

FOR OFFICIAL USE ONLY

JPRS L/10447

13 April 1982

USSR Report

AGRICULTURE

(FOUO 6/82)

FBIS FOREIGN BROADCAST INFORMATION SERVICE

FOR OFFICIAL USE ONLY

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

COPYRIGHT LAWS AND REGULATIONS GOVERNING OWNERSHIP OF MATERIALS REPRODUCED HEREIN REQUIRE THAT DISSEMINATION OF THIS PUBLICATION BE RESTRICTED FOR OFFICIAL USE ONLY.

JPRS L/10447

13 April 1982

USSR REPORT

AGRICULTURE

(FOUO 6/82)

CONTENTS

LIVESTOCK

Feed Additives for Increased Poultry Production Discussed
(I. Martynov; PTITSEVODSTVO, Feb 82) 1

AGRO-ECONOMICS AND ORGANIZATION

Capital Investment Plans for Rural Construction During
Eleventh Five-Year Plan
(A. A. Sergeyev; PLANIROVANIYE I UCHET V SEL'-
SKOKHOZYAYSTVENNYKH PREDPRIYATIYAKH, Jan 82) 4

Improving Structure of Regional Agroindustrial Complex
(G. Rusu; VOPROSY EKONOMIKI, Jan 82) 13

Efficiency of Kolkhoz Economic Operations Discussed
(A. M. Simakov; PLANIROVANIYE I UCHET V SEL'
SKOKHOZYAYSTVENNYKH PREDPRIYATIYAKH, Nov 81) 26

- a -

[III - USSR - 7 FOUO]

FOR OFFICIAL USE ONLY

LIVESTOCK

UDC 636.5.085.1

FEED ADDITIVES FOR INCREASED POULTRY PRODUCTION DISCUSSED

Moscow PTTITSEVODSTVO in Russian No 2, Feb 82 pp 19-20

/Article by I. Martynov, candidate of agricultural sciences and chief of the Feed Department of USSR Ptitseprom: "Chemical and Microbiological Feed Additives"/

/Text Our country's poultry farming workers are confronted by great tasks for the Eleventh Five-Year Plan. The plans call for the annual yield of eggs to be raised to 72 billion during this period.

An increase in the production of poultry products requires an expansion in the production capabilities of the mixed feed industry and those enterprises engaged in producing the many types of feed additives and preparations. Simultaneously with increasing the production of mixed feed for poultry and employing new feed agents, improvements must also be realized in the quality of the feed.

The animal husbandry technology must ensure a rational biochemical process for transforming the feed agents, in the organisms of animals, into food and raw material products. Feed constitutes the initial and basic element of this technology. The feed proportion of the overall production costs for animal husbandry products amounts to approximately 70 percent. Thus the economic nature and profitability of poultry raising farms are determined mainly based upon the full value of the rations and the degree of feed consumption for the production of a unit of output. If use is made of rations which are not balanced in terms of the most important nutrients and particularly protein and vitamins, it will be impossible to carry out poultry farming in an intensive and highly productive manner.

The feed ration for poultry must consist of 90-92 percent plant protein and 8-10 percent of high value protein of animal origin. However, the raw material resources for producing feed that contains adequate amounts of animal protein are limited in our country just as they are throughout the world. In the case of plant feeds, shortages are being experienced in such irreplaceable amino acids as lysine, methionine and tryptophan. According to data made available by VASKhNIL /All-Union Academy of Agricultural Sciences imeni V.I. Lenin/, of the 12 percent protein contained in wheat and 10 percent in barley, efficient use is being made of only 6 percent and of the 23 percent protein in peas -- 10 percent. Thus the plant feeds must be supplemented by additives and preparations which will make it possible to increase the use of their protein in the organisms of poultry.

FOR OFFICIAL USE ONLY

One means for covering the deficit in high quality protein and for ensuring that the animals are supplied with complete-ration feed mixtures is that of organizing, on an adequate scale, the production of yeasts, amino acids (mainly lysine), vitamins and antibiotics. The successes achieved in molecular biology and biochemistry are opening up real prospects for the industrial production of these additives.

Experience has convincingly proven that industrial microbiological synthesis is the most reliable source, independent of the caprices of nature, for obtaining high value protein and other biologically active substances. Nutrient yeasts produced by the microbiological industry based upon the processing of wood and other types of raw materials appear as a concentrate of protein, vitamins and amino acids (BVK /protein-vitamin concentrate/). One ton of nutrient yeasts contains 530-580 kilograms of crude protein and this is five times more than 1 ton of grain from the principal forage crops (barley, oats) and 2.5 times more than from the grain of peas. This protein is balanced in terms of the group of amino acids and it is rich in terms of those amino acids which are lacking in the protein of grain crops. Thus there is 10 times more lysine in nutrient yeasts than in barley and oats, methionine -- 2-3 times, triptophan -- 2-4 times and arginine, histidine, leucine and threonine -- 3-6 times.

Nutrient yeasts contain a large number of the Group B vitamins.

However, experience reveals that the introduction into a ration of yeasts from microbe synthesis, produced with a violation of the technology or in raised dosages, lowers the productivity of the poultry.

A negative property of nutrient yeasts is their pulverized state. In conformity with the OST /all-union standard/, they appear as a finely dispersed mass which is blown away during the pneumatic conveying of mixed feed and separated during rail and motor vehicle transport operations and also during issuing to the poultry.

Owing to the increased formation of dust during the preparation and issuing of feed mixtures containing yeasts obtained from microbe synthesis, anti-sanitary conditions are created in the production facilities. Thus it is deemed advisable to produce this valuable feed additive in micro-granulated form, with the particles measuring 1.0-1.5 millimeters. Glavmikrobioprom /Main Administration of the Microbiological Industry/ must undertake efficient measures aimed at improving the quality of the yeasts and their technological form.

In recent years the livestock breeders have been able to test in actual practice, during the enrichment of rations, the most scarce amino acid in plant feeds -- lysine, prepared using the industrial method. Preliminary scientific experiments have revealed that the inclusion of feed preparations of lysine (up to the norm) in mixed feed lacking in lysine, for laying hens of egg and meat lines, turkeys and replacement young chicken stock and broilers produces an increase in the productivity of adult poultry of 10 percent, a reduction of feed expenditures per unit of output of 10-14 percent, an increase in the hatchability of the eggs of 9-14 percent, an increase in the live weight of young stock of 10 percent against an expenditure of 2.4 kilograms of mixed feed per kilogram of weight and a savings of 50-60 percent in the consumption of animal feed.

