AGRICULTURE, FORESTRY, AND FISHING

IN HUNGARY

(January-March 1960)

(22nd of the series)
AGRICULTURE, FORESTRY, AND FISHING IN HUNGARY

Source Coverage: January-March 1960

This report is based on selected Hungarian sources published during the period January-March 1960.

The statements within brackets are those of the researcher.
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**KEY TO ABBREVIATIONS**

Source Abbreviations

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<td>AG</td>
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<td>ACE</td>
<td>Allami Gazdaságok Ertesitője, Budapest</td>
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<td>EE</td>
<td>Erdészeti Ertesito, Budapest</td>
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<td>EF</td>
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<td>FEE</td>
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MM - Magyar Megazdasag, Budapest
N - Novenytermeles, Budapest
SF - Szabad Fold, Budapest

Other Abbreviations

AGF - Allami Gazdasagok Feigazgatosaga; Chief Directorate of State Farms
CC - Central Committee
CEMA - Council for Economic Mutual Aid
DDT - Dichloro-diphenyli-trichlorethane
DNRB - Di-nitro-ratenone-benzol
EFEDOSZ - Epito-, Fa- és Epitoanyagipari Dolgozok Szak-szervezet; Trade Union of Construction, Lumber, and Construction Materials Industry Workers
ERTI - Erdoszeti Tudomanyos Intezet; Forestry Scientific Institute
FM - Foldmuvelesugyil Miniszterium; Ministry of Agriculture
FOMAV - Foldmuvelesugyil Miniszterium Anyagellato Vallalata; Material Supply Enterprise of the Ministry of Agriculture
HCH - Hexachlorobenzene
KISZ - Kommunista Ifjusagi Szovetseg; Communist Youth Federation
KOJAL - Kozegeszseg- es Jarvanyugyi Allomas; Public Health and Epidemic Station
MAVAD - Magyar Vadkereskedelmi Szovetkezeti Vallalat; Hungarian Game Trading Cooperative Enterprise
MSZMP - Magyar Szocialista Munkaspart; Hungarian Socialist [Communist] Workers Party
OKF - Orszagos Erdeszeti Feigazgatosag; National Forestry Chief Directorate
OKI - Orszagos Kozegeszsegugyil Intezet; National Institute of Public Health
OMMI - Orszagos Megazdasagok Minosegvizsgalo Intezet; National Agricultural Quality Testing Institute
ORKI - Ontozeasi es Risztermelesi Kutato Intezet; Irrigation and Rice Cultivation Research Institute
OVF - Orszagos Vizugyi Foigazgatosag; National Chief Directorate of Water Conservation
PM - Penzugyminiszterium; Ministry of Finance
PPF - Patriotic People's Front
TEGI - Tenyeszallatforgalmi Gazdasagi Iroda; Livestock Trading Commercial Bureau
TSZ - Termeloszovetkezet; Cooperative Farm
VITUKI - Vizugyi Tudomanyos Kutato Intezet; Water Conservation Scientific Research Institute
OVER-ALL PLAN AND PERFORMANCE DATA

At a conference of top FM and magye officials, Minister of Agriculture Pal IOSONGZI and Deputy Minister Sabor PETO-HAZI outlined the agricultural production plans for 1960.

The plan calls for a 4.9-percent increase in agricultural production, in comparison with the preceding plan period. Within this over-all increase, crop production must rise 3.3 percent; livestock production, 7.2 percent. The volume of agricultural purchasing must increase 8.4 percent over 1959.

With the exception of the state farms, the 1960 crop ratios will be basically the same as in 1959. The slight changes that have been planned serve to improve the feed supply and the intensity of farming. Thus, the feed grain acreage must be increased 10,000 cadastral yokes. Within the total feed grain acreage, however, the acreage of corn must be increased 50,000 cadastral yokes; that of silage corn, 2,000 cadastral yokes. On the state farms the corn acreage will increase 50,000 cadastral yokes; the potato acreage, 15,000 cadastral yokes.

The 1960 livestock production plan calls for a slight increase in the total number of livestock and for a considerable increase in the production of meat and livestock products. The cattle stock must be increased 1.2 percent. Within this the increase in the number of cows must be 2.2 percent. In the state sector the increase in the cattle stock will be considerably higher—7.8 percent. The horse stock must be reduced by 60,000 head. The hog stock will be kept at the 1959 level, but the ratio of sows must be increased 9.4 percent. The size of the sheep stock will be raised 5.1 percent; the poultry stock, 1.9 percent.

The average annual milk yield per cow must be raised from 2,170 liters in 1959 to 2,250 liters in 1960. The average annual egg yield per hen must be increased from 82 to 84. The average wool yield per sheep is expected to increase from 4.23 to 4.25 kilograms.

Investments within the state sector and on the TSZ's will total 6,126,000,000 forints, 27 percent more than in 1959.
Over fifty percent of the total investments will be for farm machinery—more than 10,000 tractors, 1,400 grain harvesting combines, 4,000 seed drills, 3,480 artificial fertilizer spreaders, 1,150 ensilage combines, 2,420 mowers, more than 1,000 trucks, 7,000 trailers, 1,250 manure spreaders, and more than 10,000 plows. The TSZ's will get 3,500 of the tractors mentioned above. This will increase the total TSZ tractor stock to about 5,000.

The state farms and TSZ's are planning soil improvement projects on a total of 100,000 cadastral yokes in 1960. The irrigated acreage will increase to 150,000 cadastral yokes.

The supply of artificial fertilizer will average 75 kilograms per cadastral yoke of plowland, garden, and vineyard. Although the total supply will be 1,500 tons more than what had been planned originally for 1960 under the Three-Year Plan, it will be less than the total supplied in 1959.

The 1960 plan allocates 2,825,000,000 forints for the development and consolidation of the TSZ's. This sum includes nearly 2.4 billion forints of government loans. The TSZ's will finance nearly 400 million forints' worth of investments from their own resources. Agricultural administration officials must ensure that the allotments for TSZ investments are used efficiently to consolidate the TSZ's and to increase their agricultural production.

In years past the crop ratios of the TSZ's differed somewhat from the national average. With the development of collectivization, however, it is essential that the TSZ's plan their crop ratios according to the same pattern that had originally existed on the acreage (private and TSZ) which they now farm.

The results of the 1959 "Thirty Quintals of Corn per Cadastral Yoke" movement show that with proper cultivation, adequate fertilization, and hybrid seeds it is possible to grow 30 quintals [of shelled corn, May weight] per cadastral yoke. The government, therefore, will give substantial discounts to the TSZ's that buy artificial fertilizers for the corn they are growing on a contract basis, provided they join the "Thirty Quintals" movement.

Hungary must also raise the production of beans, particularly for export purposes. If the TSZ's do not have checkerboard drills to plant beans, the TSZ brigades and members should grow beans between the rows of corn assigned them for cultivation. If the general meetings of the TSZ members agree, the brigades and members who grow beans in this manner should be entitled to one half of the crop.
In order to increase the supply of potatoes for domestic consumption, the potato acreage must also be increased, particularly on the state farms. As a rule the TSZ's should grow their own seed potatoes. On the new TSZ's the members should sell or lend the seed potatoes needed for planting.

In 1960, the TSZ's will have to raise 35,000 to 40,000 more beef cattle than in 1959. The minimum delivery weight for steer must be 400 to 430 kilograms per head; that of the fattened heifers, 350 to 380 kilograms. This seemingly stepped-up plan is based on a 75-percent calving ratio, which must be achieved through better breeding and livestock care.

By the end of 1960, the TSZ's formed prior to 1 November 1959 must raise the density of their brood sows to at least three head per 100 cadastral yokes of plowland; the TSZ's formed after that date, to at least two head per 100 cadastral yokes. In 1960, the state farms will supply the TSZ's with 60,000 head of young brood sows.

The TSZ's are urged to speed up the construction of their farm buildings, to use simple and economical construction plans and to finance the construction costs to an increasing extent from their own resources.

Agricultural administration officials are requested to ensure that the capacities of the tractors and other farm machines are utilized as fully as possible. (MM, No 3, 8 Feb 60, p 4)

Plans to curb the gradual reduction of Hungary's potato acreage and to increase it by 16,000 cadastral yokes (4 percent) over 1959 were discussed at the Nyiregyhaza conference of the potato experts from Szabolcs, Hajdú, Borsod, Heves, and Nagrad Megyék. These five megyék account for 35 percent of the total potato acreage but grow nearly 50 percent of Hungary's potato crop.

The per capita consumption of potatoes rose from 108.7 kilograms in 1950 to 120 kilograms in 1957.

The average annual yields per cadastral yoke increased from 39.6 quintals in 1946-1955 to 60 quintals in 1955-1959. Hungary imports 1,500 railroad carloads of potatoes [per year]. (SF, No 11, 13 Mar 60, p 5)
The production season in Hungary's sugar refineries lasted from 1 September 1959 through 18 January 1960. The total output during this period was more than 350,000 railroad car-loads of sugar, 30.5 percent over the previous season.

This increase in the sugar output was made possible through a rise in the sugar-beet acreage and through higher average yields. The 1959 total acreage was 212,000 cadastral yokes, an increase of more than 12 percent in comparison with 1958. According to preliminary estimates, the average sugar-beet yield in 1959 was 126 quintals per cadastral yoke, in contrast to 110 quintals in 1958. (SF, No 7, 14 Feb 60, p 4)

A supplement to FM Directive No 7/1960 lists in detail the annual, semi-annual, quarterly, monthly, fortnightly, decade, and weekly agricultural statistical reports which the FM sections, subordinate organs, agricultural enterprises, MTS's and local councils are obliged to complete and submit to the Central Bureau of Statistics (Kozponti Statisztikai Hivatal) and the FM. Approximately 197 different kinds of statistical reports are listed. This number does not include the reports compiled by the Central Bureau of Statistics itself and by the banks, Social Security Center (Tarsadalombiztositas Kozpont) and the organs subordinate to ministries other than the FM. (ME, No 7, 17 Feb 60, pp 44-50)
GENERAL AGRICULTURAL POLICIES

The following is an abstract of an unsigned article entitled "Information on the 1960 Seed Exchange Program."

Enough hybrid seed will be distributed in the spring of 1960 to grow hybrid corn on 1.4 million cadastral yokes. Producers will get the hybrid seed for 2 quintals of shelled standard corn (May weight) per quintal of hybrid corn. If the producers lack standard corn, they may pay for the seed with other grain. The rates of exchange per quintal of hybrid seed are as follows: 2 quintals of feed barley, or 1.6 quintals of breyer barley, or 2.2 quintals of oats.

The government will also distribute 1,500 railroad carloads of improved barley seed and 500 railroad carloads of improved oat seed. The producers will pay for such seed in kind, at a rate of 1.1 quintals of standard seed for 1.0 quintal of improved seed. In the distribution of barley seed first preference will be given to the TSZ's that have signed production and delivery contracts for breyer barley; second preference, to the private contractors. The rest of the demand will be supplied from processed standard seed.

Improved seed will also be available for forage crops and green fertilizers. The price of these seeds is payable in cash. The TSZ's will pay the favorable prices specified in Government Resolution No 3,004/2 of 1959. (SF, No 7, 14 Feb 60, p 5)

In a statement published in the 21 February 1960 issue of Nenszabadsag, Minister of Agriculture Pal LOSONCZI has warned the new TSZ's that the government stockpiles are inadequate to supply all of them with spring seed. The members should supply the seed, in proportion to the acreage of land they bring into the TSZ's. If the seed is heterogeneous, the government is willing to exchange it for improved or homogenous seed. The new TSZ's are urged to contact their nearest state farm or experimental farm if they are unable to obtain seed for spring planting under the government seed exchange program. If the members' seed quotas do not cover the entire amount of seed needed for planting, the new TSZ's should borrow seed from their members. (SF, No 9, 28 Feb 60, p 2)
In order to promote the agricultural production aims outlined for the Second Five-Year Plan, the editors of SF are launching a nationwide "Let Us Enrich Our Soil" movement, an all-out drive to handle stable manure properly and to collect and compost all organic wastes in agriculture, industrial plants and households. (SF, No 6, 21 Feb 60, p 5)

The National Council of the PPF has pledged its full support for the "Let Us Enrich Our Soil" movement. (SF, No 9, 28 Feb 60, p 1)

A conference on agricultural cooperation among the CEMA countries was held in Moscow on 2-4 February 1960. The Hungarian delegation was led by MSZMP first secretary Janos KADAR, prime minister Dr Ferenc MUNNICH, and Politburo member Lajos FEHÉR. The delegation included Deputy Minister of Agriculture Andras MAGYARI, Deputy Minister of Foreign Trade Janos MULATÒ, National Planning Bureau (Orszagos Terhivatal) chief section head Imre DIMENY, FM chief section head Janos HONT, and Gyula MAROSUVARI. The latter heads the FM Chief Directorate of MTS's and Mechanization (FM Gépallomasi és Gepesítesi Foigazgatósaga). (SF, No 6, 7 Feb 60, p 3)

The following is an abstract of an interview given by Politburo member Lajos FEHÉR on his return from the Moscow conference.

The purpose of the conference was to map a closer cooperation among the CEMA countries in agriculture, similar to the cooperation that already exists in their industrial production. The conference studied the feasibility of further specialization in agricultural production and in the production of farm machinery and chemicals, with due consideration for the specific conditions of the individual member nations. It was proposed that the member nations sign bilateral long-term contracts for seeds and early and late vegetables and fruits. It is expected that the further specialization of agricultural production will prove favorable for Hungary.

At the conference KHRUSHCHEV praised the TSZ's he saw in Hungary during his 1958 visit, Soviet academian LISIENKO summed up the experience of his recent visit. Soviet academian LOSANOV mentioned the excellent corn yield on the Mezöhegyes state farm. The East German delegates reported that in their 1959 comparison tests two Martonvasar hybrids gave the highest yields of silage corn. (SF, No 7, 14 Feb 60, p 1)
COLLECTIVIZATION OF AGRICULTURE

[Although considerable progress is reported, the government has called a temporary halt to further collectivization, presumably until after the 1960 harvest, and wishes to concentrate every effort on the consolidation of the existing TSZ's.

This move can be attributed partially to economic reasons. Although the total outlay for the 1960 TSZ investments is higher than in 1959, it is probably still not enough. The need to invest every penny judiciously is repeatedly stressed, and the TSZ's are being urged to finance from their own resources an increasing share of the investments. Considerable emphasis is placed on the construction of cheap temporary buildings on the TSZ's. Less artificial fertilizer will be available in 1960 than in 1959. Despite the plans for further mechanization, there are indications that the machine stock will still be inadequate. The government has told the new TSZ's that it is unable to supply all of them with seed.

Another factor behind the suspension of further collectivization is probably the government's concern over the 1960 crop yields. Another good crop is badly needed to prove the often voiced claims that the yields on the TSZ's are higher than what the private farms would have been able to produce on the same acreage. TSZ members are desperately urged to do everything possible to increase their production. Large-scale labor competitions are being launched (see AGRICULTURAL LABOR). The autumn of 1959, however, had been an exceptionally dry one, and planting was delayed. There are indications that the crops seeded in autumn have not wintered over too well (see "Crop and Weather Conditions" under CROP PRODUCTION). The odds are that the winter crop yields will be lower in 1960 than in 1959.

Plans to modify the profit distribution system on the TSZ's include the splitting up of the seeded plots among the TSZ brigades or families, paying them on the basis of the crop yields. This is a marked departure from past policies and is highly reminiscent of the sharecropper system, labeled as exploitation in years past.

In connection with the reported collectivization results it should be noted that the statistics also included former TSZ
groups or special groups that have now been converted into full-fledged TSZ's.]

Progress and Policies

An unsigned lead article, entitled "The 1960 National Budget," mentions that the TSZ's already account for 51.9 percent of the total acreage of plowland in Hungary. (SF, No 6, 7 Feb 60, p 1)

[Earlier the Central Bureau of Statistics (Kozponti Statisztikai Hivatal) reported that on 31 December 1959 the TSZ's and state farms together accounted for 55.8 percent of the total acreage of plowland.]

Tentative reports for January 1960 show that in Baranya, Bacs, Beke, Heves, Somogy, Szabolcs, Zala, and Pest Megyek a total of 68 TSZ groups and lower forms of agricultural collectives were converted into TSZ's. These groups and simple collectives had a total of 2,634 members and a total acreage of 7,262 cadastral yokes. (PBB, No 6, 12 Feb 60, p 21)

The following is a translation in full of the 12 February 1960 resolution of the MSZMP CC:

I

"1. Considerable progress has been made in the collectivization of agriculture since the 22 October 1959 resolution of the Party CC. In the period 1 November 1959-7 February 1960, more than 380,000 working peasants have chosen collective farming. In this manner the total membership of the TSZ's has increased by 870,000 members; the total TSZ acreage, by 5.2 million cadastral yokes. As the result of this further progress in collectivization, the socialist sector has become dominant in agriculture. The state farms and the TSZ's now account for 70 percent of the total acreage of plowland in Hungary.

"Gyor and Szolnok Megyek became TSZ megyek in 1959. Now Mejer, Veszprem, Somogy, and Heves Megyek have also become TSZ megye, and substantial progress has been made in the other megyek as well. Hungary now has 76 TSZ Jarasok, and more than 2,300 TSZ villages, about 70 percent of the total number of villages in the country."
These results are the joint victory of our socialist system, of the agricultural policies of the MSZMP, of the working class, and of the working peasants. This victory serves to further strengthen popular rule and the worker-peasant alliance. We have come one step closer to the primary goal set by the Seventh Party Congress—the completion of the foundations of socialism in Hungary.

