0	32,0	80,4	19,6

Necessity and conditions of developing wheat production

In the course of the recent years the output wheat has already exceeded the domestic requirements. Thus, the development of the branch is fundamentally export-oriented, the aims being /a/ to increase exports of edible wheat, and /b/ to ensure the domestic fodder base of

exported animal products.

In recent years edible wheat has been one of our export items sold on foreign markets most advantageously, hence its share in the export of cereals has risen from about 60 to 90 per cent. Probably we shall not face, even in the long run, obstacles to our selling abroad, provided adequate quality can be offered to our partners. However, in addition to our safeguarding the market position in respect of standard edible wheats, we cannot abandon the export-oriented production development of wheats saleable with guaranteed protein content and having special qualities /improving and durum wheat/. By our exporting the said wheats the scope of our customers could be widened and our foreign exchange income augmented.

The increase of the average yields has played a decisive role in augmenting the wheat output in recent years; in the future it will be practically the only source of developing the branch. The possibilities of extending the sowing area of wheat are next to nothing, because its share in the plough-land is high at present, viz. over 25 per cent, and the other crop branches are in need of land. The change of the sowing area of wheat in proportion to the slow but steady decrease of the overall arable land may be prevented by two sets of factors. One is the competitiveness of the wheat branch, in comparison to the rest of the crop production branches. The other is the operation of economic regulators promoting the growth of output. However, we are bound to reckon with the prospect that we shall probably have to meet the growing needs of the economy by cultivating decreasing lands. The branch has achieved a high production level by now. The intensive further development of the branch, to be accompanied by the improvement of the quality, should be considered as depending on the following requirements, viz. /i/ the optimal harmony of production factors, /ii/ the better utilization of the potentialities of the sites, and /iii/ the system of economic regulators that aim at shaping the interestedness of producers in line with the expectations of the economy.

The technical and technological conditions of developing
wheat production

In spite of the fact that the fundamental working processes are mechanized already it is indispensable to embark upon a further development of the machinery system of the production of wheat, with a view

to augmenting the output in an economical way.

- As a result of the large-scale use of the heavy-duty tractors the soil preparation and sowing were carried out quickly in the course of the past years. In the future the quantity of the machine work may be diminished by way of the energy-saving soil preparation without ploughing. This would affect advantageously the production costs because about 30 per cent of the costs in the branch are spent on the services of the auxiliary workshops.

- The intensive varieties with great yields respond more sensitively to the time, depth, and evenness of the sowing than the former ones. Therefore the sowing machines, to be employed in the years to come, will have to ensure greater speed, width, even depth, and seed distribution. Such sowing machines are necessary also for a better utilization of the heavy-duty tractors. Though the wheat is one of the branches requiring the least manual work, it would be expedient to provide the new sowing machines with power-fed seed containers, too.

- for the purpose of encouraging the use of liquid chemical fertilizers it is indispensable to install in our large-scale enterprises the machine system suitable for handling, storing, and applying of such chemical fertilizers.

- By 1980 the capacity in combines rose by 36 per cent /1975 = 100% the number thereof slightly decreased. Considering the present average yields this quantity would be sufficient to harvest the output in optimal time. However, the distribution by performance is not advantageous. there are still too many machines of low efficiency with a permeability of 4-6 kilogrammes per second. In the years to come the combines will have to be renewed gradually and their performance improved.

- At present the least mechanized working process of wheat production is the harvesting of straw. In this way a considerable portion of this valuable by-product is wasted, or its harvesting is too expensive. In 1980 the value of the straw harvested on one hectare of land slightly exceeded 500 Forints on a national average, representing 3-3,5 per cent of the output value of the wheat grown on one hectare. In the future the straw utilization may become multipurpose as soon as harvesting will be carried out in great bales, provided that the enterprises will possess the production lines needed in harvesting and

handling of the bales.

The intensive development of the production of wheat has altered the demand for the varieties. It has become necessary to grow varieties with increasing productive capacity which fit the advanced agrotechnics. The quality of the yield depends on the hereditary properties of the different varieties to a great extent, a fact that facilitates the multipurpose utilization of the wheat and the expansion of the range. In case of an output with lower intensity it is easier to develop the assortment of the varieties, they may be of use during longer periods than in those when production is industry-like and the technology is advanced. Therefore, when developing the production of wheat the necessity of the change-over respecting the varieties arises increasingly, and becomes almost continuous. This is particularly characteristic of the change in the variety structure of the edible wheat; the change of the varieties is substantial even subsequent to an almost complete change thereof which took place in the period 1976-1980.

Our present variety assortment is suitable for improving the quality in all respects, however the productive capacity of the top-quality varieties with high gluten content lags behind that of the varieties having the so-called "milling" qualities. The same applies to the durum wheats, being the basic material of the manufacturing of farinaceous products. Hence, their large-scale production for export requires an adequately stimulating premium.