Lysine in the form of a feed concentrate is presently being produced by enterprises in the Latvian SSR, Belorussia, Armenia and some other republics. However, its production is by no means meeting the requirements of poultry production for this amino acid (approximately 30 percent). The principal shortcomings of the domestic feed preparations of lysine are its hygroscopicity, which promotes the formation of lumps, and low activity (10-12 percent). The complete satisfaction of the branch's requirements for lysine requires a further increase in the domestic capabilities for producing feed preparations and raising their quality.

The plans for the current five-year period also call for an expansion in the production of chemical feed additives. Among these additives, special importance is attached to those preparations which are employed for stabilizing individual components and feed mixtures. Interest in the problem of stabilizing feed agents arose in connection with the industrial production of mixed feeds, the prescription for which includes numerous additives, particularly microelements, vitamins, technical fats and other substances capable of oxidizing. Moreover, substances which protect feed additives from oxidation (anti-oxidants) exert a positive effect on the organisms of animals. Santochin (etoxykhin) is included among the more effective anti-oxidants. It is used for stabilizing fats, fat-soluble vitamins, premixes and mixed feeds and also as a preventive and medicinal means for combating alimentary encephalomalalyatsiya in young poultry, especially broilers. The use of santochin ensures a high degree of preservation for the poultry and for the nutritional value of the products. The plans call for a considerable increase in the production of santochin for satisfying the requirements of poultry farming. This will be accomplished by expanding the capabilities of enterprises of the chemical industry. Improvements are presently being carried out in a new and dry form of santochin (quinol EDK sulphate), which is more suitable for inclusion in mixed feed and which is not inferior to the former type in terms of activity.

Workers in the chemical and microbiological industry, in collaboration with the agricultural specialists, must still accomplish a great deal towards satisfying the requirements of animal husbandry for feed additives and they must constantly search for additional resources and reserves for realizing this goal.

COPYRIGHT: Izdatel'stvo "Kolos", "Ptitsevodstvo", 1982

7026

CSG: 1824/213

FOR OFFICIAL USE ONLY

AGRO-ECONOMICS AND ORGANIZATION

CAPITAL INVESTMENT PLANS FOR RURAL CONSTRUCTION DURING ELEVENTH FIVE-YEAR PLAN

Moscow PLANIROVANIYE I UCHET V SEL'SKOKHOZYAYSTVENNYKH PREDPRIYATIYAKH in Russian No 1, Jan 82 pp 2-6

Article by A.A. Sergeyev, deputy chief of the Agricultural Department of USSR Gosplan: "Principal Trends for Capital Investments During the Eleventh Five-Year Plan/

Text The 26th CPSU Congress and the Sixth Session of the Tenth Convocation of the USSR Supreme Soviet have clearly defined the priority tasks for the economic and social development of Soviet society and the means for solving these tasks during the coming years.

Since the time of the March (1965) Plenum of the CC CPSU, our agriculture has made considerable advances, the logistical base has been recreated substantially, improvements have been realized in the organization of labor and production and the intensity of land usage has been raised. This has made it possible, despite the unfavorable conditions experienced over a number of years, to increase considerably the production of agricultural products. However, definite difficulties are still being experienced in the sphere of food supply for the population.

In this regard, the task of improving the supply of food goods for the population is listed first and foremost in the party's agrarian policies. In the Summary Report by the CC CPSU to the 26th party congress, the need for developing a special food program as a constituent part of the five-year plan was thoroughly validated. In it, the plans call for strengthening the binding elements of agriculture: the production of grain, feed, animal husbandry products, their processing, preservation and sale.

The Basic Directions for the Economic and Social Development of the USSR During the 1981-1985 Period and for the Period Up To 1990 call for an average annual gross yield of grain during the Eleventh Five-Year Plan of 238-243 million tons, for meat production in 1985 to reach 18.2 million tons, or 3 million more tons than the figure for 1980, for increases in the production of milk, eggs, raw cotton, sugar beets, vegetables and other agricultural products and for labor productivity at kolkhozes and sovkhozes to be raised by 22-24 percent.

The implementation of the indicated tasks is based upon a powerful logistical base for agriculture. In fulfillment of the party's long-term program, adopted during the March (1965) Plenum of the CC CPSU, large-scale measures were carried out

FOR OFFICIAL USE ONLY

aimed at further strengthening this program. By the end of 1980, the branch's fixed productive capital of an agricultural nature had increased to almost 217 billion rubles, compared to only 148 billion rubles at the end of 1975. The pool of complicated and highly productive equipment at kolkhozes and sovkhoses had grown immeasurably and the area of reclaimed land had increased to 30 million hectares.

In the report delivered to the 26th party congress, Comrade L.I. Brezhnev stated: "In the future, we will allocate considerable financial and material resources to the rural areas and continue the planned conversion of this branch over to an industrial basis. But the center of gravity today -- and this is a distinctive feature of our agrarian policy during the 1980's -- is shifting over to the return from capital investments, to growth in agricultural productivity and to strengthening and improving its relationships with all branches of the agroindustrial complex."

The plan for the 1981-1985 period calls for capital investments in the amount of 190 billion rubles, compared to only 172 billion rubles during the Tenth Five-Year Plan, to be made available for the development of agriculture in accordance with an overall complex of operations. The task today consists of ensuring that the resources allocated are utilized in a skilful manner and with the greatest degree of effectiveness.

During the Eleventh Five-Year Plan, further growth in agricultural production will be achieved mainly on the basis of intensive factors associated with land utilization, the production potential already created and the material resources allocated.

An improvement in the use of the potential for agricultural production is directly associated with solving the social problems of the rural areas. Over the past 15 years, much has been done towards solving these problems. The material welfare of rural residents has improved considerably and continues to improve. Their standard of living is drawing closer to that of city-dwellers. Improvements are being achieved in the housing and cultural-domestic conditions of kolkhoz members and sovkhos workers. More than 500 million square meters of housing space were built in the rural areas during this period. One out of every two families held house-warmings. More and more childrens' pre-school institutes and cultural-domestic facilities became available. Nevertheless, improvements in living conditions in the rural areas are taking place very slowly. Insufficient capital investments for non-productive construction in the countryside and non-fulfillment of the plans for the construction of housing, schools and childrens' pre-school and cultural-domestic institutions are intensifying migration among the rural population and adversely affecting the retention of personnel and the creation of stable labor collectives. The departure of considerable numbers of people from the rural areas is bringing about a personnel shortage and, it follows, the need for attracting manpower from the cities in order to carry out the harvesting and a number of other agricultural operations.