The CC extends its sincere appreciation to the working peasants for their sound decision to join collectives. The CC also expresses its gratitude to all those Communist and non-partisan workers, working peasants, and intellectuals who through their indefatigable and patient orientation work helped the new TSZ members to make the right decision.

2. The CC has established that one of the most important factors in this outstanding progress has been the numerical success of the 1959 collectivization drive and the substantial results of the subsequent organizational, economic, and political consolidation of the TSZ's. The TSZ members' self-initiative with respect to mobilizing their own resources for their joint farming has developed considerably. At the same time, however, the government in 1959 aided the development of the TSZ's with more than 6.8 billion forints.

Through the combined efforts of the government and the TSZ members, the first-year production results of the majority of the TSZ's proved that large-scale socialist farming ensures higher yields, provides more produce and serves as a firm basis for the development of better living conditions.

The great international victories of the forces of peace and socialism, and our sound political, economic, and cultural development at home have also produced a favorable effect on the successful progress in the socialist reorganization of agriculture.

The substantial progress in collectivization has been achieved basically on Lenin's principle of voluntary participation. During the collectivization drive the Party took special care to maintain and develop further the good relations and mutual confidence between it and the working peasants. For this reason the CC condemns the sporadic use of harsh and coarse tone and attaches special importance to the fact that in such cases the local Party organizations do not tolerate such impatience and remedy immediately any injustice that may have occurred.

3. It is a very promising phenomenon that practically everywhere in the country the peasants of the new and the
substantially increased TSZ's have begun to lay down the foundations of collective farming and to develop it further. Also promising is the fact that respectable working peasants, well-known and proven local leaders, chairmen of the local councils, Party secretaries, educators, and jaras and megye leaders have been elected to head the TSZ's.

"The agricultural experts sent by the central, megye, and jaras organs are of immense help to the new TSZ's in starting their collective farming. Sponsoring groups within the industrial plants, state farms and other institutions are also helping the new TSZ's to overcome their initial difficulties. The entire population's cooperation in aiding the TSZ's is being developed on a much wider basis than in 1959.

"Having made inventories of the livestock, equipment, seed and feed that were brought in by their members, the TSZ's are preparing their 1960 production plans. The TSZ villages have set the commendable goal to produce more in their first year than had been produced on the same acreage in the year preceding their organization. In order to provide suitable farm buildings for their joint livestock, the new TSZ's have begun construction projects financed from their own resources. These projects involve primarily the remodeling of existing buildings. Among the new TSZ's there is a great demand for farm machinery. Very often the members raise all or most of the purchase price. On many TSZ's there is a commendable tendency to increase the TSZ funds from the members' resources in other ways as well--for example, by bringing in young brood sows and poultry, or by contributing a certain amount of cash per cadastral yoke.

"4. The 1959 production results have proven that parallel with the large-scale numerical increase in collectivization it is also possible to raise the level of agricultural production. The good work done by the TSZ peasants has been a primary factor in that the volumes of crops and produce substantially surpassed the 1958 level. Thus, in 1959 the old TSZ's surpassed the level of the private farms in every respect; the new TSZ's, mostly in crop production.

"The private farmers' honest and industrious efforts also contributed to the good national farm output in 1959.

II

"In 1960, the most important prerequisite for the further progress in collectivization is the successful consolidation
of the TSZ's. Now that the socialist sector has become dominant in agriculture, the consolidation of the TSZ's is also a basic prerequisite for achieving the 4.9-percent increase in agricultural production and the 8.9 [8.4]-percent rise in government bulk purchasing planned for 1960. In the opinion of the CC, therefore, the most important task now is to suspend mass collectivization and to concentrate every effort on the consolidation of the TSZ's. The great advantage in this respect is that this year, in comparison to 1959, we are able to regroup and mobilize our resources more than one month sooner.

"1. One of the major problems in the economic consolidation of the TSZ's is good political work. We must speed up the organization and consolidation of the Party units on the TSZ's. The Party units must undertake a systematic orientation program and must constantly strengthen the working peasants' conviction that their decision to join the TSZ's had been the proper one because large-scale socialist farming is the only proper and feasible means of their advancement. The local Party units on the TSZ's must strive to ensure the observation of Law Decree No 7 and of the TSZ by-laws. The local Party units must mobilize the TSZ members for their coming production tasks. They must help to develop the members' public spirit, cooperative life and social consciousness. They must strengthen the unity of the TSZ's and must combat inimical views and manifestations.

"2. The local Party units on the TSZ's must help to organize the local KISZ units as soon as possible. The Communist youth organizations must intensify their activities to persuade the peasant youth, particularly the young peasants on the TSZ's, to seek and find their future in collective farming. The Communist youth organizations must strive to propagate new production methods and to raise the production yields. They must take the initiative in organizing the cultural and sports activities on the TSZ's.

"3. In the coming weeks the Party and government organs, and particularly the TSZ members, must concentrate their efforts on preparing the spring farm work on the TSZ's, to speed up the delivery of the grain and seed brought in by the members, to sign production contracts, to prepare the production plans, to organize the labor force on the TSZ's, etc.

"Special attention must be given to the construction work on the TSZ's, particularly to the construction of
the simple and cheap buildings financed from the own resources of the TSZ's. If possible, every TSZ should form a construction brigade. The TSZ's should speed up their building construction by remodeling the existing buildings suitable for this purpose and by making their own home-made construction materials. They should provide accommodations for as many head of livestock as possible, and primarily for their breeding stock. Provided that proper technical supervision is ensured, the TSZ's must be encouraged to build from their own resources more buildings that are suitable yet cheaper than the ones built on the basis of standard plans. The existing local possibilities must be fully utilized for such construction projects. In order to develop their joint livestock production, the TSZ's must also utilize their members' stables and barns, if the capacities of these buildings exceed the needs of the household plots.

"4. A further increase in the acreages of corn and silage corn on the TSZ's is in the interest of the entire national economy. Through the combined use of machinery, teams, and manual labor, the TSZ's must ensure the careful cultivation of the soil, a prerequisite for high crop yields. In Hungary's major corn regions the Party and local council organs must ensure the success of the "Thirty Quintals of Corn per Cadastral Yoke" movement. In the potato regions similar emphasis must be placed on increasing the potato acreage and the average potato yields. All TSZ's, particularly in the foremost hog regions, must be encouraged to increase substantially the joint breeding and production of hogs.

"5. In order to increase the production of the TSZ's, to gain the participation of the TSZ members' families, and to raise the quality of the work performed, it is necessary to broaden the individual members' direct financial interest. The CC recommends that the TSZ's, in accordance with their specific local conditions, apply on a wider scale the improvements in the work unit system which conform to the principles of socialist profit distribution. Experience shows that such incentives serve to increase the individual members' direct interest in the quality of the work performed and in the production results achieved, and also the amount of work done by the TSZ members' families. On each TSZ the general meeting of members must decide what forms of profit distribution are the most suitable under their specific conditions.

"It is also recommended that in 1960 the TSZ's, if possible, introduce regular advance payments on their members' work units.
6. In addition to the joint farming on the TSZ's, the members' household plots are also important with respect to increasing the volume of marketable produce. In addition to the development and consolidation of joint farming, therefore, the Party and government organs must make every effort to raise the volume of produce (particularly hogs, poultry, potatoes, vegetables, fruits, milk, and eggs) which the TSZ members grow on their household plots and sell the government bulk-purchasing network. At the same time the TSZ's must also aid their members to grow as much as possible on their household plots, for their own needs and for the supply of the national economy. Farming on the household plots, however, must not interfere with the members' good work in joint farming.

7. Great care must be devoted to the proper development of agricultural production and produce marketing on the private farms. The government, primarily through its price policies and the system of production contracts, will continue to help the private farmers to farm in security and to sell their surpluses to the government bulk-purchasing network at a reasonable profit.

8. In the course of the reorganization of agriculture many of the elder peasants who joined TSZ's are unable to qualify for social security benefits because of their advanced age but are in need of financial assistance. The CC is of the opinion that society must urgently come to the aid of the destitute peasants who have become too old to work. The CC has therefore recommended that the government, irrespectively of the time requirements, pay old-age pensions of 260 forints per month to men past the age of 70, and to women past the age of 65, or even under this age if they are permanently disabled.

The cost of these old-age pensions must be borne by the TSZ's. The latter must pay the National Pension Fund two forints per every [Austro-Hungarian] gold crown (up to a maximum of 16 gold crowns) of the cadastral value of every cadastral yoke of land brought in by the members, and three forints per gold crown of cadastral value for every cadastral yoke of government surplus land used by the TSZ's.

The CC believes that these old-age pensions, together with the income from the household plots and the rent paid for the land brought into the TSZ's, will provide a suitable living for the members who in their declining years join TSZ's. In addition to this income, the elder members may also do light work on the TSZ's, whereby the men may acquire
a maximum of 120 work units per year; the women, a maximum
of 80 work units per year.

"The CC hopes that the TSZ's and the families of the TSZ
members who have become too old to work will also help to
provide suitable living conditions for them.

"9. To date our working class has extended considerable
aid to the peasants who have decided to farm collectively.
It is essential that the workers continue their effective
aid for the consolidation of the TSZ's. Within the labor
competition developing in honor of the 15th anniversary of
Hungary's liberation, the workers should produce more farm
machinery of good quality, spare parts, construction mate-
rials, artificial fertilizer, and other materials essential
for farming. Under the guidance of the megye Party Committees,
the most experienced industrial workers and the plant and en-
terprise managers should sponsor the new TSZ's as well as the
old ones. They must help the new TSZ's to produce more for
the nation in their first year.

"10. The CC appeals to the agricultural and financial ex-
erts employed in the various ministries, enterprises and
non-agricultural sectors to volunteer in increasing numbers
for TSZ jobs that befit their qualifications. Those ex-
erts and leaders who come to the TSZ's in this manner will
receive from the government the same financial and moral sup-
port as in 1959.

"The CC is firmly convinced that the preponderance of the
TSZ's in Hungary and the consolidation of the new TSZ's will
further strengthen worker rule and the worker-peasant alliance
will accelerate the growth of the entire national economy and
will promote the further prosperity of our working people."
(SF, No 8, 21 Feb 60, p 3)

The following is an abstract of a speech by Istvan DOBI,
chairman of the Hungarian Presidential Council, delivered at
the mid-March session of the National Council of the PPF.

The success of the collectivization drive can be attribut-
eted to the following factors: the sound agricultural policies
of the MSZMP, the confidence of the peasant masses, the in-
dustrial workers' efforts to aid the TSZ's, the internation-
al situation, and the superiority of collective farming, evi-
dent in the 1959 harvest results.
At the present stage of collectivization, political work on the new TSZ's is perhaps even more important than their economic consolidation. The PFP must help to reassure the new members that their decision to join was a sound one. It must also mobilize the local population to aid the construction of farm buildings on the TSZ's.

Production on the members' household plots is essential for the supply of the national economy. The members should raise more hogs on their plots. The TSZ's must aid their members to grow more on their plots, but farming on the TSZ's must be given preference over work on the household plots. (SF, No 12, 20 Mar 60, p 1)

The PFP has scheduled its second national conference for 27-28 May 1960. [It will probably attempt to rally more support for collectivization and for the consolidation of the TSZ's.] The principal speaker will be First Deputy Prime Minister Gyula KÁLLAI. (SF, No 12, 20 Mar 60, p 3)

The following is an abstract of a lead article by Janos FEHÉR, entitled "Every Effort for the Consolidation of the TSZ's."

By 15 February 1960, the total membership of the TSZ's reached 888,000 members. More than 700,000 private farmers joined the TSZ's in the past 15 months.

Special committees of experts, the so-called consolidating committees (megszilárdo bizottságok) are helping most of the new TSZ's to complete their most urgent tasks—the listing of the inventories, the surveying of the plots, and the drafting of the crop plans and annual production plans.

The elected TSZ officials have become the most influential persons in rural life. Their rank and responsibilities stem from the members' confidence. If they bear this fact in mind, they will have more strength to fill their office, to acquire the knowledge needed for large-scale farming, and to preserve the members' support.

The TSZ's will buy about 3,000 of the 10,000 tractors to be supplied in 1960. According to preliminary estimates, by the end of 1960 Hungary will have one tractor for every 185 cadastral yokes of plowland. (SF, No 9, 28 Feb 60, p 1)
The following is the abstract of another lead article by Janos FEHER, entitled "Convincing Words Are Still Necessary."

The human factor in the economic consolidation of the TSZ's must not be overlooked. The new TSZ members must be convinced of the soundness of their decision to enter and of the advantages of collective farming. There are TSZ members who in starting collective farming are showing the same reluctance as when they had to decide whether to enter or not. This reluctance can be attributed to the fear of the unknown, i.e., of their new working conditions. This hesitation can best be solved through friendly and patient words.

Most of the TSZ's formed in 1959 achieved good production results in their first year. On some TSZ's, however, the members are not satisfied with the payments they received for their work units. The poor results can often be attributed to the new members' melancholic longing for their former way of life. On some TSZ's rumors have been spread that poor results in the first year of the new TSZ's are desirable because the government will dissolve them if they show no profit.

Proper orientation on the TSZ's is the task of the local Party units. It is a sound and gratifying phenomenon that on the new TSZ's and in the new TSZ villages many peasants are joining the Party. Under the guidance of the jaras Party Committees, the new Party units on the TSZ's are being aided by the municipal and industrial Party units and by the officials of the old TSZ's.

Every local Party unit on the TSZ's should establish a permanent network of propagandists or, as they are called in some areas, activists. (SF, No 8, 21 Feb 60, p 5)

The following is an abstract of an article by Piroaska RAPPAl, entitled "Together for the Future."

In recent weeks several hundred industrial workers visited TSZ's to help build barns, install plumbing, repair machinery and to aid them politically as well.

The industrial workers were surprised to find that the rural population's range of interest is extremely wide and concerns not only agriculture but political developments as well. Some of the questions the industrial workers were asked concerned Nasser's policies, revolutions in South America, missiles, the distribution of goods under Communism, etc.
The industrial workers' visits helped to strengthen the worker-peasant alliance. The peasants in general realize that their future prosperity hinges on socialism. Prince Eszterhazy and the other former landowners have hoped in vain that the Hungarian peasants will reject collectivization.

The aid which the peasants are receiving from the industrial workers obligates them to produce more food for the nation's supply.

In the villages the industrial workers often encountered views that question or ridicule the industrial workers' leading role in socialist society. Although such occurrences are comparatively infrequent, they must be curbed through patient orientation. In most cases such views stem from an ignorance of the Party's agricultural policies and of the importance of the worker-peasant alliance. (SF, No 9, 28 Feb 60, p 3)

The following is an abstract of an article by Lajos SZEGÖ, entitled "Once Again about the Payment of Rent for Land Brought into the TSZ's.

The flood of letters received by the editors of Szabadfold reflects considerable uneasiness among the intermediate peasants concerning the possible refusal of the TSZ's to pay them rent for the land which they bring into the collectives. There are also indications that the landless peasants in some TSZ's are grumbling about having to pay rent for such land.

In the Soviet Union, where all land was immediately nationalized, the problem of paying rent for land brought into the TSZ's never arose. In Hungary, where capitalism had penetrated the peasant elements deeper than in the Soviet Union, the post-war agrarian reform did not nationalize all land but divided most of it among the peasants.

Land brought into the TSZ's remains the private property of the owners. It can be willed or inherited. The TSZ's farm the land but pay the owners rent.

Since the very start of collectivization in Hungary, the government has always advocated the payment of rent for land brought into the TSZ's. In years past, however, the TSZ's generally disregarded the government's recommendations. The vast majority of the TSZ members were landless peasants and they voted down any proposal to pay rent to the small minority of former small farmers. In 1958, for example, of the
9,707 TSZ families in Hajdu Megye 4,873 owned no land. Only 23 percent of the total TSZ acreage in the megye was brought in by members, the rest was government surplus land.

In 1959, the stratification of the members who joined TSZ's changed considerably. On the national average, 32 percent of the entrants were intermediate or small farmers. The importance of paying rent for land brought into the TSZ's increased accordingly, and Law-Decree No 7 of 1959 has made the payment of rent compulsory. It no longer depends on the membership's composition or the majority's will.

Some persons oppose the payment of rent for land brought into the TSZ's because it provides unearned income based on private ownership. Such views disregard the exigencies of the socialist reorganization of agriculture and the importance of consolidating collective farming. Private farmers cannot be expected to change their mentality immediately upon entering the TSZ's. The stratification based on the amount of property owned will continue for some time even in the TSZ's. The payment of rent for property brought into the collectives, on the other hand, will attract more small and intermediate farmers and will help to develop a homogenous peasant class.

The landless members of the "Buzakalasz" TSZ in Gyuro, for example, complain that out of a total apportionable profit of 411,000 the TSZ management is planning to pay 92,000 forints in rent. Their complaint is entirely unfounded. The payment or non payment of rent is not a question of cooperative democracy but a question of observing the law. Were these members farming privately, they would be required to pay rent for the land they lease.

But the law also protects the interests of the landless TSZ members. In order to exclude the possibility of exploitation and to prevent the landless members from becoming mere hired hands, the law limits the amount of rent payable to cash payments in the equivalent of 5 to 10 kilograms of wheat, computed at the government bulk-purchase price, for every golden crown of the cadastral value per cadastral yoke. [In the cadastral records all land is assessed in Austro-Hungarian crowns.] The total amount paid out in rent may not exceed 25 percent of the apportionable total net income of a TSZ.