In order to develop our wheat production a relatively great assortment of varieties will be needed in the years to come, too. The reasons therefor are the following. The technical-technological levels and the potentialities of the sites are different. When producing varieties with differing maturity times the means of production may be better utilized and a greater security in respect of the output may be achieved. The requirements respecting quality, arising from the multipurpose use of the wheat, are varied. The number of the varieties cannot be considerably reduced on a national scale. However, it is advisable to grow, in the various production or buying-up regions, fewer varieties that conform to given conditions. In this way the varieties might get mixed up to a smaller extent, the supply of the sowing-seed would be facilitated, and the storing by quality could be easier.

Out of the elements of agrotechnics the chemicalization of the wheat production will have to undergo substantial changes, too. Due to the resistant weeds the chemical herbicides and technologies will have to be employed in the wheat production to a greater extent than hitherto. In order to achieve a better utilization of the potential productive capacity of the varieties the plant protecting activities will have to be improved and extended to such main parasitic weeds against which the protective measures have been taken on a national scale to a minor extent only.

In respect of the chemical fertilization of the wheat the principle of rational economy should prevail. The growth of the output in the past decade may be attributed largely to the rise of the chemical fertilizer rations, too. This was characteristic primarily of the development of production in farmers' cooperatives where the quantity of chemical fertilizing agent per one hectare of autumn wheat rose by 158 per cent in the period 1971-1978. Thus, it approximated the level of the state farms where the system of the advanced supply of nutritives had been developed earlier. On account of the rise of chemical fertilizer prices several producing enterprises have decreased the use thereof after 1978. The diminishing tendency of the utilization of chemical fertilizers may become, in the long run, the obstacle to the growth of output. Hence, pending the examination of the nutritive content of the soil, it will be expedient to determine different rations in chemical fertilizer, in line with the needs and productive capacity of the various sorts.

Economic conditions of developing wheat production

Within the framework of cereal production the rentability of wheat may be considered as favourable. Its income per unit of area is the greatest on the national average. Given excellent production potentialities the surplus of the output of maize over that of wheat is about the double of the difference between their national averages. However, due to the high production costs in maize production there is no material difference in respect of the extent of their incomes per hectare.

The measures aimed at the development of cereal production tend to improve the competitiveness of the wheat production. The rise in

the buying-up price of wheat cannot offset entirely the price increases of materials, machinery, and equipment necessary for its production. Yet, the increased buying-up price has improved the rentability of wheat in comparison to other branches.

The premium, introduced to stimulate cereal production, may be realized in wheat production more efficiently than in respect of maize, in spite of the fact that the average yield of the latter is greater. The reason is that the relationship between additional input and surplus production is more favourable in the wheat branch. As from 1982, the large-scale farms with lands of adverse potentialities or of temporarily poor quality /below 17 gold crowns per hectare/ receive an additional price subsidy, the percentages being the following: corn in the ear 25 or 20, maize 0 or 20. The subsidy affects more than 25 per cent of the overall sowing area of wheat and 23 per cent of that of maize. On such lands the difference between the average yields of wheat and maize was, on the average of the period 1976-1980, less than 0,4 ton/hectare. Thus, the price subsidy tends to stimulate mainly the production of wheat. Out of the rest of cereals it is the autumn barley whose rentability is equal to that of wheat, or occasionally it even exceeds the rentability of the latter. This is due to the lower production costs of the barley. This statement is valid mainly for lands of poor quality. Hence as a result of the price subsidy the sowing area of barlex may grow to a smaller extent, to the detriment of the wheat area.

As a result of the economic measures taken at the beginning of the 1980's the weight of the wheat production will probably increase within the overall production of cereals.

Out of the other branches of field crop production the sugar-beet, the potato, and the sunflower yield higher incomes, as computed for the unit of area, than the wheat. Due to the location of sugar-beet and potato, and the fact that they can be grown in combination with the wheat, they cannot compete with the latter.

The sowing area of sunflower has increased in the course of the past years almost threefold, fundamentally at the expense of cereals first of all of maize. The sunflower is at present one of the most rentable branches of crop production; a further rise of its sowing area may adversely affect the development of wheat production, and

may decrease its proportion on lands of good quality. However, we cannot reckon with a further dynamic development of sunflower production in years to come, because the increase of its present, relatively great area will be prevented by the necessity of the change of the sowing area.

However, the money incentive, stimulating the quantitative development of wheat production, will not change probably the structure in respect of quality. The buying-up price system introduced in 1982 does not stimulate sufficiently the production of top-quality wheats, in spite of the fact that it pays more attention to the differences in quality than perviously. We should like to point out that the price proportions are not in line with the differences in the productive capacity of the variety groups, and the same applies to the additional costs that are concomitants of producing special qualities, as well as to the greater risk. The price of the improving wheat, namely, pending its gluten content, exceeds that of the wheat having the so-called "milling" quality by only 7-12 per cent. Therefore the bulk of the wheat output continues to consist of the standard edible wheats.

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