During the Eleventh Five-Year Plan, large-scale measures must be carried out in connection with the social development of the rural areas. In particular, the plans call for the rapid construction at kolkhozes and sovkhoses of well organized dwellings, simultaneously with farm buildings for the maintenance of livestock and poultry and in accordance with a single estimate, childrens' pre-school institutes, clubs and other installations of a cultural-domestic nature. Compared to the Tenth Five-Year Plan, the capital investments to be used in agriculture for this purpose will be increased from 26 billion to 37.9 billion rubles, or by 45 percent.

FOR OFFICIAL USE ONLY

The plans call for the placing in operation of 124 million square meters of housing space, 31 million more square meters than during the last five-year plan and childrens' pre-school institutes for 1.18 million children, an increase of 196,000 above the figure for the previous five-year plan. Increases will take place in connection with the placing in operation of engineering lines of communication in the rural areas (water, sewerage, heating and gas lines and so forth).

During the October (1980) Plenum of the CC CPSU, Comrade L.I. Brezhnev pointed out that the "problems associated with reorganization of the rural areas must be solved in an energetic and thorough manner, with a search being made for the necessary resources both on an all-state scale and in the republics, krays and oblasts and at each kolkhoz and sovkhoz". However, work associated with carrying out the plans for non-productive construction in the rural areas has not as yet been developed fully in a number of republics and oblasts. Thus, during the Tenth Five-Year Plan, only 63 percent of the capital investments allocated for this purpose were utilized and 51 percent of the dwellings and 44 percent of the childrens' pre-school institutes placed in operation; in the Kirghiz SSR -- 78 and 90 percent placed in operation respectively. During the first year of the current five-year plan, the measures required for intensifying this construction were not undertaken.

Many dwellings are still being built in cities and rayon centers and this is resulting in additional labor turnover at the sovkhozes.

A basic feature of capital investments for production purposes during the Eleventh Five-Year Plan -- the trend towards considerable appropriations for satisfying the requirements of feed production and feed preparation (growth by a factor of more than 1.6) and field crop husbandry. In the process, a preference is being shown for those objects required for ensuring preservation of the products.

According to data supplied by scientific-research institutes, the losses in silage and haylage when stored in mounds and unlined trenches amount to 30 percent or more. At the same time, there is a great shortage of coarse and succulent feed in animal husbandry. Practical conclusions have been drawn in a majority of the republics. During the present five-year plan, facilities for storing 197 million cubic meters of silage and haylage must be created, compared to only 117 million cubic meters during the past five-year plan. The country's requirements for these facilities will reach 83 percent, compared to only 55 percent in 1980. The plans call for a great amount of work to be carried out in this regard in the RSFSR and this will make it possible to raise the availability of storehouses from 53 to 92 percent and in the Turkmen SSR -- from 30 to 83 percent. A sufficient number of these facilities have been built in the Georgian and Estonian republics and yet the plans call for the placing in operation of additional ones to satisfy the raised requirement for feed.

In the Moldavian SSR, large capital investments are to be used for the construction of animal husbandry facilities. However, they are being utilized in a poor manner. At the same time, the agricultural and planning organs are devoting very little attention to preserving and improving the quality of the feed. Throughout the republic, the plans call for the placing in operation of silage and haylage facilities for only 120,000 tons, with the availability of such facilities being

* L.I. Brezhnev. "Leninskim kursom" /Following Lenin's Course/, Moscow, Politizdat, 1981, Vol 8, p 469.

FOR OFFICIAL USE ONLY

reduced to 45 percent by the end of the five-year plan, compared to 46 percent at the beginning of 1981. By no means is this same phenomenon justified in the Azerbaijan SSR, Armenian SSR, Lithuanian SSR or the Latvian SSR. The plans for building silage and haylage installations in the Kazakh SSR are clearly below the existing potential.

In many republics, the plans call for the construction of a large number of storehouses for hay, briquetted feeds and grass meal. Nevertheless, additional work must be carried out aimed at finding reserves for raising the preservation of the feed that has been grown and procured.

Large quantities of vegetables and fruit are being lost owing to an absence of storehouses and processing capabilities for them. During the current five-year plan, vegetable and fruit storehouses for 7.22 million tons are to be built, compared to only 5.33 million tons during the Tenth Five-Year Plan. This will make it possible to satisfy the country's overall requirements for fruit storehouses almost completely and for vegetable and potato storehouses -- by 44 percent, compared to 34 percent in 1979. The plans call for 1.4 billion rubles to be made available for their construction, almost 1.6 times more than during the Tenth Five-Year Plan. Moreover, one cannot consider as correct the actions taken by the agricultural and planning organs in the Belorussian SSR, Uzbek SSR, Moldavian SSR and the Armenian SSR, which are allocating only limited resources for the preservation of fruit and vegetable products.

For the construction of installations for the processing and storage of grain, the plans call for approximately 2.9 billion rubles to be made available -- 43 percent more than was used during the past five-year plan. As a result, the majority of the republics will have adequate capabilities for the storage of seed and grain at the kolkhozes and sovkhozes. In the future, work must be directed towards the modernization of existing granaries, mechanization of their operations and the automation of control over storage.

In the computations for the five-year plan, the plans call for more than 1.7 billion rubles to be made available for the construction of warehouses, or 2.3 times more than during the last five-year plan, with the facilities capable of containing 13.7 million tons of mineral fertilizers and 11.3 million tons of toxic chemicals. The requirements for such warehouses in the Uzbek SSR, Kazakh SSR, Georgian SSR and Latvian SSR will be fully satisfied by 1985. Considerable improvements will take place in connection with the preservation of mineral fertilizers in the RSFSR, the Ukrainian SSR and a number of other republics. At the same time, the plans for the Kirghiz SSR call for the construction of such warehouses for only 83,000 tons, against a requirement for 335,000 tons and for the Armenian SSR the figures are respectively -- 58,000 and 127,000 tons. Certainly, these republics require mineral fertilizers. But if there is no place to store them and they spoil, then there can be only one conclusion: give them to those who will make use of each kilogram.

The kolkhozes and sovkhozes still lack adequate intra-farm hard surface roads. According to computations by specialists, of the overall volume of shipments of agricultural freight by all types of transport, intra-farm shipments constitute almost 75 percent. At the present time, of 56,000 farms, less than 20 percent have hard surface roads. According to data supplied by the Institute of Complex Research Problems, the losses in agricultural products caused by poor roads amount to more than 1 billion rubles annually. To this we must add that freight shipments

FOR OFFICIAL USE ONLY

carried out within farms over such roads involve excessive fuel expenditures and raised costs for the shipments themselves. In addition, as a result of bad roads the schedules for the carrying out of agricultural operations are often disrupted and wear and tear on the motor vehicle and tractor pool accelerated.