Some TSZ's report that they are planning to distribute the rent in proportion to the number of work units acquired by the owners. It is very unlikely that the jars council agricultural sections will approve such plans. The amount of rent payable depends entirely on the acreage and cadastral value and has nothing to do with the number of work units the members acquired during the year. (SF, No 7, 14 Feb 60, p 5)
[The following may be an indication of the intermediate farmers' reluctance to join TSZ's in which the majority of the members are landless peasants.]

In an article entitled "Who Gets the Better Deal," Klari B. PÁRKAS cites the "Uttcoro" TSZ in Mako. Local private farmers are reluctant to join the TSZ because they would bring their property into the TSZ, whereas the present membership consists almost entirely of landless peasants. The private farmers are under the impression that they would be sharing their wealth with the landless members.

The TSZ chairman counters this view with the following arguments:

1. The landless members are no longer poor. Their standard of living is at least as high as that of the private farmers.

2. The private farmers will be paid rent for the land they bring into the TSZ's.

3. For the livestock and agricultural equipment they bring into the TSZ's the private farmers are reimbursed in cash. Only 30 percent of this cash compensation is deducted and allotted to the TSZ unapportionable fund.

4. The average net fixed capital of the TSZ is 18,000 forints per member. In order to contribute the same amount to the fixed capital of the TSZ, the new members would have to bring in at least 60,000 forints' worth of livestock and equipment. Very few private farmers have that much. (SF, No 6, 7 Feb 60, p 10)

Within the "Youth for Socialism" movement, students in Somogy, Baranya, Szolnok, Szabolcs-Szatmar, and Zala Megye have volunteered to work on rural development and drainage projects and to help out on the state farms and TSZ's. (SF, No 7, 14 Feb 60, p 5)

The editors of SF call the government's attention to the fact that many TSZ special groups are not operating according to their by-laws but are merely fronts for speculation. For example, the members buy wine from private growers and then sell it in their wine shops. Although the state farms and TSZ's are able to supply the entire demand for wine, TSZ groups specializing in wine production and private winegrowers' associations are still justified. But their operation should be supervised more closely in the future. (SF, No 8, 21 Feb 60, p 8)
Farming on the TSZ's

One hundred agronomists have volunteered to work on the TSZ's in Borsod Mégye. Forty of them have already occupied their posts. (SF, No 6, 7 Feb 60, p 4)

In an article entitled "Well-Informed Members Help to Consolidate the TSZ's," Sandor Teszik reports in some areas a shortage of brochures explaining the TSZ by-laws, work units, the regulations on taxation, social security, etc. He urges that such publications be made simple and lucid, easily understandable for the average TSZ member. (SF, No 7, 14 Feb 60, p 3)

The new members who entered TSZ's in 1959 brought with them over 100,000 head of cattle, about 40 percent of which were cows. The TSZ's also purchased through the TEGI 35,570 head of cows or heifers, in contrast to the 30,000 head originally planned. This number includes 11,000 head of registered purebred cows or heifers, whose average maternal milk yield was over 3,500 liters of milk per year. For these purchases the TSZ's received price subsidies ranging from two to six forints per kilogram, depending on the quality, and the government bore the cost of transportation. An additional 19,000 head of cows or heifers, suitable for breeding but of unknown origin, were purchased on the free market. Here the government reimbursed the TSZ's only for the transportation cost.

The TSZ's in 1959 bought most of their cattle with government loans, repayable in five to 16 years.

In 1960, the TSZ's will purchase 35,000 head of cows or heifers suitable for breeding.

In 1959, the government sold the TSZ's 35,000 head of young Hungarian Yorkshire brood sows, at price subsidies of three forints per kilogram of live weight. The TSZ's financed these purchases through government loans repayable in three to five years. Depending on their regional conditions, some TSZ's were supplied with Mangalitsa, Cornwall, and Berkshire stock. In 1960, the TSZ's will buy 60,000 head of young brood sows through the TEGI.

The TEGI supplied the TSZ's with 5,200 valuable breeder rams and ewes in 1959. The average annual wool yield of the ewes was 4 to 5 kilograms per head; that of the rams, 8 kilograms. In 1960, the TSZ's will be able to purchase 100,000
head of ewes, repayable in either cash or kind, in two to four years. The ewes will be supplied by the Wool Trading Enterprise (Gyapjuforgalmi Vallalat).

The TSZ's will be supplied with a total of 1,388,000 day chicks, pullets, goings and ducklings in 1960, in contrast to 781,000 in 1959.

The supply of poultry in 1959 was seriously hampered by the fact that the TSZ's were late in placing their orders and in completing their poultry sheds. This year the TEGI is supplying the poultry on a staggered basis, since January 1960. (BP, No 9, 28 Feb 60, p 2)

The following is an abstract of an article entitled "Proper Crop Ratios on the TSZ's." Its author is Dr Cabor S00S, [head of the FM Chief Directorate of Crop Production (FM Novenytermelesi Foigazgatosaga)].

At average crop yields, the crop ratios that have developed in Hungary during the past three years are generally adequate to supply the needs of the national economy. The TSZ's, however, have deviated considerably from the national average crop ratios. In 1959, for example, corn (not including silage corn) was grown on 25.5 percent of Hungary's total acreage of plowland. On the TSZ's, however, the ratio of corn was only 15.6 percent, or 22 percent if the household plots are also taken into consideration.

The situation is similar in regard to potatoes. In 1959, the national ratio of potatoes was 4.3 percent, in contrast to the joint TSZ ratio of only 2 percent.

The national economic plans call for a bread grain ratio of about 28 percent. This figure corresponds to the average acreage the TSZ's have sown to winter grain in the autumn of 1959.

The new arid substantially increased TSZ's must strive to maintain the same crop ratios as had originally existed on the acreage they are now farming. Slight modifications may be made in the crop ratios in favor of feed grain, hay, and certain industrial crops. But no basic changes in the crop structure are permissible in 1960 or in the next few years.

Hungary plans to increase the national ratio of corn to about 26 to 27 percent in 1960. The production plans which the TSZ's are now drafting, however, show that many of them still fail to realize the importance of hybrid corn production. (NM, No 4, 22 Feb 60, p 7)
In another article, entitled "Our TSZ's Should Make Adequate Preparations for Their Spring Work," EOCOS reports that many new and substantially increased TSZ's have failed to collect from their new members the seed needed for spring planting. The great lag in the delivery of seed potatoes is particularly deplorable because the members have sufficient seed potatoes and get the same price from the TSZ's as they would get on the local free markets. (MM, No 5, 7 Mar 60, p 8)

Profit Distribution on the TSZ's

In 1959, the FM Chief Section of Cooperative Policy (FM Szovetkezetipolitikai Fooszta) and the Institute for Agricultural Organization (Mezogazdasagi Szervezeti Intezet) jointly studied on seven TSZ's the various solutions for the further development of the work unit system. The operating experience and economic analyses obtained in this manner are the basis for the drafting of recommendations for all TSZ's on how to modify their profit distribution systems, with due consideration for their specific local conditions. (J, No 6, 7 Feb 60, p 15)

The following is an excerpt from an unsigned article, entitled "Diligently and in a Well-Organized Manner."

The distribution of the seeded plots among the TSZ families for cultivation will ensure the systematic participation of the family members in joint farming. In view of the present level of mechanization on the TSZ's, particularly on the new ones, the fears that the family system of cultivation will result in the inadequate utilization of the existing machine capacity are entirely unfounded. (J, No 10, 6 Mar 60, p 3)

An article by B. P. [Bela FOLDEAKI], entitled "Harmony in the Chorus," points out that a common mistake on many of the TSZ's formed in 1959 was that only the men joined, while the women worked only around the house, the old people remained idle, and the children sought employment elsewhere. The participation of the entire family in joint farming can be ensured if the cultivation of the corn, potatoes, sugar beets and other row crops is split up into family plots, especially if the family incomes depend on the crop yields. (J, No 6, 7 Feb 60, p 3)
The following is an abstract of an article entitled "TSZ Profit Distribution Based on Production Results." Its author is Jenő TAKÁCS, secretary of the MSZMP Committee in Nagykoros.

In 1960, all of the TSZ's in Nagykoros have introduced the system of family plots for the cultivation of all crops, with the exception of grains other than corn. This system was tested on one of the local TSZ's in 1959. The results were extremely favorable. Labor discipline improved, the crop yields rose, and the members' private interest was properly coordinated with the joint interests of the entire TSZ. Local private farmers also favor this system of profit distribution. It dissolves one of their most common fears—that they will be required to do the work of the leasers as well.

The system of family plots should not be regarded as a decline back to small-scale farming. The large plots are plowed and seeded jointly, only their cultivation is divided among the TSZ families. Nor is the work unit system entirely abandoned. The work done by the individual families is still measured in work units. However, the work units are paid not on the basis of the cultivated acreage but on the basis of the crop yields. (A, No 2, Feb 60, pp 59-61)

The modification of the work units system on the TSZ's was one of the major topics of discussion at the "Days of Soviet-Hungarian Agriculture." The following is an abstract of a lecture by Dr László STEINCZINGER [of the MTA Institute of Farm Management (MIA Mozogazdasági Uzamtani Intézet)], entitled "The Problems of Profit Distribution on the TSZ's."

Good management and proper organization are basic prerequisites for the profitable operation of the TSZ's. It is interesting to note that on those TSZ's which pay 50 forints or more per work unit the members are usually satisfied with their profit distribution system. Dissatisfaction is usually voiced only on the TSZ's that pay 25 forints or less per work unit. The profit distribution system is unquestionably of major importance with respect to the operation of the TSZ's. But the example cited above clearly indicates that poor TSZ results should not be attributed entirely to the shortcomings of the profit distribution system.

A general principle to be observed in modifying the work unit system is that payments in cash should be increased, while payments in kind should be kept at a minimum.

Monthly advance payments on the work unit acquired by the members are of primary importance on the TSZ's. This can be
ensured through better planning. A monthly breakdown of the labor plan can also serve as a continuous check on the efficiency of the work performed.

The TSZ's are advised to form a special reserve fund from which they can ensure their members regular monthly advance payments on the work units the members acquire each month. An adequate reserve fund can also enable the TSZ's to guarantee their members a certain minimum value for the work units.

Combined with a remuneration method based more or less on crop yields, the system of cultivation on the basis of family plots is a necessary temporary solution. In view of the further mechanization of agriculture, however, the plots in the future will have to be divided for cultivation among the brigades and not the individual members or their families.

Profit distribution methods based on the gross or net value produced are already used extensively in the Soviet Union and in Bulgaria. Such methods provide incentives not only for high yields but for the economical utilization of the means of production as well. This method is particularly feasible in the labor-consuming branches of farming, for example, in tobacco and wine production and in certain branches of livestock production. (MM, No 4, 22 Feb 60, pp 5-6)

**Government Measures Concerning TSZ's**

Government Decree No 6/1960 regulates the payment of old-age and disability pensions to TSZ members. [The provisions of this decree are based on the principles outlined in the 12 February 1960 resolution of the MSZMP CC. (See "Progress and Policies," above.)] (J, No 9, 23 Feb 60, supplement)

PM Directive [No 122/1960] regulates the transfer of government buildings and other property to the TSZ's. Such transfers must be approved by the megye council agricultural section. The TSZ's must pay the full market value but may obtain intermediate-term loans to finance such purchases. Government organs may sell the TSZ's the buildings that are only partially used or not at all, provided that the sale will not affect the plan fulfillment of the government organ concerned. (SF, No 10, 6 Mar 60, p 8)
A joint directive of the Ministers of Agriculture, Construction, and Finance regulates the construction of simple farm buildings on the TSZ's.

The megye council agricultural sections are authorized to order and approve recommended standard plans for farm buildings in their megyék.

Private architects may also be commissioned to design TSZ farm buildings, provided that the total outlay per building does not exceed 100,000 forints, and the architects are listed in the national register. The adaptation of the standard plans to the construction sites can be entrusted to the private architects if the megye TSZ investment bureaus are overburdened and unable to do this work.

If the TSZ's finance the farm buildings entirely from their own funds and requisition no construction materials from government stockpiles, the construction plans are not subject to the approval of the megye council agricultural sections.

In the construction of TSZ farm buildings preference should be given to local construction materials and local labor. The loans and construction materials must be supplied from the allotments of the individual jarasok. (SF, No 12, 20 Mar 60, p 2)

The following is an abstract of an interview given by OEF chief Dr Gyula BALASSA.

If a private farmer joins a TSZ, the existing regulations require that he bring in all land owned by him and by any member of his household. This includes shares in forest owners' associations. Such shares devolve onto the TSZ. It is not customary to allot the members forests as household plots.

Private farmers whose forests or trees are incorporated into TSZ or state-farm plots in the course of the replotting of land are entitled to compensation. This compensation is payable either in kind or in cash. The cash compensation for timber stands is 50 forints per cubic meter.

Over and above their regular cutting plans, the TSZ's may not be granted permission to cut timber from their forests, even if the lumber is needed for the construction of TSZ farm buildings. The state forestry bureaus from their own stockpiles will provide the TSZ's with sawed lumber or precut parts. (SF, No 11, 13 Mar 60, p 6)
Although Law Decree No 24 of 1959 regulates in detail the question of land offered to the government, its provisions are not always observed.

The government will accept land or buy it only if it's offered by owners who are not farmers by profession, provided none of the owners' family members wish to join TSZ's. A further prerequisite is a signed obligation by a TSZ or state farm to take over the land offered. The land must be offered in writing, to the jaras council agricultural sections.

The sales price of land offered to the government is determined on the basis of Government Decrees Nos 4091/1949 and 284/1950.

An owner who is not a farmer by profession may offer his land directly to a TSZ and become its honorary member. In this case the owner is entitled to the same rent as the regular members who bring land into the TSZ's. The general meeting of members may also vote the owner a household plot.

Owners who are not farmers by profession may also lease their land to TSZ's, without becoming honorary members. (J, No 9, 28 Feb 60, p 9)

FM Decree No 6/1960 modifies FM Decree No 32/1959 which regulations the status, salaries and benefits of the chairmen, agronomists, and accountants on the new TSZ's. Accordingly, the same provisions apply also to the village agricultural inspectors and the agronomists and accountants of the farmers' consumer cooperatives who are hired by new TSZ's in the period 31 December 1959–30 April 1960. (ME, No 7, 17 Feb 60, p 43)

STATE FARMS

The Garden Seed and Medical Herbs Producing Farm (Kertímag es Gygynovenytermelő Gazdaság) has been abolished, effective 1 January 1960. Its branches in Kozépbogár, Bankút-Rozsąmajor, Kiszombor, Cegléd-Kecskészsardá, and Újfehértó have been converted into separate state farms but will continue to specialize in the production of garden seeds and medical herbs. (ME, No 6, 10 Feb 60, p 39)
AGRICULTURAL FINANCES

TSZ Finances

The following is an abstract of an article by Sandor TESZKO, entitled "Government Loans and the Own Resources of the TSZ's."

Many members are opposed to applying for government investment loans because they fear that their TSZ's will become heavily indebted. The other extreme is also common—some TSZ's want to finance their investments entirely with government loans.

As outlined in Government Resolution No 3,004/2 of 1959, the sole purpose of government loans is to supplement the own resources of the TSZ's. The loans obtained in this manner must be used judiciously. For example, it is essential to build suitable modern buildings for the joint cattle stock. By dividing its cattle stock among the barns of its members a TSZ might save the interest and installments on the investment loan needed to finance the construction of a suitable barn but in the long run would lose more through extra labor, feed losses, and the lack of adequate supervision. In order to avoid heavy debts, however, the TSZ's must also utilize their own resources. Preference should be given to simple structures and home-made construction materials. (SF, No 6, 7 Feb 60, p 7)

The unapportionable funds of the special groups that decide to convert or merge into TSZ's devolve upon the latter. If the members of one and the same special group join two or more different TSZ's, the unapportionable fund must be divided proportionately.

The conversion or merger does not affect the members' obligations to fulfill their production and delivery contracts, for example, for wine. The TSZ's, however, are entitled to at least one half of the bulk delivery bonuses. (FBE, No 7, 19 Feb 60, pp 25-26)

[See also OVER-ALL PLAN AND PERFORMANCE DATA, and COLLECTIVIZATION OF AGRICULTURE.]
MTS Finances

PM Directive No 113/1960 regulates anew the sharing and distribution of MTS profits and losses. [The provisions of this directive are basically the same as those of PM Directive No 154/1959. Only the more important modifications are listed below.]

The distribution of the unplanned annual surpluses of the MTS's has been altered as follows: The portion allotted for bonuses and premiums has been cut from 40 to 30 percent. The allotment for the MTS development funds has been raised from 10 to 15 percent; the government's share, from 50 to 55 percent.

In addition to the premiums and bonuses from the unplanned surplus, the MTS's are entitled to a share of the savings arising from the better utilization of their machine capacity on the TSZ's. This share will be determined in a separate directive.

If a MTS fulfills its production plans without failure, the personnel is also entitled to a special bonus which may not exceed the equivalent of the average wages for two days. (ME, No 4-5, 3 Feb 60, pp 22-23)

Finances of the State Forestry Bureaus

PM Directive No 112/1960 regulates in detail the sharing and distribution of the profits and losses of the state forestry bureaus.

Each state forestry bureau operates on the basis of its approved annual budget which includes the estimated profits or losses for the fiscal year. The losses are subsidized by the government. The state forestry bureau must pay the government each quarter the profits planned in its annual budget for the quarter in question. These profits must be paid regardless of the actual financial results. Thus, in principle no state forestry bureau may close its fiscal year with a planned surplus.