In rayons served by good motor vehicle roads, the gross agricultural output per 100 hectares of agricultural land is higher and production costs lower. Thus, there is every reason to believe that the development of a road network in the rural areas is one of the most important factors for achieving growth in production efficiency. Roads play a great role in the solving of social problems in the countryside. Thus a solution must be found for this problem.

Since 1976, the national economic plans have provided an indicator for the placing in operation of intra-farm hard surface roads. During the past five-year plan, approximately 3.2 billion rubles were expended for the construction of such roads. More than 47,000 kilometers of road surface were placed in operation. The extent of such hard surface roads on farms increased by 40 percent. But this is not enough. Thus, during the current five-year plan these expenditures must be increased to 4.7 billion rubles, or 42 percent more than those for the past five-year plan. Taking into account the increase in expenditures, it is expected that 57,400 kilometers of intra-farm road surface will be placed in operation.

In the process, attention must be focused on the fact that the construction of general purpose roads is being carried out by the "Road Economy" branch and that capital investments for this purpose are being allocated to road organizations rather than to agricultural organizations.

One of the chief trends in the intensification of agricultural production is that of its further mechanization and electrification. Tremendous progress has been achieved in this regard over the past 15 years. The power-worker ratio has increased by a factor of 3.2 and today it amounts to 24 horsepower per worker. The plans call for it to be raised to 38-40 horsepower by 1985.

During the Eleventh Five-Year Plan, the kolkhozes and sovkhozes will be supplied with better and more powerful items of equipment and also with a complex of working machines which will make it possible to raise labor productivity, improve the quality and reduce the amount of time required for the carrying out of agricultural operations and ensure the extensive use of industrial technologies in farming and animal husbandry.

During the five-year plan, sufficient capital investments will be made available for measures aimed at increasing the active portion of the fixed productive capital. Compared to the Tenth Five-Year Plan, appropriations for acquiring machines and equipment will be increased by almost 9 billion rubles, or by 17 percent. Their proportion of the volume of capital investments for production purposes will increase from 36 percent during the Tenth Five-Year Plan to 41 percent during the Eleventh Five-Year Plan.

During the 1981-1985 period, a considerable increase will take place in capital investments for the construction of rural electrification installations, repair workshops and facilities for the storage of equipment.

FOR OFFICIAL USE

The plan for the Eleventh Five-Year Plan calls for the placing in operation of 1,770 hectares of hothouse combine space, compared to 1,180 hectares during the Tenth Five-Year Plan, and for 2.2 billion rubles, or 500 million rubles more than were used during the preceding 5 years, to be made available for this purpose. Moreover, their construction will be based mainly upon secondary sources for heat and thermal water.

Capital investments for perennial plantings and soil improvement work will increase at an accelerated rate. However, notwithstanding the fact that 700-800 million rubles are being invested annually in perennial plantings, the areas of fruit-producing orchards are not only not increasing but in fact they are decreasing in size and the effectiveness of the appropriations is not increasing.

Among the problems concerned with raising the effectiveness of capital investments in agriculture, special importance is attached to those associated with land reclamation work. As a result of the consistent implementation of an extensive land reclamation program, adopted during the May (1966) Plenum of the CC CPSU, the volumes of state capital investments for this purpose have increased from 6.7 billion rubles during the 1961-1965 period to 34 billion rubles during the Tenth Five-Year Plan and the area of reclaimed agricultural land throughout the country increased from 16.9 million hectares in 1965 to 30 million hectares in 1980.

Land reclamation is one of the chief factors associated with the intensification of agricultural production. Occupying approximately 10 percent of the overall area of arable land and plantings, they furnished one third of all gross farming output during 1980 and minus technical crops -- 25 percent.

Cotton production is developing in a stable manner on reclaimed lands and a base has been created for domestic rice production. The production of vegetables, feed and other products on these areas has increased. On the average for the country as a whole, the productivity of a hectare of irrigated land is 4-5 times higher and that for drained land 1.5-2 times higher than the productivity for non-reclaimed lands.

During the years of the Tenth Five-Year Plan, grain production on irrigated lands increased to 11 million tons, or by a factor of 1.5, raw cotton -- to 9.9 million tons, vegetables -- to 12 million tons, potatoes -- to 2 million tons, or by a factor of 1.3 and perennial grasses -- by a factor of 1.5. The gross yield of agricultural crops on drained lands also increased, but to a negligible degree.

There are many farms in all oblasts and republics which are utilizing their reclaimed lands in an efficient manner. In Uzbekistan, for example, in addition to high cotton yields, 68 quintals of corn grain per hectare were obtained during 1980 from an area of 179,000 hectares and the harvest of alfalfa for hay reached 135 quintals per hectare. In Krymskaya Oblast, averages of 46.8 quintals of grain, 216 quintals of vegetables and 773 quintals of fodder root crops were obtained from irrigated hectares of land. From 60 to 65 quintals of feed units per hectare are being obtained from irrigated tracts in Stavropol'skiy Kray.

However, by no means is this in keeping with the large-scale financial and material resources being employed for land reclamation work. Substantial shortcomings are being observed in connection with the utilization of reclaimed

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

areas. First of all, the cropping power of the agricultural crops is increasing only slowly. Compared to the 1971-1975 period when the average cropping power for rice on irrigated land was 38.5 quintals per hectare, during the 1976-1980 period it amounted to 39.9 quintals per hectare, for perennial grasses the figures were respectively -- 50.7 and 51.3 quintals per hectare, corn for silage -- 201 and 237 quintals per hectare and sugar beets dropped from 313 to 309 quintals per hectare.

In 1979, the cropping power of grain crops on irrigated land, for the country as a whole, amounted to 48.4 quintals per hectare, while at the same time more than 1,000 kolkhozes and sovkhoses obtained yields lower than 15 quintals per hectare from an area of 231,000 irrigated hectares and 244 farms obtained yields of corn from grain lower than 25 quintals per hectare from an area of 29,600 hectares.

In many areas the reclaimed lands are not being utilized to their maximum capability and the cropping power of the agricultural crops on this land is lower than that called for. The principal cause of insufficient productivity for these areas is a low culture of farming, violations of the agricultural practices and production technology and limited applications of mineral and organic fertilizers. In behalf of the 1980 harvest, 2.1 quintals of mineral fertilizer were applied to a hectare of irrigated land and 1.7 quintals to a hectare of drained land (in a conversion for active agent); this was 1.5-2 times lower than the required norms. As a result, maximum use is not being made of the reclaimed fields.

At many kolkhozes and sovkhoses, the planting structure has not been worked out and the crop rotation plans are being mastered very slowly (especially cotton-alfalfa plans in the republics of Central Asia). Considerable irrigated areas are still being used for annual grasses and other low-productivity crops. In 1980, for example, such crops were grown on 683,000 hectares, with the cropping power of the hay reaching only 27.3 quintals per hectare, or two times lower than the cropping power of perennial grasses. In the planting structure for forage crops in the Georgian SSR, annual grasses occupied 28 percent, in the Ukrainian SSR and Azerbaijan SSR -- 17 and in the RSFSR -- 15 percent. At the same time, the amount of corn for grain being cultivated on irrigated land throughout the country is unjustifiably low.

Insufficient use is being made of another important reserve -- secondary sowings -- the areas of which can be increased to 1 million hectares and produce 3-4 million additional tons of feed units.

An equally important reason for the slow growth in the cropping power of agricultural crops on irrigated and drained land is the expansion that has taken place in the areas requiring land reclamation improvement and restoration. Compared to 1975 when there were 4.8 million hectares of irrigated land throughout the country as a whole requiring improvement, by 1980 this area had increased to 5.4 million hectares, or 32 percent of the overall area. In particular, a large proportion of unsatisfactorily reclaimed land, compared to the overall area, is found in the Turkmen SSR -- more than 60 percent, Azerbaijan SSR -- 49 percent, Kirghiz SSR -- 44 percent, Kazakh SSR -- 37 percent, Uzbek SSR -- 32 percent and the RSFSR -- 26 percent. To a considerable degree, this is the result of incorrect operation of irrigated land and the untimely fulfillment or non-fulfillment of land levelling and other required operations.

One of the more urgent problems is that of organizing a reliable operational service capable of carrying out, on the basis of definite schedules, an entire complex of operations concerned with the repair and maintenance, in good working order, of the land reclamation network, installations and mechanisms and ensuring that waterings are carried out during the best periods.

A difficult situation has developed with regard to ensuring that the kolkhozes and sovkhnozes are supplied with adequate numbers of personnel in the Volga region, the north Caucasus, the Central Chernozem Zone and in some other regions. There is a shortage of machine operators, especially operators of sprinkling units and pumping stations. During the current five-year plan, it will be necessary to train no less than 300,000 individuals for work and to do everything possible to ensure that they remain on the farms.

Considerable areas of reclaimed land are being utilized for purposes other than those originally intended. During the 1971-1980 period, 208,000 hectares, including 13,000 hectares of irrigated land, were made available throughout the country as a whole for intra-farm construction and for satisfying various non-agricultural needs. During the period mentioned, 604,000 hectares of reclaimed land, including 313,000 hectares of irrigated land, were written off based upon inventory results. In the RSFSR, for example, 306,000 hectares of reclaimed land were written off and of this amount 33,000 hectares had been allocated for the mentioned purposes. Large areas of reclaimed land have been removed from use in the Belorussian SSR, Uzbek SSR, Armenian SSR and the Georgian SSR.

The party has established the task of bringing about a radical change in the use of reclaimed lands and raising to a considerable degree the effectiveness of the investments employed.

The plan for the Eleventh Five-Year Plan calls for the placing in operation of approximately 3.6 million hectares of irrigated land and 3.8 million hectares of drained land, for the watering of more than 27 million hectares of pasture land, for the carrying out of soil improvement work on 8.3 million hectares of agricultural land that does not require drainage and so forth. More than 40 billion rubles of capital investments, or 19 percent more than during the past five-year plan, are being allocated for these purposes.

Fewer capital investments will be allocated for animal husbandry and poultry raising projects than was the case during the past five-year plan (roughly 80 percent). Here a preference is being shown for meat poultry factories, reproduction farms and breeding plants.

The plans call for the placing in operation during the 1981-1985 period of meat poultry factories for 545 million head, compared to only 362 million head during the past five-year plan. An increase in the capabilities of egg poultry factories of 26.6 million laying hens will be achieved mainly through the technical re-equipping, modernization and expansion of existing installations. New poultry factories will be built only in those areas where there are egg shortages and where no possibility exists of obtaining eggs based upon more effective solutions.

The conversion of pig farming over to an industrial basis will be carried out through the construction of swine complexes having an overall capability of

FOR OFFICIAL USE ONLY

approximately 6 million head; this corresponds to the level for the past five-year plan. In all, the pig farming capabilities to be built will be two times less than the figure for the 1976-1980 period.

Sheep raising capabilities will be created at the former rates (24 million billets), with the exception of Kazakhstan, where this construction will be increased twofold and in Kirghizia -- an increase of 1.5 times.

The large-horned cattle facilities to be placed in operation during the 1981-1985 period will be two times less than that for the previous five-year plan, since sufficient facilities are almost available for the animals now and the only requirement remaining is to ensure that they are utilized completely and efficiently. Capital investments must be directed towards the technical re-equipping, modernization and expansion of existing farms.

During the Eleventh Five-Year Plan, 23.8 billion rubles must be appropriated for the technical re-equipping and modernization of existing enterprises in agriculture. This figure is 6 billion rubles more than the amount used during the 1976-1980 period.

The republic's agricultural organs, together with the planning organs, when preparing the annual plans, should continue the work of defining more precisely the most effective direction for capital investments, with consideration being given to the balance and use of production capabilities and to their technical re-equipping and modernization.

The dispersion of capital investments among numerous construction projects and installations is causing great harm to the national economy. This alone, coupled with the absence of systematic and purposeful work concerned with the concentration of resources, can explain the growth that has taken place in the volume of unfinished construction at agricultural projects. Exhaustive measures must be undertaken aimed at concentrating capital investments on projects, with consideration being given to placing them in operation in accordance with the established schedules and reducing the volumes of unfinished construction to the established norms during 1982 and 1983.

The effectiveness of capital investments in agriculture is dependent to a great degree upon stable farm specialization, an economically sound distribution for production operations and for the erection of auxiliary installations, construction schedules and quality and upon many other factors. The timely solving of these problems in a high quality manner will serve to guarantee fulfillment of the tasks assigned to agriculture by the 26th CPSU Congress.