If an unplanned surplus accrues at the end of the year (from good management, economization, labor competitions, etc.), it must be distributed as follows:
40 percent for premiums and bonuses, not to exceed the workers' average monthly pay;

20 percent for the state forestry bureau development fund;

10 percent for the reserve fund, from which possible losses in the coming years are balanced;

30 percent for the government treasury.

The OEF carefully audits the financial statements of the state forestry bureaus. The amounts that can be attributed to causes beyond the control of the state forestry bureaus (price increases, freight rate reductions, etc.) are deducted from the total unplanned surpluses. The state forestry bureaus, however, must be reimbursed for losses caused by government measures.

The losses unforeseen in the budgets must be financed from the reserve funds or through bank loans. (KE, No. 5-6, 5 Feb 60, pp 22-23)

AGRICULTURAL LABOR

Over 20,000 young agricultural and forestry workers, organized in 1,200 brigades, took part in the 1959 labor competitions for young workers on the state farms, TSZ's, and in the state forestry bureaus. The success of these labor competitions has prompted the decision to repeat them in 1960. Two resolutions, issued jointly by the MEDOSZ, KISZ, and FM, contain the terms and prizes of these competitions and the methods for evaluating the results achieved. (KE, No 8, 24 Feb 60, pp 53-57)

AGF Directive No 3/1960 calls for a general tightening of the planning and utilization of manpower and wages on the state farms. The plans submitted by the state farms showed a general tendency to increase production through higher employment and not through the efficient utilization of their manpower and machine capacity. (ACE, No 7, 12 Feb 60, p 42)

ACE publishes detailed official interpretations of the regulations governing quarters for employees and the payment of allowances for dependents. (ACE, No 8, 19 Feb 60, pp 48-56)
MARKETING OF AGRICULTURAL PRODUCTS

Government Procurement

The following is an abstract of an article by Gula FEHER, entitled "Vegetable Production Contracts in 1960."

Hungary's total vegetable acreage is estimated at 210,000 cadastral yokes. This includes gardens and household plots as well. In 1960, vegetables will be grown on a contract basis on about 60 percent of this acreage. Vegetables for the canneries will be grown on about 70,000 cadastral yokes, predominantly by the TSZ's.

Production contracts can be signed for 31 different kinds of vegetables. The new items on the list are red beets, spinach, kohlrabi, cabbage, red cabbage, squash, green corn, and potatoes.

A so-called "differentiated fixed price system" has been introduced to safeguard the producers' interests. This means that, on the basis of the estimated cost prices, guaranteed minimum prices will be established at least 10 days before the harvest, separately for the early, regular, and the late crops. The producers are entitled to the free-market prices if during the established periods these are the higher.

Another novelty of the 1960 production contracts for vegetables is that the commercial network will be required to accept also a certain quota of second-grade vegetables.

Although in 1960 about 60 to 70 percent of the contracted vegetable crop will be grown with large-scale methods, contracts will also be signed with producers who have only gardens and household plots, especially in the regions specializing in vegetable production. (SF, No 6, 7 Feb 60, p 2)

The TSZ's in 1960 will sign production contracts for 30,000 cadastral yokes of potatoes and 5,000 cadastral yokes of new potatoes. The government will supply them with selected seed potatoes, at a rate of 1.4 quintals of regular potatoes per quintal of seed potatoes. The new TSZ's may pay for the seed potatoes in cash. Only the TSZ's that have no suit-
able seed potatoes of their own can qualify. Upon signing the contracts the TSZ's may apply for interest-free loans of 500 forints per cadastral yoke.

In Szabolcs, Győr, Veszprém, and Vas Magyak--Hungary's foremost potato regions--the TSZ's are showing some reluctance to increase their potato acreage. (SF, No 6, 7 Feb 60, p 7)

The following is an abstract of an article by Laszlo NAGY, entitled "More Favorable Conditions for the Marketing of Vegetables."

In 1958-1959, the annual per capita consumption of vegetables was 110 to 120 kilograms in Budapest and 80 to 100 kilograms in the provinces. This is still far below the per capita consumption in Bulgaria, France, and Denmark. [Note, these figures do not include potatoes.]

In 1959, the farms operating under the jurisdiction of the AGS grew vegetables on a total of 6,100 cadastral yokes. This acreage will increase to 6,600 cadastral yokes in 1960, and to 19,600 cadastral yokes in 1962.

The new price system for vegetables will prove favorable for the state farms. In years past the bulk-purchasing network was obliged to maintain an average annual price margin, but this did not prevent it from cutting the vegetable prices when the state farms had a bumper crop and no other market outlets.

Direct contracts between the state farms and the retail networks have proven favorable over the past two years and will be expanded in the future.

The state farms have learned by bitter experience that it is not profitable to pad their vegetable shipments with vegetables of a lower grade. If a certain grade contains more than the permissible 5 percent of inferior vegetables, the entire shipment is paid on the basis of the rates for the lower grade. (AG, No 2, Feb 60, p 14)

The farmers' consumer cooperatives are negotiating production and delivery contracts for domestic rabbits. Such contracts may be signed with TSZ's, TSZ groups, agricultural associations, private farmers, TSZ members, and youth cooperatives. The rabbits must weigh from 2.6 to 3.7 kilograms.
per head. The delivery price is 14 forints per kilogram of live weight. The TSZ's are entitled to bulk-delivery bonuses of two forints per kilogram if they ship in lots of 50 or more. Private farmers cannot qualify for bulk-delivery bonuses. The bonuses for the other contractors are one forint per kilogram. (FEK, No 9, 4 Mar 60, pp 36-37)

In the fourth quarter of 1959, the cooperative purchasing network bought 69.4 percent more vegetables, 31.9 percent more fruit, and 21.9 percent less potatoes than in the same period of 1958. The over-all plan for the purchasing of vegetables, fruits and potatoes was fulfilled 85 percent.

In comparison with the same period of 1958, the following increases are noted in the purchase volume in the fourth quarter of 1959: poultry, 5.3 percent; eggs, 43.6 percent; hay, 52.7 percent; straw, 32.6 percent; lentils, 594.6 percent. The purchase volumes of beans and poppies also rose considerably. Despite these gains, only the plan for straw purchasing was fulfilled. (FEK, No 5, 12 Feb 60, pp 21-23)

[See also "Poultry" under LIVESTOCK PRODUCTION.]

Prices

The National Price Bureau (Orszagos Arhivatal) has approved prices of 8 or 7 forints per kilogram of live weight for the prime and improved mutton supplied by the state farms for export purposes. (AGE, No 9, 26 Feb 60, p 61)

AGRICULTURAL TAXATION

According to FM Decree No 1/1960, the 1960 monetary equivalent of the grain payable as instalments on the purchase price of the farmland, forests and household plots distributed under the agrarian reform is 210 forints per quintal. (J, No 6, 7 Feb 60, supplement)
MECHANIZATION OF AGRICULTURE

[See also OVER-ALL PLAN AND PERFORMANCE DATA, COLLECTIVIZATION OF AGRICULTURE, TRANSPORTATION AND STORAGE OF AGRICULTURAL PRODUCTS, and "Education" under AGRICULTURAL SCIENCE AND EDUCATION.]

Equipment

Warranty claims on the Sz-100, Sz-80, DT-55, DT-54, MTZ 5 L, and T-28 tractors imported from the Soviet Union should be submitted directly to the three Soviet experts stationed in Hungary. They can be reached at the Megye MTS Directorates in Gyor, Veszprem, and Szolnok. If the experts find the claims justified, they will replace the defective parts free of charge, through the FOMAV. (ARGE, No 5, 26 Feb 60, p 61)

From March through December 1960, the Tool Machine Factory in Gyor (Gyori Szerszameggyár) is planning to manufacture 5,000 dump trailers for tractors. The dumping mechanism has been redesigned, and the weight of the trailer has been reduced. (SF, No 7, 14 Feb 60, p 4)

The state farms must submit by 15 March 1960 their orders to the FOMAV for the combine blades they wish to purchase in 1961. (ARGE, No 10, 4 Mar 60, p 69)

In an article entitled "The Combine Harvesting of Morphine Poppies," Sándor BALOGH reports that the Medical Herb Research Institute (Gyógynövénykutató Intezet) has converted an ACD-343 grain harvesting combine into a poppy harvester. The experimental model has been widely praised by Soviet experts. The seed loss is low, and the morphine yield of the empty shells and the upper parts of the stems is about the same as when the poppies are harvested by hand. (A, No 2, Feb 60, pp 57-58)

GA publishes detailed technical descriptions of the Hungarian TVD-6 and the Soviet SzKGH-6 checkerboard corn drills. (GA, No 2, Feb 60, pp 6-7)
Laszlo AGH of the Nagykunsag Agricultural Experimental Institute (Nagykovsag Mezogazdasagi Kiserleti Intezet) reports that the institute is testing the prototypes or zero-series models of the following farm machines: the Mosonmagyarovar subsoil plow, its chemical dispenser attachment, the FE-3 tractor mounted plow, the Soviet PT-2-30 three-layer plow, the K-21/1 combined cultivator and disk harrow, and a new rotary hoe (Nos 11-16). (MM, No 4, 22 Feb 60, pp 19-20)

Continuing its series of reports on the farm machinery tested by the Institute for the Testing of Agricultural Machinery (Mezogazdasagi Gepkiserleti Intezet), Magyar Mezogazdasagi publishes photographs and technical descriptions of the following machines:

The "Ideal" manual seed drill (No 17), manufactured by the "Beke" Artisans' Cooperative in Mako, was tested in March-May 1958. It was found suitable for the planting of small seeds.

The SZT-4 adapter (No 18) to the PGSZ 10-12 pneumatic grain conveyer, manufactured by the Livestock Breeding State Farm in Mezolcecske, was tested in May-June 1958. It has been given preliminary approval.

The VZ coupling rod (No 19), manufactured by the Debrecen Agricultural Machine Factory (Debreceni Mezogazdasagi Gepgyar), was tested in April-June 1958. It has been granted preliminary approval, but only for Zetor 25-K tractors. (MM, No 3, 8 Feb 60, pp 21-22)

The "Buzakalasz" team-drawn seed drill (No 20), made by the Mosonmagyarovar Agricultural Machine Factory (Mosonmagyarovari Mezogazdasagi Gepgyar), was tested in January-April 1957. It was given final approval, without any restrictions.

The NST-12 high-capacity silage shredder and loader (No 21), manufactured by the Szombathely Agricultural Machine Factory (Szombathelyi Mezogazdasagi Gepgyar), was tested in August-November 1957. It was found suitable for both ditch-type silos and tower silos.

The ZR-3 tractor-mounted beet puller (No 22), manufactured by the Enterprise for the Repair of Agricultural Machinery in Baja (Bajai Mezogazdasagi Gepjavito Vallalat),
was tested in October-November 1957. It was approved for general use. (MM, No 4, 22 Feb 60, pp 21-22)

The HPK-6 mower (No 23), manufactured by the Mosonmagyaróvar Agricultural Machine Factory, was granted preliminary approval in June 1958.

The LB-3.5 team-drawn farm cart and dumping mechanism (No 24), manufactured by the Győr-Sopron Megye No 2 Enterprise for the Repair of Agricultural Machinery, was tested in June 1958. It was granted preliminary approval for use in predominently flat regions.

The KE-230 tractor-mounted two-share plow (No 25), manufactured by the Mosonmagyaróvar Agricultural Machine Factory, was approved for certain regions. The plow was tested in 1957 and 1958. (MM, No 3, 7 Mar 60, pp 21-22)

Electrification

The plans for 1960 call for the electrification of 520 TSZ's. (SF, No 10, 6 Mar 60, p 3)

Buildings

In an article entitled "New Standard-Type Dairy Barns on the TSZ's," Ivan KAPPETEH describes the floor plans and specifications of two standard types of TSZ dairy barns approved in 1960. The plans differ from the ones used in 1959 in that the attic space, used for storing grain, has been heightened to ensure better access. The maximum load capacity of the overhead granary is 400 kilograms per square meter. This means that the grain, provided that it is dry, can be spread in a layer 50 centimeters thick.

The cost of a NÖT-I-6-37/59 standard dairy barn is approximately 1,322,000 forints. It can accommodate 50 head of cattle. A NÖT-I-6-39/59 barn for 102 cows costs about 1,331,000 forints.

In 1959, barns with a total capacity of 110,000 cows were built on the TSZ's. (MM, No 3, 8 Feb 60, pp 26-28)
OBF Directive No 7/1960, issued in agreement with the National Price Bureau (Orszagos Arhivatal), sets the following prices for the precut lumber needed to build simple farm buildings on the TSZ's:

- maternity pens for 20 brood sows (slabs), 10,310 forints;
- maternity pens for 20 brood sows (sawed lumber), 12,090 forints;
- pig pens for 250 head, 10,300 forints;
- hog pens for 120 head (lumber walls), 15,310 forints;
- shed for 52 calves, 19,950 forints;
- sheep shed for 300 head, 14,340 forints;
- chicken shed, 7,160 forints. (EE, No 9, 26 Feb 60, pp 42-43)

**Machine Tractor Stations (MTS's)**

[See also "MTS Finances" under AGRICULTURAL FINANCES.]

In accordance with the resolution of the Second National Corn Conference, the MTS's are required to plant about 385,000 cadastral yokes of silage corn with their checkerboard drills. This means an average of about 160 to 180 cadastral yokes per drill.

The MTS's are instructed to ensure that their checkerboard drills are in top mechanical condition for seeding. Special attention must be devoted to the selection of seed disks that correspond to the caliber of the hybrid corn used.

In order to avoid bottlenecks in the harvesting of the silage corn, the MTS's must advise the TSZ's to plant at least two different varieties of hybrid corn if the silage acreage per TSZ exceeds 100 cadastral yokes. (GA, No 2, Feb 60, pp 1-2)
TRANSPORTATION AND STORAGE OF AGRICULTURAL PRODUCTS

A 4-kilometer extension (between the villages of Pulesd and Kolose) of the Jankmajtis narrow-gauge line and the new station buildings in Jankmajtis were placed into operation on 30 January 1960. (SF, No 6, 7 Feb 60, p 3)

The Csepel Automobile Factory (Csepel Autogyar) is manufacturing a special-body truck for wine transportation. The truck has six separate compartments, each with a 2,400-liter capacity. Six different kinds of wine can be transported simultaneously. (SF, No 9, 28 Feb 60, p 4)

The Soviet "Bielorus" (KZ-5L) and "Vladimirets" (T-28) tractors and the Hungarian UTOS-45 do not meet the requirements for highway vehicles specified in the Hungarian Traffic Regulations (KRESZ). Their headlights are not mounted properly and cannot be dimmed. They lack stop lights and license plate lights. The "Bielorus" and UTOS have only one set of brakes each.

As a temporary measure, however, the Ministry of Communications and Post (Közlekedés- és Postaügyi Miniszterium) has agreed to authorize the issuance of temporary registrations for the above-mentioned tractors, valid until 31 December 1960. The registrations are subject to certain restrictions. The tractors may haul trailers only in flat regions and may operate only from sunrise until sunset. If the trailers are equipped with mechanical brakes, only one trailer may be attached per tractor. The maximum permissible load of the trailers is 4.5 metric tons. Two trailers may be attached to a tractor if the trailers are equipped with air brakes that are in operating condition. (CA, No 2, Feb 60, p 7)

A large-scale road construction project for the forests in the Bakony Mountains has been approved by the OEP. To be completed by 1967, the plan calls for the construction of roads in a total length of 539.5 kilometers. This includes 41.6 kilometers of first-grade forestry roads, 102.5 kilometers of second-grade and 395.4 kilometers of third-grade roads. The average construction costs are 450,000 forints per kilometer for the first-grade roads and 80,000 forints per kilometer for the third-grade ones. (EF, No 2, Feb 60, p 8)
AGRICULTURAL SCIENCE AND EDUCATION

Agricultural Education

The following is an abstract of an article by university professor Dr Gyorgy FOGACSAS, entitled "Agricultural Mechanical Engineering Is a Wonderful Profession."

By the end of 1960, the total number of tractors and combines in Hungary will be more than 50,000. The value of the farm machinery on a well-equipped state farm averages more than 1,500 forints per cadastral yokes. Within a few years the TSZ's will also reach this level, and the total value of Hungary's stock of farm machinery will be over 10 billion forints. The demand for agricultural mechanical engineers is constantly increasing. Graduates can easily find jobs on state farms, TSZ's, MTS's, in the repair shops, agricultural machine factories, scientific research institutes, agricultural administration, agricultural schools, state enterprises, etc.

The University of Agricultural Sciences, Faculty of Agricultural Mechanical Engineering (Agrartudomanyi Egyetem Mezogazdasagi Gepeszmernoki Kara) offers a five-year curriculum. This includes nine semesters of classes and practical training. In their tenth semester the students prepare their diploma dissertations which they must defend before the board of examiners.