COPYRIGHT: Izdatel'stvo "Kolos", "Planirovaniye i uchet v sel'skokhozyaystvennykh predpriyatiyakh", 1982

7026

CSO: 1824/223

12
FOR OFFICIAL USE ONLY

AGRO-ECONOMICS AND ORGANIZATION

IMPROVING STRUCTURE OF REGIONAL AGROINDUSTRIAL COMPLEX

Moscow VOPROSY EKONOMIKI in Russian No 1, Jan 82 pp 59-69

/Article by G. Rusu, candidate of economic sciences and assistant professor at the Kishinev Polytechnical Institute, Kishinev: "Improvements in the Structure of a Regional Agroindustrial Complex"

/Text The tasks associated with satisfying more completely the country's requirements for food goods and other agricultural products and with the socio-economic development of the rural areas are conditioned by the need for implementing a unified approach for solving inter-branch and inter-farm problems, within the framework of the agroindustrial complex, and for balancing the principal elements of production throughout the entire technological chain, commencing with the production of the means of production and ending with the sale of the finished products of the complex. In the "Basic Directions for the Economic and Social Development of the USSR During the 1981-1985 Period and for the Period Up To 1990," emphasis is placed upon the following: "In the interest of achieving successful realization of the food program, it will be necessary to ensure unified planning and proportional and balanced development for the branches of the agroindustrial complex, a considerable strengthening of its logistical base, improvements in the economic relationships between branches, the organization of efficient interaction among them in intensifying the production of agricultural products and improvements in the preservation, transporting and processing of the products and also in delivering them to the consumer." The implementation of the instructions handed down during the 26th CPSU Congress assumes the formation of an APK /agroindustrial complex at various levels and the administration of it as a unified structural subunit of the national economy.

The essence of the economic problems associated with organizing the work of a national economic APK, when the task is assigned of creating organs for administering groups of similar branches, consists of developing and converting the system of production associations into new structural elements -- food agroindustrial units of a regional APK, based upon the need for achieving technological and economic unity throughout the entire production-technological chain.

Distinct from branch administration, the administration of a national economic APK creates the conditions required for the development of inter-branch production subunits and for the formation of a system of mutually related

economic elements within the framework of the complex, the single final goal of which is to satisfy the country's requirements for food goods and agricultural raw materials and to solve the socio-economic problems. Thus, instead of a relatively detached branch of economics -- agriculture -- an agroindustrial complex that is complete in its structural and economic relationships develops. In the process, not only do the inter-branch balance relationships become stronger, but in fact qualitatively new structural subunits develop based upon these relationships and these subunits form the system of economic elements of the APK. Thus the most important structural element at the lower level, in our opinion, must be that of the food agroindustrial unit (association). It is here that production units associated with the servicing, production, processing and sale of agricultural products cooperate with one another.

The need for forming such structural units in an agroindustrial complex derives from the absence of a unified approach for developing all of its spheres and branches. The existing organizational forms for the production of agricultural products, for processing them, for the marketing infrastructure and for the means of production used for producing them, being technologically and directly associated with one another, are not associated from an organizational-economic standpoint and cannot exert an active influence on mutual development. The organizations and enterprises of the APK lack an effective system of stimuli aimed at achieving complete and high quality use of the agricultural output and coordinating their activities with the final results of agroindustrial production. This explains the lack of development of the logistical base of the branches which service agriculture and which process its products and the imperfections in the structure of the industrial means of production being supplied to agriculture and also in the internal structure of the branches. All of this leads to a duplication of production functions and to a dispersion and irrational use of resources.

The formation of agroindustrial units as lower elements of the APK makes it possible to intensify coordination of the work of agricultural, agroindustrial, transport, service and processing enterprises and organizations and also those which sell the finished products; to achieve greater coordination for various aspects of production -- equipment, technology, labor organization and incentives, the mechanism for management and administration in the agroindustrial sphere and the elimination on this basis of departmental barriers; to subordinate departmental interests to achieving the final results; to accelerate the industrialization of procurements and the transporting and sale of agricultural products. The gradual conversion over to direct production and economic relationships between agriculture and its service branches is accompanied by the development in Goskonsel'khoztekhnika and other departments of a number of specialized services for providing logistical services.

The singling out of a number of agroindustrial units within the structure of regional APK's will make it possible to convert over from controlling individual branches and subunits to all-round control over all regional APK's. Each agroindustrial unit appears as a totality of mutually related production efforts of all spheres of the APK and the elements of the infrastructure, the goal of which is that of obtaining a definite type of product and supplying it to the consumer in the appropriate assortment and quality and with minimal

expenditures of labor. "We need not just any associations" stated L.I. Brezhnev during the July (1978) Plenum of the CC CPSU, "but rather those which truly raise the socialist collectivization of production and labor to a new stage, are based upon the latest scientific, engineering and technological achievements, ensure a high level of productivity and furnish maximum quantities of inexpensive products." Thus one of the chief tasks is that of selecting the best paths of development and the organizational forms for food agroindustrial units within the framework of regional APK's and administering them while taking into account their branch structure and the trends in agricultural development.

Under modern conditions, various trends in the formation of agroindustrial units within the structure of republic APK's have already appeared in Moldavia, Estonia and some other republics. A basic consideration in organizing such units in Estonia is that of forming processing and service enterprises of rayon production associations, which will be common to the kolkhozes and sovkhoses and in the framework of which production specialization and concentration will be intensified based upon inter-farm and intra-farm specialization. Cooperation between kolkhoz and state enterprises is being achieved based upon the development of rayon associations. In the process, the economic integrity of the kolkhozes and sovkhoses and their economic and legal independence are retained. At the same time, the well known levelling off of the conditions of management is achieved by organizing the centralized funds of the association. The formation of rayon associations calls for further development of the organizational-economic structure of the APK -- the conversion over to the formation of a republic APK.

Substantial peculiarities are attached to the formation of agroindustrial units in Moldavia. During the 1970's, cooperating farms singled out 1-2 branches (animal husbandry, capital construction, feed production) which had obtained independence from a production standpoint, especially in connection with the creation of inter-farm enterprises of the industrial type having closed production cycles. This method opened up broad opportunities for specialized production by the branches, but it promoted to a lesser degree cooperation among the kolkhozes and sovkhoses in the principal production activity. Since the 1970's, the process of cooperation and integration of all kolkhoz-sovkhoz production, within the framework of the territorial-production branch associations, has been strengthened throughout the republic. However, this has been accomplished not on the basis of farm or intra-farm specialization, but rather based upon inter-farm cooperation between the production branches and inter-branch agroindustrial integration. The specifics of this method provide for the gradual formation of a system of specialized branch associations, based upon a reorganization of the production structure of the kolkhozes and sovkhoses themselves. The rates of development for inter-farm enterprises, based upon the kolkhoz sector, are reflected in the data furnished in the table on the following page.