It costs the government about 100,000 forints to train an agricultural mechanical engineer. The nominal tuition fee is the same as at all universities—1,000 forints per semester. Depending on their advancement and their parents' class origin and financial circumstances, the students may obtain free tuition and scholarships. The government scholarships are 700 forints per month. The students may also get scholarships of 400 to 650 forints per month from state enterprises, state farms, MTS's or TSZ's, provided they undertake to work for them after graduation, one year for every year during which they received scholarships. (SF, No 7, 14 Feb 60, p 2)

The University of Agricultural Sciences publishes the requirements which secondary school graduates must meet to qualify for admission to the Faculty of Agricultural Mechan-
ial Engineering. These include parental consent and the recommendation of the secondary school. If these requirements are lacking, the applicants may appeal to the educational sections of their magye councils. Applicants who are employed must submit the recommendation of the management and Party secretary at their place of employment. All applicants must undergo written and oral examinations in mathematics, physics, and drafting. The scope of these examinations is the same as the material taught in the secondary schools. (3F, No 7, 14 Feb 60, p 8)

The University of Agricultural Sciences in Gödöllő is offering a special briefing course for those secondary-school graduates who were graduated a year or more ago and now wish to take their entrance examinations. The maximum age limit is 30 years for full-time students, and 40 years for students wishing to enroll in extension courses. (J, No 8, 21 Feb 60, p 9)

The Advanced School of Forestry Engineering (Erdötermészet Foiskola) in Sopron is seeking a professor or docent for its chair of Marxism and Leninism. All applications must be submitted by 31 March 1960. (EE, No 9, 26 Feb 60, p 44)

The University of Agricultural Sciences Institute for the Further Training of Agricultural Experts (Agrartudományi Egyetem Továbbképzési Intezeté) staged a special course in poultry breeding, attended by 38 poultry experts of the state farms, poultry enterprises, local councils, and TSZ's.

Two special courses are being held for irrigation experts. The first course, for the irrigation experts of the state farms, experimental farms, and school farms, opened on 8 February 1960. The second course, for the irrigation experts of the TSZ's, will open on 29 February 1960. (MM, No 3, 8 Feb 60, p 30)

The second three-week course for irrigation experts had a total enrollment of 40.

A two-week course in livestock feeding will open on 2 March 1960. Expected enrollment—40 TSZ agronomists. This will be a repetition of the course held in January for the benefit of the state-farm and local-council experts. (MM, No 4, 22 Feb 60, p 29)
An announcement in Allami Gazdasag lists the 32 agricultural technical schools (27 coeducational, five for girls), seven horticultural technical schools, three technical schools for agricultural mechanization, and three forestry technical schools that will offer first-year courses in the 1960-1961 school year. (AG, No 2, Feb 60, p 28)

The following is an abstract of an article by Dr Gyorgy Fekete, entitled "Agricultural Education on the State Farms."

The system of skilled agricultural workers was introduced on the state farms in 1957. Since then considerable attention has been devoted to the training program for skilled workers. The curriculum has been made more rigorous. The workers must pass their examinations before government boards.

The following table shows the skilled worker requirement of the state farms in 1958:

<table>
<thead>
<tr>
<th>Fields</th>
<th>Requirement</th>
<th>Skilled Workers</th>
<th>Workers Who Lack Qualifications But Have 7 plus 3 to 7 0 to 3 years of experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanization</td>
<td>11,703</td>
<td>5,563</td>
<td>1,300 2,266 2,574</td>
</tr>
<tr>
<td>Other crafts</td>
<td>4,441</td>
<td>3,890</td>
<td>93 130 328</td>
</tr>
<tr>
<td>Crop production and horticulture</td>
<td>19,312</td>
<td>1,394</td>
<td>4,716 6,455 6,747</td>
</tr>
<tr>
<td>Livestock breeding</td>
<td>8,012</td>
<td>1,338</td>
<td>2,076 2,339 2,259</td>
</tr>
<tr>
<td>Total</td>
<td>43,468</td>
<td>12,185</td>
<td>8,185 11,190 11,908</td>
</tr>
</tbody>
</table>

An additional 3,427 workers acquired their qualifications during the 1958-1959 educational program. The number of the courses held and their enrollment were as follows:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Number</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop production</td>
<td>126</td>
<td>1,857</td>
</tr>
<tr>
<td>Livestock breeding</td>
<td>180</td>
<td>2,367</td>
</tr>
<tr>
<td>Horticulture</td>
<td>138</td>
<td>2,447</td>
</tr>
<tr>
<td>Mechanization</td>
<td>216</td>
<td>3,265</td>
</tr>
<tr>
<td>Other</td>
<td>115</td>
<td>2,186</td>
</tr>
<tr>
<td>Total</td>
<td>775</td>
<td>12,122</td>
</tr>
</tbody>
</table>
These figures do not include the 1,850 state-farm workers who attended the merged training courses for operators of imported farm machinery, dairy workers, welders, etc.

The 1959-1960 educational program for the training of skilled state-farm workers developed as follows:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Number</th>
<th>Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop production</td>
<td>319</td>
<td>4,767</td>
</tr>
<tr>
<td>Livestock breeding</td>
<td>439</td>
<td>6,382</td>
</tr>
<tr>
<td>Horticulture</td>
<td>173</td>
<td>2,863</td>
</tr>
<tr>
<td>Mechanization</td>
<td>292</td>
<td>4,736</td>
</tr>
</tbody>
</table>

Total 1,223 18,748

About 5,000 workers attended the merged courses (hauling, plant protection, apiculture, etc.) held by the various state farms directorates.

The courses for the training of skilled workers offer three-year curriculums, with 100 hours of instruction per year.

In addition to their industrial apprentices, the state farms have been training agricultural apprentices since 1958. Their number rose from 240 in 1958, to 1,865 in 1959, and about 3,000 in 1960. The breakdown of the agricultural apprentices hired in 1959 was as follows: horticultural apprentices, 48.2 percent; livestock breeder apprentices, 31.6 percent; crop production apprentices, 25.6 percent. About 900 agricultural apprentices are assigned in shifts to three-month courses of theoretical instruction at the various agricultural schools. The rest of them attend the schools or classes set up on the various state farms.

In 1959, 134 machine foremen and 116 other foremen acquired the qualifications needed for their posts. The state farms directorates will take action against those few foremen who refuse to take the required examinations.

The two-year winter courses for state-farm brigade leaders, with four months of instruction per year, have proven successful. The 1959-1960 enrollment was 319 students in the first year, and 141 in the second year. However, a further specialization of these courses is necessary. Their curriculum must be modified to enable the graduates to continue their studies in the extension courses offered by the agricultural technical schools.
The reorganized Institute for the Further Training of the Managerial Personnel of the State Farms (Allami Gaznasagok Vezetoineak Towabkhepzo Intezete) in 1959-1960 offered a six-month course for those state-farm directors who had no agricultural qualifications, and a three-month course in farm management for university graduates. In the future this institute should specialize in farm management. Were an entrance examination required for enrollment, the basic agricultural subjects could be eliminated, whereby the courses could be shortened by six weeks, without affecting their educational level.

In cooperation with the scientific-research institutes and scientific associations, various training courses were also held in 1959-1960 by the AGF and the state farms directorates. Although the completion of these courses does not qualify for scholastic credits, the state-farm experts have profited by them immensely.

In accordance with the directives of the MSZMP, the state farms must train young agricultural experts not only for themselves, but for the TSZ's and other sectors as well. The trainees are assigned to outstanding elder state-farm experts. As a result of the trainees program, the number of young agricultural experts occupying responsible posts has increased considerably. In 1958-1959, the number of top officials who were graduated from universities or advanced schools after 1945 increased 127 percent; the number of such graduates assigned to independent posts rose 336 percent. The number of trainees with university degrees rose 177 percent.

The ratio of young experts and technicians in proportion to the total technical and administrative staff of the state farms increased from 14 to 24 percent.

In the 1958-1959 academic year, 780 state-farm workers took part in the extension courses offered by the University of Agricultural sciences, the individual agricultural academies, and the agricultural technical schools. Enrollment in the correspondence courses rose considerably in the 1959-1960 academic year. On some state farms even the physical workers have enrolled in the extension courses offered by the agricultural technical schools.

The state farms have signed scholarship contracts with about 100 students of the advanced schools of agriculture. Experience has shown that the system of scholarship contracts is suitable for attracting promising students to work on the state farms. But impartiality must be ensured in granting these scholarships. Signs of favoritism could be noted already in the first months. (A, No 2, Feb 60, pp 67-72)
Agricultural Science

[Another volume of] *Kísérletügyi Kozlemények* (Reports on Experiments) is being published. It contains the papers prepared by the personnel of the scientific-research institutes operating under the jurisdiction of the FM. Six volumes have appeared to date. Three contain papers on crop production; one is devoted to livestock breeding; the remaining two volumes contain papers on horticultural research.

Almost all copies of *Kísérletügyi Kozlemények* are distributed in the course of the information exchange programs with foreign foreign scientific-research institutes. Several hundred more copies should be published and made available in Hungary. (MM, No 3, 8 Feb 60, p 31)

According to the Book Review section of *Agrartudomány*, János Di GLÉRIA's *Mezógazdaság Kemle* (Agricultural Chemistry) fills a long-felt gap in Hungary's agricultural literature. Prior to the publication of this work, the most recent handbook on agricultural chemistry was published in 1903. (A, No 2, Feb 60, p 96)

At its 22 January 1960 session, the Limnological Section of the Hungarian Hydrological Society (Magyar Hidrologiai Tarsasag Limnologiai Szakosztalya) resolved to intensify the hydrobiological research of Hungary's fishponds. This research program is especially important in view of the fact that Hungary's fishpond acreage is expected to increase by at least 50,000 cadastral zokes "in the near future." (H, No 2, Feb 60, p 26)
CROP PRODUCTION

Soils and Soil Improvement

The Debrecen Soil Improvement Enterprise (Debrecein Talajjavito Vailalat) has made soil improvement a year-round operation. The quality of the work done during the winter months has proven satisfactory. The production plans of the enterprise include the chemical treatment of 8,500 cadastral yokes in the first quarter of 1960. (SF, No 7, 14 Feb 60, p 4)

Irrigation and Drainage

Hungary’s state farms in 1960 will build or repair the drainage canals for a total of 69,700 cadastral yokes. Rice fields will be built on 10,000 cadastral yokes, mostly on the alkaline soils in the Hortobagy. Fishponds will be built on a total of 2,500 cadastral yokes. The state farms will also continue their soil improvement projects. These include the tying down of the sand and the spreading of calcium carbonate on a total of 2,800 cadastral yokes. (SF, No 7, 14 Feb 60, p 5)

During the next three years the ORKI farm in Rozsas will be developed into Hungary’s largest irrigated farm. On its 1,800 cadastral yokes the farm will grow fodder crops, corn, sugar beets, and grass. The methods for the irrigation of these crops have already been tested in small-plot experiments. This model farm will demonstrate the advantages of irrigation farming and will also serve as a center for the training of the irrigation specialists needed on the state farms and the TSZ’s. (SF, No 8, 21 Feb 60, p 6)

The agricultural section of the MSZMP CC and the OVIF jointly sponsored a meeting of about 200 irrigation and drainage experts, held in Budapest [in the first half of March, 1960]. The principal speaker was MSZMP Politburo member Lajos FEHER. The following is an abstract of his speech.

Under the Second Five-Year Plan, the irrigated acreage
in Hungary will increase to 2½ times its present size. The capacities of the drainage systems will be increased, and the water and sewer systems of about 20 towns will be developed.

The water conservation network must do its utmost to aid large-scale socialist farming. The irrigation and drainage projects, however, must always be regarded from the point of view of production.

The potential flood area in Hungary is 7.2 million cadastral yokes. Under the present conditions, its drainage requires an average of thirty days. The average amount of damage caused by inland waters during the past 19 years can be estimated at 350 million forints per year. For this reason it is essential to speed up the drainage of inland waters, especially on the Hortobagy, in the Kunsag, and along the Tisza and Csorna-Fokto water systems.

In 1960, the irrigated acreage in Hungary is expected to increase to 150,000 cadastral yokes. The utilization of local water sources will play an important role in the irrigation program of the Second Five-Year Plan. Such local irrigation will account for about one third of the 360,000 cadastral yokes to be irrigated under this plan.

The planning of irrigation projects must always be adapted to local conditions and requirements. The planners must always strive to find the most simple and most economical solutions.

More attention must be devoted to the development of the irrigation and drainage associations. The trend should be toward larger associations that include several TSZ's, TSZ villages, and state farms. In this manner the associations would be able to finance jointly drainage projects, irrigation systems, fishponds, water storage reservoirs, small local water works, etc. These are projects which a small association alone might not be able to afford.

Hungary's water conservation network now has twice as many engineers as before World War II. (SP, No 12, 20 Mar 60, p 3)

The following is an abstract of an article entitled "Current Problems of Irrigation." Its author is candidate of agricultural sciences Imre PETASOVITS, chief of the FM Directorate of Irrigation (FM Ontozesi Igazgatosaga).

In 1959, only 50 percent of the acreage equipped with ir-
Irrigation installations was used for irrigation farming. This lag should be attributed to reasons other than the technical difficulties justly cited in years past.

The breakdown of the 1959 irrigated acreage was as follows: ricefields, 45.6 percent; plowland, 17.2 percent; vegetables, 15.2 percent; pastures and meadows, 14.1 percent; other, 6.7 percent; second crops, 1.2 percent.

No exact national data are available on the average increases in crop yields achieved through irrigation. The following figures, however, may serve as illustrative examples:

1959 Average Yields
(quintals per cadastral yoke)

<table>
<thead>
<tr>
<th>Crop</th>
<th>Irrigated</th>
<th>Not Irrigated</th>
<th>TSZ Location</th>
<th>Method of Irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn (shelled)</td>
<td>33.0</td>
<td>25.8</td>
<td>Nadudvar</td>
<td>Sprinkler</td>
</tr>
<tr>
<td>Corn</td>
<td>23.8</td>
<td>15.0</td>
<td>Kunaszentmarton</td>
<td>Surface</td>
</tr>
<tr>
<td>Sugar beets</td>
<td>320.0</td>
<td>224.0</td>
<td>Nadudvar</td>
<td>Sprinkler</td>
</tr>
<tr>
<td>Sugar beets</td>
<td>276.0</td>
<td>172.0</td>
<td>Sarzentlorinc</td>
<td>Sprinkler</td>
</tr>
<tr>
<td>Lucerne (hay)</td>
<td>79.2</td>
<td>39.1</td>
<td>Eperjes</td>
<td>Sprinkler</td>
</tr>
<tr>
<td>Clover (hay)</td>
<td>83.3</td>
<td>25.8</td>
<td>Kunaszentmarton</td>
<td>Surface</td>
</tr>
</tbody>
</table>

The total irrigated acreage planned for 1960 is 150,000 cadastral yokes, in the following breakdown: ricefields, 34.7 percent; plowland, 23.0 percent; vegetables, 16.0 percent; pastures and meadows, 14.6 percent; other, 6.7 percent.

One of the reasons why irrigation has been neglected even where it is feasible is that many TSZ's and state farms are still able to increase their crop yields even without irrigation.

The ratios above show that ricefields and vegetables account for about 60 percent of the irrigated acreage. This is justified for reasons of biology and economics. But the 1959 average crop results show that the yields are comparatively low, particularly for rice. This situation can be improved only through crop rotation on the ricefields.
Substantial government investments, particularly under the First Five-Year Plan have provided irrigation facilities for a potential acreage of 300,000 to 400,000 cadastral yokes. In the next stage of development it will be necessary to exploit these possibilities for actual irrigation farming. This should be done primarily through local initiative. In Szolnok Megye, for example, simple irrigation installations will be built on 2,900 cadastral yokes and will be financed from local resources and from the government aid that was originally allotted for the construction of costly irrigation systems, with underground pipes, on 290 cadastral yokes.

The introduction of irrigation farming on a state farm or TSZ requires careful planning and skilled management, especially if the acreage to be irrigated is 100 to 150 cadastral yokes, or 5 to 8 percent of the total acreage per farm. But many TSZ's would be able to build simple irrigation installations on 40 to 50 cadastral yokes, using the tools and machinery they already have.

Considerable importance is being attached to the work of the so-called irrigation demonstration brigades. They will propagate irrigation farming, set up small irrigation systems, and will urge the TSZ's to increase their irrigated acreages.

Many TSZ's are irrigating as much as 10 percent of their total farm acreage. Their primary task is to ensure proper management and experienced workers, by sending their agronomists, brigade leaders, and workers to the special training courses that are being held on a much wider scale than in years past.

It can be expected that by 1964-1966 irrigation will be the primary means of increasing Hungary's crop yields. (NN, No 4, 22 Feb 60, pp 16-17)

According to OVP Directive No 56/1959, the water conservation directorates may approve installations for the prevention of water pollution only on the basis of six-month trial runs. The water samples taken during this period must be tested by the VITUKI, OKI, KOJAL, or OMMI. (AGS, No 7, 12 Feb 60, pp 42-43)
Fertilization

Several state farms will test in 1960 the composting method recommended by Soviet academician LISENKO at the National Corn Conference held recently in Hungary. This method is as follows:

An area of 0.5 hectare is marked out on the plot to be fertilized and 200 to 300 tons of fresh or partially decomposed stable manure is spread over it in the spring. The manure is treated with 20 tons of ground phosphorus and 30 tons of ground limestone or ground dolomite. The manure is then plowed under to a depth of 15 centimeters. The area is disk-harrowed every ten days for the next six weeks to two months. Sprinkling the area with 10 to 20 tons of liquid manure is also desirable.

Toward the end of July, a 12- to 14-centimeter topsoil layer is piled up into heaps, with the aid of bulldozers. About 1,000 to 1,200 tons of compost are obtained in this manner, sufficient to treat a plot of 60 to 100 hectares. The fertilizer value of the compost is higher than of 20 tons of stable manure per hectare. In this manner the limited amount of stable manure available can be used to treat an acreage six to ten times larger than the normal. (SF, No 6, 7 Feb 60, p 2)

Disease and Pest Control

The chemical control of weeds on cornfields was tested in 1959 on a total of 2,000 cadastral yokes. Only imported [Swiss] herbicides were used in these tests. The Plant Protection Research Institute (Novenyvedelmi Kutato Intezet) and the Heavy Chemical Industry Research Institute (Nekemseyvilippu Kutato Intezet) have now developed an aminotriassin domestic herbicide that produces the same effect as the foreign products. The new domestic herbicide will undergo extensive small- and large-plot comparison tests in the spring of 1960. (SF, No 6, 7 Feb 60, p 12)

The following spraying materials are available to private farmers in 1960: "Wofatox Spritzpulver" and "Ekatox 20", both are insecticides containing parathion; "Melipax," a selective insecticide not injurious to bees; "DNRE Paste" and "Vitigran," fungicides, primarily against Peronospora, substitutes for blue stone; "Sulfex" against monilia; and "Nikocon F," a moistening material. Of the products mentioned above "Vitigran" is an import containing cupric oxychloride. (SF, No 8, 21 Feb 60, p 2)
The following table gives the shelf lives of the various plant protection products available in Hungary. The shelf life must be computed from the date of production.

<table>
<thead>
<tr>
<th>Product</th>
<th>Shelf Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCH powder</td>
<td>0.5</td>
</tr>
<tr>
<td>HCH spraying material</td>
<td>0.5</td>
</tr>
<tr>
<td>&quot;Krezonit F&quot;</td>
<td>0.5</td>
</tr>
<tr>
<td>DNRB powder</td>
<td>1.0</td>
</tr>
<tr>
<td>Caterpillar glue</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Hungaria Matador&quot; [50% DDT]</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Mevspo&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Permit&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Mikerol D 10&quot; powder</td>
<td>1.0</td>
</tr>
<tr>
<td>Cupric lime powder</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Hollo 10&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Hungaria Matador 10&quot; powder</td>
<td>2.0</td>
</tr>
<tr>
<td>&quot;Hungaria Matador 10&quot; spraying material</td>
<td>2.0</td>
</tr>
<tr>
<td>Grafting wax</td>
<td>5.0</td>
</tr>
<tr>
<td>&quot;Darsin&quot;</td>
<td>5.0</td>
</tr>
<tr>
<td>&quot;Arvalin&quot; rodent poison</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Arvalin&quot; leuse poison</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Dikonirt&quot; herbicide</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Fuklasin P&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Germicain&quot; powder for dressing seeds</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Higozan&quot; seed dresser</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Krezonit E&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Sulfarol T&quot;</td>
<td>1.0</td>
</tr>
<tr>
<td>&quot;Mikerol D 20&quot; powder</td>
<td>2.0</td>
</tr>
<tr>
<td>Fruit-tree oil</td>
<td>2.0</td>
</tr>
<tr>
<td>&quot;Neopal&quot;</td>
<td>2.0</td>
</tr>
<tr>
<td>&quot;Novenda&quot;</td>
<td>2.0</td>
</tr>
<tr>
<td>&quot;Sulfarol&quot;</td>
<td>2.0</td>
</tr>
<tr>
<td>Copper sulphide powder</td>
<td>4.0</td>
</tr>
<tr>
<td>Tree surgeon's tar</td>
<td>5.0</td>
</tr>
<tr>
<td>Nicotine</td>
<td>5.0</td>
</tr>
<tr>
<td>Blue stone</td>
<td>(unlimited)</td>
</tr>
<tr>
<td>Iron vitriol</td>
<td>(unlimited)</td>
</tr>
<tr>
<td>Zino vitriol</td>
<td>(unlimited)</td>
</tr>
<tr>
<td>&quot;Fioristella&quot; sulphur powder</td>
<td>(unlimited)</td>
</tr>
<tr>
<td>Sulphur powder</td>
<td>(unlimited)</td>
</tr>
<tr>
<td>Potash soap</td>
<td>(unlimited)</td>
</tr>
</tbody>
</table>

(FEB, No 5, 5 Feb 60, pp 15-16)
According to FM Decree No 3/1960, Hungary's plant quarantine service has facilities for examining [import and export shipments] in Budapest and at the border stations of Bihareresztes, Hegyeshalom, Hitamemeti, Kolabla, Komarom, Lokoshaza, Magyarboly, Mohacs, Murakoresztor, Rajka-Rusovce, Roska, Somonkujfalva, Soprom, Szantgotthard, Szob, and Zashony. (MM, No 4-5, 3 Feb 60, p 21)

In 1959, Hungary's state farms observed 68,780 cadastral yokes of their corn acreage in order to determine the infection rate of the European corn borer and the amount of damage caused by it. On the basis of the data supplied by the state farms in the various magyek, their national average infection rate can be estimated at 22.2 percent. The corn borer caused an average production dropout of 6.3 percent, the equivalent of 1.35 quintals of shelled corn (May weight) per cadastral yoke. The total production dropout on the 68,780 cadastral yokes was 92,500 quintals, valued at 19.5 million forints.

The state farms have begun a three-year (1960-1962) study to determine the extent to which the European corn borer can be controlled by shredding the cornstalk and plowing it under for fertilizer. (MM, No 3, 6 Feb 60, pp 16-17)

Ilona MÁTYÁSÖSZKI of the Plant Quarantine Laboratory (Zarazolgalati Laboratorium) reports that the 1959 infection rate of the European corn borer was high in Csongrad, Bekes, Nagrad, Fejer, Gyor-Sopron, and Pest Megyek; moderate in Szabolcs, Hajdu, Szolnok, Haves, Borsod, Komarom, Gyor, Vas, Fejer, and Tolna Megyek. The forecast for 1960 conforms to the 1959 pattern, but weather favorable for the development of the larvae may cause a further increase.

On the national average, the total acreage infected by wireworms in 1959 increased in comparison to the preceding years. Conditions for their development were favorable. Heavy occurrences can be expected in 1960 in Gyor-Sopron, Vaszprem, Fejer, Pest, Bacs-Kiskun, and Hajdu-Bihar Megyek. (A heavy occurrence means more than 4.1 larvae per square meter.)

Occurrences of pseudo-wireworms (Opatrum sabulosum L., Omophilus rugosocollis Brulle, Omophilus proteus Krisch, and Peditus femolaris L.) in 1959 were light in all regions of Hungary, ranging to moderate in some areas. The 1960 forecast, moderate occurrences in some regions. (MM, No 3, 6 Feb 60, pp 17-18)
The following is an abstract of an article entitled "The 1960 Forecast for Lucerne and Clover Parasites." Its author is Sandor CABELLO of the Plant Quarantine Laboratory.

Occurrences of Sitona were noted everywhere in Hungary in 1959. The weather conditions were favorable for its development.

In 1959, there was a considerable increase in the occurrences of the Otiorrhychus ligustici, particularly in the foremost lucerne regions.

Weather conditions in 1959 were generally favorable for the development of the Contarinia medicagini.

Depending on the weather conditions, increases can be expected in the occurrences of the three parasites mentioned above, particularly of the Otiorrhychus ligustici. (MM, No 4, 22 Feb 60, p 15)

In another report CABELLO gives the 1960 forecasts for the potato beetle and two clover parasites.

The potato beetle is spreading, particularly in the foremost potato regions. Depending partially on weather conditions, heavy infections (over one beetle per square meter in the autumn of 1959) are forecast for Györ-Sopron, Vas, Zala, Komarom, Fejer, Tolna, Bacs-Kiskun, Pest, and Szabolcs-Szatmar Megye.

In 1959, occurrences of the Apion apricans Herbst, and of the Apion aestivalis Germ., were especially heavy in the northwestern part of the Trans-Danubian Region, with slight or occasional moderate occurrences in the other regions. The 1960 forecasts agree with the 1959 pattern. (MM, No 5, 7 Mar 60, p 17)

Zoltan KLEMENT of the Plant Protection Research Institute (Növényvédelmi Kutató Intezet) and Janos LEHOCZKY of the Plant Quarantine Laboratory are the authors of an article entitled "The Bacterial Blight of Peas in Hungary," an abstract of which is given below.

The bacterial blight of peas has been observed in Hungary on several occasions since 1953, but previous efforts to identify its cause were unsuccessful. The authors have isolated the pathogen and have identified it as Pseudomonas pisi Sackett.
The biochemical properties of their strains differ somewhat from the findings of other authors, an indication that the bacterium is not of a homogenous species. There is reason to believe that this parasite is carried by the Sitona insect.

The fact that the pathogen has been positively identified is of special importance because Hungary exports peas. Most importers specify that the shipments must be free of Pseudomonas pisi bacteria. (N, No 1, Feb 60, pp 59-66)

Geza KAISER, director of a state vineyard in Balatonfured, reports that vine mildew caused considerable damage to Hungary's 1959 grape crop, particularly in the Badacsony, Balatonfured, and Csopak wine regions. The damage amounted to 25 percent in the vineyards that were sprayed and dusted four to five times, with a total of 28 kilograms of chemicals per cadastral yoke. Where the vineyards received only the usual one or two treatments, the damage ranged from 50 to 60 percent.

The favorable weather conditions in years past have led the plant protection experts and winegrowers to believe that the behavior of Peronospora and mildew—the two major parasites of Hungary's vineyards—have been fully explored and completely controlled. The outbreaks of mildew in 1959, however, did not follow the usual pattern. Whereas in other years mildew always occurred on the same plots or in the same vineyards, in 1959 it spread to new areas. The viability of the fungi must be far stronger than was believed. (A, No 2, Feb 60, pp 39-42)

An article by Laszlo LOVEREKOVICH, entitled "The Application of Serological Methods in Plant Virology," reviews the international scientific literature on the use of sera for determining plant viruses and also lists Hungary's research efforts in this field.

Hungarian researcher J. SZIRMAI developed in 1947 an immune serum for determining the potato X-virus.

In 1954, Andras KOVACS of the Plant Breeding and Crop Production Research Institute in Sopronhorpacs (Sopronhorpcsai Novenytermesztési es Novenytermesztési Kutato Intezet) developed a serum for determining the virus that causes sugar beet blight. The institute is still producing this serum.

The Plant Protection Research Institute began its sero-
logical research fairly recently. Within a comparatively short time the institute has worked out a micro-method for determining the potato X-virus. With this method it is possible to detect the virus in minute quantities (as low as 0.0006 milliliter) of potato juice.

Istvan SARVÁZI and his co-workers at the Danube-Tisza Region Agricultural Experimental Institute (Duna-Tiszakozi Mezogazdasagi Kiserleti Intezet) in Kecskemét have developed immune sera that react with the X, Y, and S viruses, and with the tobacco mosaic virus. The institute is producing these sera not only for its own use but for the other scientific research institutes as well. The sera are lyophilized for better transportation and storage. (N, No 1, Feb 60, pp 89-94)

In an article entitled "The Agricultural Uses of Gibberellin and the Studies Preceding Its Domestic Production," [director] Dr Gábor UBRIZSY and [researchers] József VOROS and Zoltán KIRÁLY [of the Plant Protection Research Institute] review the discovery of gibberellin, its chemistry, its effects on plant life, and the studies undertaken by the Plant Protection Research Institute in 1957 to determine the feasibility of the domestic production of gibberellin. It is noted that gibberellin production has already started in Hungary. (N, No 1, Feb 60, pp 79-88)

Weather and Crop Conditions

The following is an abstract of an article by Dr Alfred ZACH, entitled "Comments on the Weather Balance for 1959."

The weather in 1959 deviated from the average pattern and proved very unfavorable for agriculture. The annual mean temperature was 0.5 degree centigrade above the average. But the higher temperatures occurred in the months that are usually cold or cool, while in the spring and summer months the temperatures were lower than usual.

The precipitation pattern also differed considerably from the average. There was an abundance of precipitation in the months that are usually dry, but practically no precipitation was measured in the months when it was needed the most. On a national scale the annual total precipitation was 100 milli-
meters below the average, and even less in some areas (Nyíregyháza, 150 millimeters below the average; Debrecen, 200 millimeters; Szombathely, 260 millimeters).

In August-October 1959, Hungary had an unprecedented drought. In October, for example, only 1.0 millimeter of precipitation was measured in some areas. There was an abundance of precipitation in December 1959, but in the form of rain instead of snow.

A severe cold spell started on 10 January 1960. Fortunately, it was preceded by snow which covered and protected the winter crops from frost. (MM, No 3, 8 Feb 60, pp 9-10)

Istvan KULIN [of the National Meteorological Institute (Orszagos Meteorologiia Intezet)] reports that in the period 16-30 January 1960 the cold spell, which began on 10 January, continued for some time but was gradually followed by mild spring-like weather.

The maximum daytime temperatures in the first part of this period were -3 to -8 degrees centigrade. The subsequent alternating masses of cold and warm air caused the noontime temperature to vary from -1 and -6 to 1 and 6 degrees centigrade. After 23 January, the warm masses of air became dominant, causing maximum daytime temperatures of 14 to 16 degrees centigrade in the Trans-Danubian Region and of 6 to 10 degrees centigrade in the eastern half of Hungary.

Minimum nighttime temperatures of -12 to -18 degrees centigrade were measured, at ground level, after January 15. Toward the end of the month, however, the minimum nighttime temperatures in many areas failed to reach the freezing point.

There was very little precipitation in the second half of January, only 1.0 to 2 millimeters of snow and rain in some areas.

On 16 January, up to 20 centimeters of snow covered the Trans-Danubian Region, and 10 to 12 centimeters in Eastern Hungary. Most of the snow disappeared by 29 January.

The weather in January 1960 was favorable for the winter crops. (MM, No 3, 8 Feb 60, p 18)

KULIN's second report covers the period 30 January-12 February 1960. The weather during this period was very cold, with
considerably less snow than during the January cold spell.

The maximum daytime temperatures were below the seasonal average. In the first eight days of February 1960, maximum daytime temperatures of -1 to -5 degrees centigrade were measured everywhere in Hungary. The weather warmed up suddenly on 9 February. On 11 February, for example, the maximum daytime temperatures ranged from 3 to 8 degrees centigrade.

During the first eight days of February, minimum nighttime temperatures of -12 to -18 centigrade were measured at ground level, reaching -19 and -20 degrees centigrade in some areas.

The mean temperature for January 1960 was 0.5 to 1.5 degrees centigrade below the seasonal average. The total hours of sunshine were 5 to 10 hours below the average.

Total precipitation in January 1960 was more than 25 millimeters in most regions, but less than this amount along Hungary's western border and in some parts of Northern Hungary.

Although 1.0 to 2 centimeters of snow covered the fields in some areas, the general absence of snow during the severe cold wave in the first eight days of February may have affected the more sensitive winter crops. (MM, No 4, 22 Feb 60, p 6)

The third report by KULIN covers the period 13-26 February 1960. The weather during this period was warmer than the seasonal average, with abundant precipitation.

The maximum daytime temperatures after 9 February were above the freezing point, rising to temperatures of 10 to 13 degrees centigrade on several days.

Minimum nighttime temperatures of -4 to -5 degrees centigrade at ground level were reported only in some areas.

Total precipitation during the period 1-26 February 1960 was 15 to 25 millimeters in the northern megyes, over 25 millimeters elsewhere, and over 50 millimeters in the southeastern part of the Trans-Danubian Region.

The mild weather and abundant precipitation during the period 13-26 February 1960 were favorable for agriculture. (MM, No 5, 7 Mar 60, p 30)
The following is an abstract of the crop reports submitted by the magye chief agronomists from five magyek.

Zala Megye: No damage to the 70,000 cadastral yokes of winter grain (here exceptionally the fields were covered with 3 to 4 centimeters of snow during the February cold wave); a 40-percent dropout in the seeded lucerne can be attributed primarily to the autumn drought.

Borsod Megye: according to tentative estimates, frost damaged 10 to 15 percent of the 260 cadastral yokes of Italian grain varieties planted for comparison tests.

Bacs Megye: about 50 percent of the winter grain on the TSZ's and about 75 to 80 percent of the private farmers' grain acreage must be treated with artificial fertilizers [i.e., the crops were damaged by the frost].

Veszprem Megye: a portion of the winter barley acreage will have to be plowed up; the winter wheat will probably recuperate.

Bakas Megye: no damage to the winter wheat, some damage to the winter barley. [However,] the TSZ's are treating their winter wheat with artificial fertilizers. (SF, No 10, 6 Mar 60, p 2)

Plant Breeding

Janos SZEKACS, secretary of the Council for the Classification of Plant Varieties (Novenyfa,taminosito Tanacs) reports that the following plant varieties have been submitted for classification:

The Martonvasar No 42 hybrid corn, the earliest maturing hybrid.

The Szarvas No 2 hybrid silage corn, especially suited for irrigation.

The Kisvarda No 263 potato, an intermediately maturing variety noted for its high yield.

The Somogy "kifli" potato is an early maturing variety especially suited for human consumption.
The Szeged No 9 hemp has the highest fiber yield.

The Krasnodar No 1646 sunflower, imported from the Soviet Union.

The Viera fiber flax, imported from Holland.

The I. Sz. I. [presumably the Iregszemcs No I] soybean is an early maturing variety and is noted for its high yield.

The Hatvan salad pepper is an early maturing green pepper variety of moderate yield, especially suited for forcing. (MM, No 5, 7 Mar 60, p 30)

Grains

The state farms in Csongrad-Bekes Megye tested Italian wheat varieties on 400 cadastral yokes in 1959. The yields averaged 30 quintals per cadastral yoke. In 1960, the experiments are being continued on 6,000 cadastral yokes. Although the fields were not covered with snow, frosts of -10 to -12 degrees centigrade have caused no apparent damage to the crop seeded in the autumn of 1959. (SF, No 9, 28 Feb 60, p 4)

The results of the 1959 corn comparison tests on large plots show good agreement with the results obtained in the 1959 small-plot comparison tests. (MM, No 4, 22 Feb 60, pp 11-13)

ORKI researcher Jozsef SIMON urges prompt government action to improve the supply of selected and 100-percent pure rice seed for planting.