The slower rates for raising the proportion of the gross output of inter-farm enterprises in the gross output of the kolkhoz sector, compared to the rates of growth for the fixed capital of inter-farm enterprises in the fixed capital of the kolkhoz sector, derive from the fact that during the 1970's associations were created for the mechanization and electrification of agricultural

Development of Inter-Farm Enterprises in the Moldavian SSR

	Unit of Measurement	1965	1970	1975	1979	1979 in % of 1975
All inter-farm enterprises on an independent balance	Number	51	113	176	301	-
	%	100	222	345	590	171
Gross output of inter-farm enterprises in gross output of the kolkhoz sector	%	5.0	16.8	30.5	36.7	-
Fixed capital of inter-farm enterprises	Millions of Rubles	30.8	154.8	802.3	1536.2	-
	%	100	5 times	26 times	50 times	191
Their proportion in fixed capital of the kolkhoz sector	%	3.7	10.7	30.6	44.1	-
Number of workers engaged at inter-farm enterprises	Thousands of persons	25.3	44.3	99.4	139.8	-
	%	100	175	393	552	141
Their proportion of the number of workers in the kolkhoz sector	%	3.5	6.5	15.8	25.3	-
Profit realized by inter-farm enterprises, of total amount of profit in the kolkhoz sector	%	4.5	19.1	30.0	25.1	-

production and the equipment of farms was transferred over to their balance. More than 90 percent of the tractors and other equipment of the republic's kolkhozes are to be found within associations. This has brought about a sharp increase in the number of workers engaged at inter-farm enterprises. During the 1971-1978 period, their proportion of the number of workers in the kolkhoz sector increased by more than a factor of seven.

An analysis of the practice of inter-farm cooperation at the primary levels makes it possible to single out several principal methods for developing it: the creation of a system of inter-farm enterprises of the industrial type; the formation of territorial-production associations which cooperate and specialize in the principal activities of kolkhozes and sovkhoses; the development of cooperation among agricultural enterprises of the industrial type, cooperation which creates the prerequisites for intra-branch specialization of production. All of these trends are promoting structural improvements in the production elements of regional APK's.

The cooperation of farms and the creation of a broad network of specialized enterprises of the industrial type are considered to be very important conditions for the development of agroindustrial integration, based upon the formation of a system of agroindustrial enterprises and associations. The development of a structure for the production elements of the Moldavian APK is being carried out along the following lines: merging at the republic level of the agricultural and industrial branches; creation at the primary levels of a system of

agroindustrial enterprises and associations of the industrial type; merging of specialized enterprises and transport-marketing organizations for the purpose of subordinating the various aspects of the single process to achieving the final goal; the production and processing of field crop husbandry and animal husbandry products on an industrial basis, directly at inter-farm enterprises and associations; expanding the geography of development of the agroindustrial forms. Overall, these changes have brought about new features in the development of specialization and also in the integrated forms of production, forms which are transforming the structure of the production elements of the APK.

The agroindustrial complex of the Moldavian SSR includes a system of specialized economic agroindustrial elements having central republic and branch organs of administration: Moldvinprom, Ministry of the Fruit and Vegetable Industry, Moldtabakprom, Ministry of the Food Industry, Moldsakharprom, an agroindustrial association for the production of essential oils and perfume-cosmetic products, a system of specialized scientific-production associations and so forth.

During the 1971-1979 period, the number of sovkhos-plants and sovkhoses belonging to agroindustrial associations increased by a factor of 1.6. Their proportion of land compared to the republic's agricultural land increased from 15 to 20 percent. The fixed production capital of an agricultural nature, of enterprises belonging to agroindustrial associations, increased by a factor of 3.25 during the 1971-1978 period and amounted to approximately one fourth of all of the republic's capital in the public agricultural sector. During this period the volume of gross agricultural output from agroindustrial production increased by a factor of more than 1.7. Its proportion of gross output in the public sector increased from 14.8 to 20 percent. The number of agricultural workers engaged in associations increased by a factor of 1.5 and their proportion of the overall number of agricultural workers in the republic increased from 15 to 23.6 percent.

During the 1971-1978 period, the fixed industrial production capital of agroindustrial formations increased by threefold and exceeded 760 billion rubles. The gross output volume of industry at agroindustrial associations increased by a factor of 1.7 and amounted to approximately two thirds of all output produced by the republic's food industry. The number of industrial-production personnel at agroindustrial associations increased by 7 percent and reached 39,500. This number constituted 10.5 percent of all industrial workers in the republic.

The Moldvinprom Agroindustrial Association is one of the more developed structural subunits of the republic's APK. It includes 200 sovkhos-plants and 30 industrial enterprises -- 244 economic units in all. One hundred and ninety five sovkhos-plants belong to 21 agroindustrial associations and one scientific-production agroindustrial association and five sovkhos-plants are directly subordinate to Moldvinprom.

In 1979, the association produced 2.5 times more grapes than were produced in 1971. The vineyard areas have increased by a factor of 1.9. Increased production was achieved as a result of concentration of the grape production

areas, the proportion of which has increased from 20.4 to 33.9 percent of the agricultural lands (at other farms it equals 4.9 percent). The increase in the proportion of vineyard areas of the agroindustrial association, with regard to the overall vineyard area of the kolkhoz and state sectors, from 25.4 to 47.4 percent and the gross yield of grapes from 21.8 to 46.1 percent, has made it possible to ensure an interrelationship between the production, transporting and processing of the products and to reduce product losses.

Within the framework of the Moldvinprom territorial subunit, the best solutions are being found for those problems associated with the all-round development of the viticulture and wine-making microregions, which more often than not embrace the lands of several farms and industrial production is properly merged with the raw material base and associated branches (field crop husbandry, animal husbandry) and with auxiliary services, through the creation of inter-farm production efforts. Logistical supply and the marketing of products, accounting and technical-economic planning involving the use of electronic computers are all centralized in the association and an operational dispatcher service, automatic control system and others have been created. Increased production specialization has made it possible to introduce a progressive technology for the cultivation of grapes, increase the level of mechanization, raise cropping power, improve the quality of the grapes and increase the earnings from their sales.

The agroindustrial-trade association of the Ministry of the Fruit and Vegetable Industry is extremely efficient. The production, procurement, processing and sale of fruit and vegetables are concentrated in this association. Approximately 70 percent of the enterprises attached to 12 agroindustrial associations have forfeited their economic independence. A unified production structure has been created in the association and unified policies are being implemented in the areas of capital investments, logistical supply and marketing. An increase in the areas of fruit plantings from 5.3 to 8.3 percent, with regard to the overall area of agricultural land, and vegetable crops from 13.0 to 19.1 percent, compared to the overall area under crops, increased production specialization, the introduction of leading agricultural practices and raising the level of mechanization have made it possible to increase the cropping power of fruit crops by a factor of 1.5 and that for vegetables by more than a factor of 1.6. In addition, they have made it possible to subordinate the interests of each element to achieving the final goals, reducing losses and on the whole raising the economic efficiency of the association's operations. Efficient work is being performed by agroindustrial associations for the production of essential oils and perfume-cosmetic products, Moldsakharprom, Moldtabakprom and others.