Most state farms and Tsz's do not find it profitable to grow seed rice. This is due to the fact that there is no government-approved rice variety in Hungary, only licensed foreign varieties. The bonus for growing the seed of government-approved varieties is 500 forints per quintal, in contrast to 250 forints per quintal for the licensed varieties. (MM, No 4, 22 Feb 60, p 18)
Oil and Fiber Crops

The Nyirseg Agricultural Experimental Institute (Nyirseg Agricultural Institute) has developed a new sunflower variety, a crossbreed of the Soviet "Krasnodar" and the Hungarian "Szabolcs Beta" varieties. Especially suited for the region bordered by the Tisza and Szamos Rivers, the new sunflower variety is more resistant to plant diseases, gives a 10-percent higher seed yield (10 quintals per cadastral yoke). The oil content of the seed is also higher (40 percent). (AG, No 2, Feb 60, p 12)

Forage Crops

The following is an abstract of an article by Istvan DETREK, entitled "The Substantial Reserves in the Management of the State-Farm Meadows and Pastures."

The state farms have a total of 286,561 cadastral yokes of meadows and pastures, almost 20 percent of their entire acreage. In 1958, this area yielded feed in the equivalent of less than 4 quintals of hay per cadastral yoke. That year had been an exceptionally dry one. But even in 1959 the average yield per cadastral yoke was less than 5 quintals of hay.

According to their 1960 production plans, the state farms intend to average 10.7 quintals of hay per cadastral yoke on their meadows, and 25 quintals of green feed per cadastral yoke of pasture. The planned combined total average, expressed in hay, is 7.1 quintals per cadastral yoke.

In comparison to years past, the planned increase is significant yet feasible. This is confirmed by the experiments which Kossuth Prize winner Sandor HERKE made on the calcareous alkaline meadows and pastures in the region bordered by the Danube and Tisza Rivers. Over a seven-year period he averaged 13.3 quintals of hay per year, in contrast to 4.7 quintals on the control plots, merely by using 2 quintals of Pet Salt [a nitrogenous fertilizer] per cadastral yoke. On irrigated pastures and meadows, with the same doses of artificial fertilizer, the average was 25.1 quintals of hay per cadastral yoke. (AG, No 2, Feb 60, pp 6-7)
Fruits and Vegetables

[See also OVER-ALL PLAN AND PERFORMANCE DATA, COLLECTIVIZATION OF AGRICULTURE, and MARKETING OF AGRICULTURAL PRODUCTS.]

According to top megye officials, Szabolcs-Szatmar Megye [the foremost potato producer in Hungary] was unable to fulfill the 1959 bulk-purchasing plan for potatoes because the private farmers grew potatoes on 14 percent of their total acreage, while the TSZ's grew them on only 5 percent of their plowland acreage.

The shortage of seed potatoes can be attributed to large-scale virus infections. Many TSZ's were able to sell their seed potatoes, grown from guaranteed bonded stock, only for consumption or for industrial purposes. Fifty-four TSZ's in the megye are suing for over 3,000,000 forints of damage, caused by the infected seed potatoes. Under such conditions the TSZ's are unwilling to sign production and delivery contracts for seed potatoes.

Several years will be needed to solve the present potato bottleneck. Production and delivery contracts will be signed for potatoes in 1960. The experiments on growing potatoes as a second crop, after barley, are promising. Effective methods must be devised to curb the potato viruses. The potato beetle is a carrier of this infection and must also be controlled. Since the blades used to cut the potatoes for seeding may also transmit the infection, the state farms are using only whole potatoes for seeding. (J, No 8, 21 Feb 60, p 14)

Hungary's asparagus acreage increased from 100 cadastral yokes in 1950 to 1,258 cadastral yokes in 1959. The 1960 acreage is expected to exceed 2,000 cadastral yokes. In the winter of 1959-1960, the farmers' consumer cooperatives negotiated contracts for nearly 600 cadastral yokes of new asparagus fields. This acreage includes 550 cadastral yokes farmed by the TSZ's, and 50 cadastral yokes on private farms. At average yields, the new acreage will provide 600 to 800 quintals of asparagus per year for export. (FEB, No 4, 29 Jan 60, pp 9-10)
LIVESTOCK PRODUCTION

[See also OVER-ALL PLAN AND PERFORMANCE DATA, and COLLECTIVIZATION OF AGRICULTURE.]

Disease and Pest Control

The FM has licensed the Chinoin Pharmaceutical and Chemical Products Factory (Chinoin Gyogyszer es Vegyeszeti Termek Gyar- ra) to manufacture "Sedakolin," a sedative and antispasmodic injection used in veterinary medicine. (AGS, No 9, 26 Feb 60, p 62)

The FM has also licensed the Chinoin Pharmaceutical and Chemical Products Factory to manufacture Vitamin D-3 injections for use in veterinary medicine. A previous license for the production of Vitamin D-2 injections has been revoked. (ME, No 8, 24 Feb 60, p 58)

The FM has authorized the Phylaxia State Vaccine Producing Institute (Phylaxia Allami Oltoanyagtermelo Intezet) to market a vaccine against the enterotoxication of sheep. (ME, No 8, 24 Feb 60, p 58)

Hogs

Janos MARKOVICS, head of the FM Chief Directorate of Livestock Breeding (FM Allattanyeztasi Feigazgatosaga) urges the old and the new TSZ's to promote the raising of hogs by their members on the household plots and to sign contracts with them for the pigs, which the TSZ's can fatten and sell in 1961. In this manner the TSZ's will be able to develop their joint hog stock, without having to buy pigs or sows through the TEGI. (J, No 7, 14 Feb 60, p 3)

An article by TEGI official Sandor BALLA, entitled "In Defense of the Mangalitsa Breed," advises the new TSZ's against switching from the Mangalitsa to the Hungarian Yorkshire breed.
The new TSZ's have not yet ensured the regular supply of feed needed for their hog stocks. Under these conditions it is safer to raise the more sturdy Mangalitsa breed than the more sensitive Hungarian Yorkshires. It is true that the demand for porker-type hogs is increasing on both the domestic and foreign markets, but Mangalitsa hogs are still needed in the salami industry and for lard and bacon. (MM, No 5, 7 Mar 60, p 28)

In view of the general shortage of pigs on the TSZ's, Otto BAKSA recommends that the sows intended for fattening be made to bear one litter each before they are fattened to the desired weight and sold. This method has proven satisfactory in the Soviet Union. The fattening time is prolonged by two or three months, but five to eight pigs are produced, at a comparatively low specific cost. Spaying becomes unnecessary, and its hazards and weight losses are avoided. If the sows intended for fattening prove satisfactory, they may be retained as brood sows.

The author warns the TSZ’s to use this method only on the sows from their own stock. The young sows of unknown origin supplied by the TEGI may be infected and might lose their litters. (MM, No 5, 7 Mar 60, p 28)

Cattle

The following is an abstract of an article by Dezso BÁCSÓ and Antal SZUROMI [both of the Mosonmagyaróvar experimental farm], entitled "The Amount and Composition of the Milk Yield from Piebald Hungarian x Kostroma and Grey Hungarian x Kostroma Cows."

The quality of a dairy cow should not be judged on the basis of her milk yield during one outstanding lactation period. A persistent high milk yield over several lactation periods is a more desirable trait. In this respect the F-1 crosses (piebald Hungarian mothers x Kostroma bulls) appear superior to the piebald Hungarian mothers, although their data are available for only 3.0 to 3.5 lactation periods.

The F-1 cows that have reached the age of six years produced an average of 20,134 kilograms of milk, containing 3.95 percent butterfat. Their piebald Hungarian mothers were kept for 8.6 years; in 5.4 lactation periods they averaged 18,449 kilograms of milk containing 3.92 percent butterfat.
The percentage of butterfat in the milk is important, but under Hungarian conditions it should not be regarded as the most important aim in cattle breeding. Thus, it would not be advisable to raise the present goal of 4 percent butterfat to 5 percent, even at the cost of further increases of the average milk yield.

Butterfat contents of more than 4 percent have been achieved by 42 percent of the F-1 cows. In their first lactation periods they produced 194.5 kilograms of butterfat each, a 58-percent increase over the 114 kilograms averaged by their mothers. This increase, however, was achieved by a higher average milk yield rather than through a richer butterfat content. (A, No 2, Feb 60, pp 43-45)

**Horses**

[For plans to reduce Hungary’s horse stock by 60,000 head in 1960, see OVER-ALL PLAN AND PERFORMANCE DATA.]

An article by horse breeding inspector György BANOS, entitled "Horse Breeding on the TSZ's," reports that the TSZ's are reluctant to breed horses because of the high cost. This will cause a shortage of horses in one or two years. Experience shows that the TSZ's that are adequately mechanized should maintain at least one team of horses per every 50 cadastral yokes of their acreage. On the new TSZ's, the desirable ratio is one team for every 30 to 35 cadastral yokes. (MM, No 4, 22 Feb 60, p 29)

In 1951, a portion of the Lippitzaner stock of the Babolna stud farm was transferred to Csipkeskut, on the Bukk Plateau. The rugged mountainous terrain helps to preserve and improve the traits of this Hungarian breed. The new stud farm had 48 brood mares and over 100 foals. Since the effects of the Bukk terrain have proven extremely satisfactory, the rest of the Lippitzaner stock (70 brood mares and their foals) has also been transferred "recently" to Csipkeskut. (SF, No 10, 6 Mar 60, p 7)
Sheep

The following is an abstract of an article by Jozsef MOLNAR, Dr Jozsef JUHASZ, and Otto SOOS, entitled "Let Us Select the Merino Sheep on the Basis of Their Wool Yield."

The [Second Five-Year Plan] calls for increases of 30 to 35 percent in the sheep stock, and of 50 to 55 percent in wool production. These goals can be achieved by the following means:

1. Better conditions of keep, primarily on the TSZ's.

2. Extensive offspring testing and the use of more tested rams.

3. Selection based solely on the annual wool yields.

Selection on the basis of breed registration requirements has lost its significance with respect to the further development of Hungary's sheep stock. Sheep that yield a considerable amount of wool are often rejected because they lack the necessary number of points required for registration. These requirements include body weight, general appearance, dimensions, the shape of the horns, etc. Comparatively little attention is given to the wool yield, which is of primary economic importance. Because of formalistic requirements it often happens that the commercial flocks have higher average wool yields than the registered breed flocks.

In addition to the wool yield, the milk yield and carcass quality of the sheep are also important. But selection for breeding purposes should be based entirely on the wool yield, because it is an almost hopeless task to develop these traits simultaneously. It must be admitted that, for example, the Taigaya is a universal breed that produces good mutton and is also a good milker. But its annual wool yield is lower than that of the Merino breed.

Emphasis on the annual wool yield as the basis of selection for breeding purposes is expected to cause a slight deterioration in the quality of the wool produced.

The editors note that this article is the first of a series to be published in the course of the open debate on sheep breeding which Magyar Mazogazdasag is sponsoring. (MM, No 3, 8 Feb 60, pp 24-25)
Poultry

Hungary's hatching stations will supply the TSZ's, TSZ members and private farmers with 39 to 35 million day chicks, ducklings, goslings, and turkey chicks in 1960, three million more than in 1959. The TSZ's will be given first preference. They will get their supply through the megye council agricultural sections. The private farmers will get their stock directly from the hatching stations.

The TSZ's may sign production contracts with the poultry processing enterprises. The minimum live weights per head at delivery are as follows: 0.60 kilogram for chickens delivered in April and May; 0.80 kilogram, in June and July; 0.90 kilogram, in August; 1.0 kilogram, in September-December. The delivery prices per kilogram of live weight are as follows: 27 forints in April and May, 25 forints for the period 1-18 June, 24 forints for the period 19-30 June, 23 forints for the period 1-16 July, 22 forints for the period 17-31 July, 21 forints in August, 20 forints in September, and 19 forints for the period 1 October-20 December.

In the case of turkeys delivered on a contract basis, the minimum live weight required is 5 kilograms per cock, and 3.5 kilograms per hen. The prices per kilogram are as follows: 17 forints for the period 1-19 November, and 18 forints for the period 20 November-20 December.

The prices per kilogram for geese fattened at least five weeks are 20 forints for the period 1 August-31 October, and 19 forints for the period 1 November-20 December.

From 1 August through 20 December, the price of ducks fattened over a period of three to four weeks will be 19 forints per kilogram.

The TSZ's are entitled to bulk-delivery bonuses if they deliver at least 100 kilograms of chickens, 150 kilograms of ducks, or 250 kilograms of geese or turkeys per shipment. The bonuses are three forints per kilogram for chickens, and two forints per kilogram for other poultry.

A 10-percent bulk-delivery bonus is offered the TSZ's if they ship the poultry processing enterprises at least 5,000 eggs per year.

The poultry processing enterprises will reimburse the TSZ's for the freight charges and will allow them a one-percent weight loss during shipping. (SF, No 7, 14 Feb 60, p 7)
An FM decree regulates the prices of day chicks and of eggs suitable for hatching. [FM Decree No 4/1960.]

Over and above the current prices paid by the government bulk-purchasing network for edible eggs, the hatcheries will pay the following premiums for eggs suitable for hatching:

a 90-percent premium for the eggs supplied by the poultry breeding plants from certified purebred stock during the period 1 February-30 April;

a 60-percent premium for the eggs from certified purebred stock supplied during 1 February-30 April by the plants for the reproduction of brood poultry, and for the eggs from first-grade crossbred stock supplied at any time of the year;

a 50-percent premium for the eggs from certified purebred stock supplied from 1 May through 31 January by the poultry breeding plants or the plants for the reproduction of brood poultry, and for the eggs from second-grade crossbred stock supplied at any time of the year;

a 40-percent premium for the eggs supplied by poultry farmers or farms whose stock is purebred;

a 30-percent premium for the eggs supplied by poultry farmers or farms whose stock is not purebred.

For poultry other than chicken the price of eggs suitable for hatching are based on the local free-market prices. The poultry breeding plants are entitled to a 30-percent premium for duck eggs and to a 50-percent premium for goose, turkey or Guinea fowl eggs. For the same categories the premiums payable to the plants for the reproduction of brood poultry are 15 and 30 percent, respectively.

The consumer price of day chicks will be determined by the magye council agricultural sections, with due consideration for the recommendations of the hatching stations and marketing organs. A premium of 10 to 40 percent can be added to the local market price of turkey and Guinea chicks, ducklings, and goslings. (SF, No 7, 14 Feb 60, p 6)

In an article describing the cage method for raising spring chickens, Karoly HOMITZ warns that Hungary's poultry farms must increased the average weight of their dressed chickens from the present 0.75 to 1.15 or 1.20 kilograms if they wish to compete on the foreign markets. The cage method is suitable for this purpose. It is being used by the Hungarian poultry enterprises. (A, No 2, Feb 60, pp 49-53)
HUNTING AND FISHING

Game

FM Decree [No 5/1960, published in the No 6 (10 February 1960) Issue of ME] contains the service regulations for the game wardens employed by the hunting associations. The decree regulates the game wardens' employment, duties, rights and obligations, and the conditions under which they may keep and use firearms. (SF, No 7, 14 Feb 60, p 4)

A group of 12 Belgian citizens, mostly businessmen, attended a five-day boar hunt in the Visegrad area. Some of them had hunted in Hungary in 1959. (SF, No 7, 14 Feb 60, p 8)

FM Decree No 6/1960, issued in agreement with the OEF, regulates the procedure for permitting foreign hunters to shoot game in Hungary.

Foreign hunters who wish to shoot game on the hunting grounds which the state forestry bureau supervise and lease to the hunters' associations must first sign a contract with the MAVAD, under the terms specified by the OEF.

The hunters' association that wishes to invite a foreign hunter must apply for permission to the OEF, through the director of the state forestry bureau concerned. In his recommendation to the OEF the state forestry bureau director must certify that suitable accommodations are available for the foreign guest. The director must also recommend the number, sex and quality of the game that the foreign guest may be allowed to shoot. If the application is for stag, the approximate weight of the antlers must also be reported.

If the OEF approves the application, it informs the MAVAD. The latter then signs a contract with the hunters' association. On the basis of this contract the OEF issues a temporary hunting license for the foreign guest. This license is valid only for the hunting area and game specified and must be retained by the hunters' association after the hunt. (EE, No 6, 19 Feb 60, p 36)
To promote better game breeding in the state forests, the OEF has established the Kalman KITTENBERGER Cup. It will be awarded each year to the state forestry bureau on whose territory the stag with the best antlers is shot. Foreign hunters may be issued temporary hunting licenses only if they agree to enter their trophies for the annual awards. (EE, No 9, 26 Feb 60, pp 41-42)

The results of the 1960 boar hunts were 100 percent better than in 1959. A total of 140 foreign hunters shot more than 400 boar and 15 moufflon. Several foreign hunters are expected in February 1960. They are coming to hunt boar, moufflon, and stag unsuitable for breeding purposes. (EE, No 2, Feb 60, p 10)

Andor STANDEISKY cites advertisements from American newspapers to illustrate the wide demand for Hungarian pointers in foreign countries. He recommends that more attention be devoted to the breeding of Hungarian pointers for export purposes. (MM, No 4, 22 Feb 60, p 28)

Fish

According to PM Decree No 7/1960, the 1960 fishing seasons and restrictions will be the same as in 1959. (AGE, No 9, 26 Feb 60, p 63)

Hungary's fishermen's cooperatives caught a total of 16,633 quintals of fish in 1959, in comparison to 16,508 quintals in 1958. But for the low water level of Hungary's streams during the 1959 autumn drought, the increase would have been higher. This is evident from the fact that in the first and second quarters of 1959 the fishermen's cooperatives caught 700 quintals of fish more than in the first half of 1958.

The improvement in the quality of the catch is reflected in the higher ratios of carp and pike perch. Carp accounted for 20.2 percent (3,363 quintals) of the 1959 catch, in contrast to 15.5 percent in 1958. The ratio of pike perch increased from 3.4 percent in 1958 to 3.6 percent (504 quintals) in 1959. Owing to water pollution, stream regulation, and dam constructions, the sturgeon catch dropped from 124 to 122 quintals; the barbel catch, from 512 to 472 quintals. (H, No 2, Feb 60, p 40)
Five fishermen's cooperatives used electric fishing machines in 1959. Their combined total catch was 6,423 quintals, including 600 quintals (9.3 percent) caught with the machines. On Lake Velence, where the conditions for fishing with machines are the most favorable, 140 quintals of fish were caught in this manner. (H, No 2, Feb 60, p 38)

The following is an abstract of an article by N.P., entitled "The Seventh Year of Fish Breeding on the TSZ's."

The Party and government resolution to develop fish production on the TSZ's was adopted in 1953. The fishponds (including some natural lakes) operated by the TSZ's in 1954 covered an area of 727 cadastral yokes. The average net yield was 1.03 quintals per cadastral yoke.

At the outbreak of the 1956 "counter-revolution," the TSZ's were raising fish on 2,861 cadastral yokes of ponds. The average net yield for that year is estimated at about 1.8 quintals per cadastral yoke.

Owing to the dissolution of many TSZ's during and immediately after the 1956 revolt, some TSZ fishponds were taken over by the Fishponds Trust (Halgazdasagi Troszt) and other sectors. Thus, the total acreage dropped to 2,266 cadastral yokes in 1957, but the average net yield rose to 1.77 quintals per cadastral yoke.

In 1958, the TSZ fishpond acreage was 3,144 cadastral yokes; the average net yield, 1.41 quintals.

Because of the large-scale development in collectivization, the TSZ's in 1959 were able to devote less time and effort to fish production. The populated acreage dropped to about 2,200 cadastral yokes, but the average yield was 2.08 quintals per cadastral yoke. The TSZ's hatched 75.2 percent of the fry used for populating their ponds in 1959. (H, No 2, Feb 60, p 23)

The following is an abstract of an article by Sandor SOLDENYI, entitled "Let Us Further Improve the Supply of Fish."

The annual fish yield of Hungary's natural waters and fishponds can be estimated at 1,200 railroad carloads. In view of the fact that fish imports balance the exports, the annual per capita consumption is 1.2 kilograms.

The state sector supplied about 67,500 quintals of fish.

Despite these increases, Hungary still has a shortage of fish in March through September.

The catering industry consumed 18,096 quintals of fish in 1958, and 20,992 quintals in 1959. These figures represent increases of 177 and 221 percent over 1954.

Hungary exported 15,467 quintals of fish in 1958, and 16,770 quintals in 1959—an increase of 58 and 72 percent over 1954. The rise in exports is not keeping pace with the increase in fish production.

Central government stockpiles supplied 8.5 million kilograms of live, iced, or deep-frozen fish in 1959. Fish bought alive from the producers totaled 69,420 quintals.

The [1959] breakdown of the domestic supply was as follows: 21 percent in the first quarter; 12 percent in the second quarter; 25 percent in the third quarter; and 42 percent in the fourth quarter [Christmas season]. (H, No 2, Feb 60, p 32)

Crab expert Dr Zoltan THURANSZKY reports that in 1958-1959 the MAVAD supplied 11,814 crab for populating the streams in Northern Hungary. Because of inadequate packing, 20 percent of the 12,000 Cambarus affinis imported from East Germany in September 1959 died in transit. The rest of the shipment was used to populate the streams in the Pilisvecsevar, Szigetszentmiklos and Szigetbuesse areas.

The author estimates that at least 50,000 crab are needed for population per year. The stock should be imported from Yugoslavia. (H, No 2, Feb 60, p 37)

AGRICULTURAL PROCESSING INDUSTRIES

Hungary’s most modern “wine combine” is being built on the Vaskut state farm, at a total cost of 12 million forints. It will be able to process and store 30,000 hectoliters of wine. The machinery is being supplied from import. (AG, No 2, Feb 60, p 26)
Government Decree No 8/1960 modifies Government Decree No 50/1958 as follows: On the containers of prepacked foods and beverages it is necessary to list the name and location of the packing plant, the name or trade-mark of the product, the net weight or volume, the retail price, and the date of packing or processing. (ACE, No 9, 26 Feb 60, p 63)

The Lepsery plant of the Agricultural Seed Producing and Supplying Enterprise (Mesogazdasagi Magtermelteto es Ellato Vallalat) processes 37 different kinds of seed. In 1960 it will supply 450 railroad carloads of seed for domestic use, and 300 railroad carloads for export. It will also process 210 railroad carloads of seed for the canning industry. (J, No 6, 7 Feb 60, p 2)

FORESTRY

[See also AGRICULTURAL FINANCES, and TRANSPORTATION AND STORAGE OF AGRICULTURAL PRODUCTS.]

Personal

Jeno MOSONYI is identified at the Party secretary of the CEF. (FP, No 2, Feb 60, p 3)

The state forestry bureaus and the lumber industry enterprises under the jurisdiction of the CEF had a total of 17 fatal accidents in 1959. The total number of accidents rose 5.2 percent over 1958, but the ratio of accidents per 1000 workers dropped from 65 to 63. (EP, No 2, Feb 60, p 9)

Forest Owners' Associations

[See also "Government Measures Concerning TSZ's," under COLLECTIVIZATION OF AGRICULTURE.]

Where the forests of the forest owners' associations are managed by the state forestry bureaus, the associations are billed only for the direct costs but not for overhead. According to a ruling of the CEF, interest on the unpaid balance of the amount owed by the associations is direct cost and must be paid by the latter. (EE, No 9, 26 Feb 60, p 44)
Forestation and Forestry Management

The following is an abstract of a joint appeal by the OEF and the MEDO32 for the fulfillment of the 1960 production plans within the state forestry bureaus.

The 1960 production plans assign the state forestry bureaus important tasks with regard to increasing their production volume, and particularly in reducing their production costs.

Discipline in planning must be rigorously enforced. It will be the primary responsibility of the state forestry bureau directors to ensure that no attempt is made to fulfill the tight production cost plans at the expense of the timber stands needed for future supply.

In accordance with the resolution of the Party and the government, one of the most important goals of the 1960 national economic plan is to improve the international balance of payments, especially with the capitalist countries. In view of the fact that lumber accounts for more than 10 percent of the total import, the state forestry bureaus must play an important role in the achievement of this goal. To counterbalance the rise in beech imports in recent years, all useful beech logs must be shipped to the sawmills and panelboard factories. The ratios of industrial timber must be increased 5 to 7 percent for logs, 8 to 10 percent for mine timber, and 50 percent for poles.

The production of mine slabs must be increased 14 percent; that of bracings, by 10 percent. A 10-percent increase is feasible in the planned output of ties for narrow-gauge railroads.

The 1960 production plans for vineyard props must be reduced by the amount remained unsold in 1959.

The volume of export lumber must be increased, provided that this does not affect the domestic supply. Over and above the 1960 production plans, 1,000 cubic meters of acacia posts, and 520 cubic meters of beech and 35 cubic meters of hornbeam slats should be produced for export.

Lumber decay must be curbed through better storage and the careful planning of the shipments.

In order to cut imports, the 1960 production quota for Christmas trees must be surpassed.
In order to ensure the supply of Hungary's cellulose industry, the state forestry bureaus must continue to surpass their poplar forestation quotas.

The state forestry bureaus must eliminate their afforestation and reforestation backlogs. Modern methods must be used, and the forestation regulations must be observed. Work in the nurseries of the state forestry bureaus must be mechanized as far as possible.

The capacity of the machine stock must be fully utilized. "Cooperation contracts" should be signed with the state farms and TSZ's to ensure the complete utilization of their joint machine capacities.

The Forestry Products Enterprise (Erdei termak Vallalat) must surpass its quotas for the export of tanning bark and dried mushrooms by at least 15 to 20 percent. The enterprise must also increase to a maximum its output of roofing cane needed for the construction of farm buildings on the TSZ's.

In 1960, the state forestry bureaus must completely liquidate the undesirable emphasis on quantity, regardless of cost. Instead they must strive to improve the quality of their production.

In view of the tight production cost norms, the productivity of labor must be increased through technical development and better planning. The practice of hiring unnecessary workers must be abolished.

In view of the farm building program on the TSZ's, the plans for the production of building lumber (and any modifications of the original quotas) must be fulfilled without failure. (EE, No 10, 4 Mar 60, pp 45-47)

Assistant university professor Géza TESZARS reports that one or two state forestry bureaus are beginning to use data obtained by aerial surveys. The Budapest bureau, for example, has recently acquired a stereotip for the evaluation of the films. (AE, No 2, Feb 60, pp 71-78)

The following areas have been declared natural preserves:

35.3 hectares of old oak stands of the "Nagyröde" in Debrecen;
60.6 hectares of the "Tilalmas Erdo" (Forbidden Forest) near Ujszentmargita, Hajdu-Bihar Magye;

7.4 hectares of the [Festetics] park in Keszthely;

17 hectares of the old park (along the shore of Lake Balaton) in Keszthely;

438.5 hectares of forests surrounding the Kekesteto in the Matra Mountains;

two stands, one 55.58 hectares, the other 135.17 hectares, near Ocsa;

106.9 hectares, remnants of a virgin forest, near Kerecsend, Heves Magye. (EE, No 10, 4 Mar 60, p 49)

On the basis of the surveys made in 1958, the state forestry bureaus are instructed to prepare 5-, 10-year, and long-range plans for converting their so-called "corrupted" forests into useful timber stands, through thinning or clear-cutting and reforestation (nursery stock or seed trees). An ONF directive lists the ten categories of corrupted forests and the methods, separately for each category, for their improvement. (EE, No 7, 12 Feb 60, pp 27-30)

The following is an abstract of an article by Zoltan MARJAI, entitled "The Supply of Red-Pine Seed in Hungary."

The red pine (Larix decidua) has proven satisfactory under Hungarian conditions, but the domestic seed supply is able to cover only 20 percent of the 1,500 kilograms needed each year. Not every imported seed is suitable. For example, the Austrian seed is of Alpine origin.

Of the 22 state forestry bureaus studied by the author, only 10 collected pine cones in 1958-1959. The cones were dried in special chambers and then threshed. The seed yield was 2.3 percent of the 134.8 quintals of cones processed. An additional 2.2 percent was obtained by cracking open the cones after threshing.

Laboratory tests made by the author showed that the threshing yield is 2.23 percent, and that 4.18 percent is left in the cones after threshing. The germinating ratio of the seed left in the cones is 31 percent, in contrast to 37 percent for the threshed seed.
The author urges that all state farms collect pine cones and harvest the seed. It is worth 1,000 forints per kilogram. The ERTI is designing a special machine for threshing the cones. (ME, No 2, Feb 60, pp 41-42)

In order to fulfill their poplar forestation quotas, the state forestry bureaus in the mountainous regions are stepping up the production of aspen seedlings in their nurseries. Aspen is the only poplar variety suitable for mountainous regions. (ME, No 2, Feb 60, pp 65-71)

In an article entitled "Stump Production with Blasting," ERTI engineer Laszlo MAKUS recommends ammonium nitrate explosives for forestry use. One such domestic explosive is Paxit. It contains 50 percent ammonium nitrate, and 20 percent of trityl, coal powder, and fine sawdust. (EZ, No 2, Feb 60, pp 60-67)

Lumber Industry

A joint appeal by the OEP and ZEPEDOSZ urges lumber industry workers to increase their efforts for the successful fulfillment and overfulfillment of the 1960 production plans.

In order to cut lumber imports, the lumber industry enterprises must produce without failure the special sizes of sawed lumber that can be cut only from imported pine logs. The export plan for 2,000 cubic meters of parquet must be completed within the time and in the quality specified. The quotas for first, second and third grade lumber must be ensured.

The 1960 output of the Mohacs Fiberboard Factory (Mohacsi Farostlamezgyar) and of Szombathely Chipboard Factory (Szombathelyi Forgacslemezgyar) will cut imports by 4,300 cubic meters in comparison to 1959. (This figure already takes into consideration the increase in consumption.) Every cubic meter by which these factories surpass their production quotas will mean an additional cubic meter cut from the import volume. Through the better utilization of the domestic beech and poplar logs, the domestic panel and furniture panel industries must cut lumber imports by 500 cubic meters. The available lumber supply already permits increases of 500 cubic meters each in the production of panels and furniture.
panels.

The Szentendre Cart Factory (Szentendrei Koosigyár) must complete on schedule the building hardware it is manufacturing for the TSZ's.

The Crate Industry Enterprises (Jadapari Vallalat) must cut lumber imports 2,000 cubic meters, by the better utilization of the imported pine lumber and by using boards with unsawed edges.

Depending on the amount of raw materials available, the production quotas of the following products may be surpassed: panels, furniture panels, veneer, barrel staves, parquet.

All lumber industry enterprises under the jurisdiction of the OEF must strictly observe their labor quotas. The average wages per hour must not be tampered with by exceeding the permissible labor quotas. (EE, No 10, 4 Mar 60, pp 46-47)

Hungary now has only two match factories, one in Budafok, the other in Szeged. The third factory, in Kecskemét, was closed. Its modernization would have required substantial investments, and the premises were needed for the expansion of a bathtub factory.

The machinery of the Kecskemét factory has been sold to Iraq, at several times the book value. The machines are being overhauled prior to their shipment to Baghdad. Three Hungarian experts will go there to supervise the installation of the machinery.

The Budafok Match Factory (Budafoki Gyufagyár) plans to export 36 million boxes of matches in 1960 and hopes increase this amount by an additional 18 million boxes. Markets for Hungarian matches are available. The only problem is the supply of the needed lumber. (EF, No 2, Feb 60, pp 5-6)
APPENDIX

List of Photographs of Special Interest

1. Mrs Jozsef NAGY, Minister of the Light Industry. (J, No 10, 6 Mar 60, p 10)

2. Valeria BENKE, Minister of Education. (J, No 10, 6 Mar 60, p 11)

3. Deputy Minister of Agriculture Andras MAGYARI. (GA, No 2 Feb 60, p 1)

4. MSZMP Politburo member Lajos FEHÉR (center), Deputy Minister Matyas SZÖKE (left), and Soviet academician LISSENKO (right). (GA, No 2, Feb 60, p 1)

5. Jenő MOSONYI, Party secretary of the OBP. (EF, No 2, Feb 60, p 3)

6. Lajos HALÁS (right), national commander of the Workers' Militia. (J, No 8, 7 Feb 60, p 19)

7-10. Exterior of the veterinary hospital in Hodmezovasary (No 7), a ferroscope for determining the location of metallic foreign substances in the bodies of animals (No 8), and the operating table of the hospital (Nos 9-10). (HM, No 4, 22 Feb 60, rear cover)

11-16. The Mosonmagyaróvar subsoil plow (No 11), the same plow with an attached chemical dispenser for soil improvement operations (No 12), the FE-3 tractor-mounted plow (No 14), the Soviet PT-2-30 three-layer plow (No 13), the K-21/1 combined cultivator and disk harrow (No 15), and a new rotary hoe (No 16). (HM, No 4, 22 Feb 60, pp 19-20)

17-19. The "Ideal" manual seed drill (No 17), the SZT-4 adapter for the PC 10-12 pneumatic grain transporter (No 18), and the VZ coupling rod (No 19). (HM, No 3, 8 Feb 60, pp 21-22)

20-22. The "Buzakalaszt" team-drawn seed drill (No 20), the NST-12 shredder and silage loader (No 21), and the ZR-3 tractor-mounted beet puller (No 22). (HM, No 4, 22 Feb 60, pp 21-22)
23-25. The HPK-6 haymower (No 23), the LB-3.5 farm cart equipped with dumping gear (No 24), and the KE-230 two-share tractor-mounted plow (No 25). (MM, No 5, 7 Mar 60, pp 21-22)

26. The boxes and labels of the various types of matches manufactured in Hungary. (BP, No 2, Feb 60, p 5)

BIBLIOGRAPHY

Arratudomany, Budapest; No 2 (February) 1960.
Allami Gazdasag, Budapest; No 2 (February) 1960.
Allami Gazdasagok Ertesitoje, Budapest; Nos 6-10 (5 February - 4 March) 1960.
Az Erd, Budapest; No 2 (February) 1960.
Erdogazdasag es Fejvar, Budapest; No 2 (February) 1960.
Erdogazdasagi Ertesito, Budapest; Nos 5-10 (5 February-4 March) 1960.
Foldmuveszetkezet Ertekesitei Ertesito, Budapest; Nos 4-9 (29 January-4 March) 1960.
Genillomas, Budapest; No 2 (February) 1960.
Halaszat, Budapest; No 2 (February) 1960.
Jarmuvek es Mezogazdasagi GerekJ, Budapest; No 1 (January) 1960.
Jovanonk, Budapest; Nos 6-12 (7 February-20 March) 1960.
Magyar Mezogazdasag, Budapest; Nos 3-5 (8 February-7 March) 1960.
Mezogazdasagi Ertesito, Budapest; Nos 4-9 (3 February-2 March) 1960.
Novenytermesz, Budapest; No 1 (February) 1960.
Szabad Fold, Budapest; Nos 6-12 (7 February-20 March) 1960.

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