On the whole, the raised level of production concentration and increased production specialization are creating opportunities for converting over to a new stage in the formation of subunits of the republic's APK, which consists of transforming the production associations into specialized branch agroindustrial units of the complex. The existing food agroindustrial units: Moldvinprom, Kolkhozhivprom, Moldtabakprom and Moldefirmaslopprom of the Ministry of the Fruit and Vegetable Industry have still not become true units of the complex, since the component parts of each unit in the republic do not ensure elimination of the separate nature of the production process or further

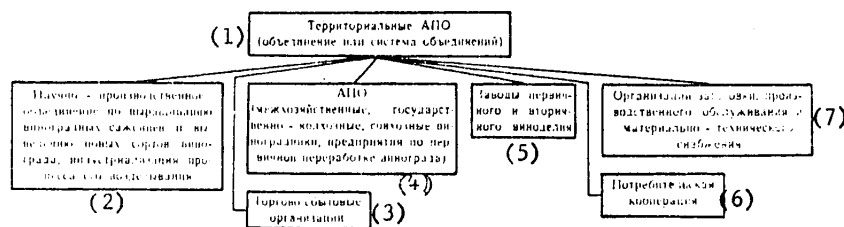
movement of the agricultural output. On the one hand, this is associated with the fact that the existing organizational forms (agrarian, agroindustrial, scientific-production associations) are isolated subsystems of different and separate ministries and departments and, on the other, each of these forms was created taking into account the need for retaining unity in the technological and economic chain, commencing with production and ending with the sale of the agricultural products. For example, despite the fact that Moldavian viticulture includes the operation of two scientific-production associations of the Moldavian Ministry of Agriculture and the state union-republic APO /agropromyshlennoye proizvodstvennoye ob'yedineniye; agroindustrial production association/, nevertheless associations of Vinogradprom of the Kolkhoz Council for the MSSR are being created simultaneously in the republic. Today approximately one half of the republic's grapes are being produced within the Kolkhoz Council system, which does not have a processing base.

Under these conditions, it is not always possible to organize efficient work in connection with the deliveries and processing of grapes or supplying the farms with grape seedlings produced within another department's system. Thus the enterprises which process the grapes, being technologically associated with agriculture, are dissociated from an organizational-economic standpoint. They lack the stimuli aimed at ensuring complete and high quality use of the products produced by the agricultural enterprises. At the same time, the material interests of subunits in Sphere III of the APK are not adequately oriented toward the final results of Moldvinprom. Unity of technological, economic and social relationships is found to be lacking within the framework of such a unit.

The organizational-economic coordination of new economic units of a regional APK can be ensured based upon cooperation between state APO's and mutually related subunits of the kolkhoz sector. In such a case, the structure for a viticulture-wine making state agroindustrial unit of a regional APK could be as follows.

Chart 1

Production Relationships in an Agroindustrial Unit for the Production of Viticulture and Wine Making Products



Key:

- 1. Territorial APO (association or system of associations)
- 2. Scientific-production association for the raising of vineyard seedlings and the breeding of new varieties of grapes; industrialization of the cultivation process
- 3. Trade-marketing organizations
- 4. APO (inter-farm, state-kolkhoz, sovkhos vineyards, enterprises for the primary processing of grapes)
- 5. Primary and secondary viticulture plants
- 6. Consumer cooperation
- 7. Procurement, production services and logistical supply organizations

FOR OFFICIAL USE ONLY

The development of inter-farm cooperation and the creation of agroindustrial units in fruit growing are associated with achieving solutions for a number of problems. For example, horticulture in Moldavia is concentrated mainly in the kolkhoz sector and the processing enterprises are under the jurisdiction of the state APO, that is, production and processing are separated from a departmental standpoint. The same situation prevails in vegetable growing. It is typical not only of Moldavia but also the Ukraine, the RSFSR and other republics. This is reflected in the quality of the products being supplied and it results in great losses when the vegetables are shipped using non-specialized transport equipment. Thus the existing union republic APO's should not be considered as complete units of regional APK's.

The creation of single state-kolkhoz agroindustrial units on a republic scale would make it possible to unite inter-farm, state-kolkhoz, kolkhoz and sovkhos orchards, crop rotation plans for the production of vegetables and also scientific-production associations for the breeding of new varieties of fruit and the industrialization of their cultivation process, consumer cooperation, trade, procurement organizations and organizations for production services and logistical supply. These agroindustrial units within the framework of APK's can be formed based upon specialized territorial agroindustrial enterprises and associations. Within the framework of the latter, departments for the primary processing of fruit should ideally be created at the inter-farm specialized enterprises. When a high level of concentration is achieved, cooperation should ideally take place between the APO and the canning plants according to the territorial criterion.

Branch production specialization at kolkhozes and sovkhos and the creation of inter-branch enterprises and associations are promoting the formation of agroindustrial units for various types of field crop husbandry products, particularly for the production, procurement and processing of grain crops, sugar beets and sunflowers.

With the intensive conversion of animal husbandry over to an industrial basis, based upon the development of agroindustrial relationships, conditions are created for the formation of agroindustrial units even in this branch. At the present time, unity has been violated in the process of producing animal husbandry products, in the reproduction of pedigree livestock, in maturing and fattening the livestock and in the processing of meat, since these technological stages are under the jurisdiction of various ministries and departments.

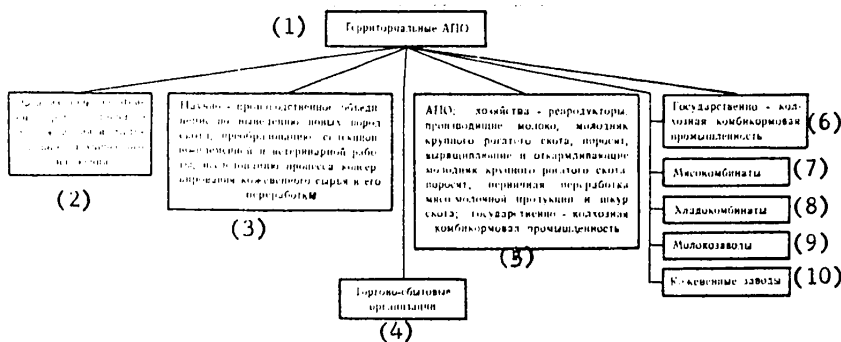
Production services and logistical supply for the branch have also been isolated. The same holds true for the planning, procurement, storage and primary processing of livestock pelts, operations which are carried out on farms and at enterprises which are subordinate to different departments. The complexes, kolkhozes and sovkhos are not always interested in the final operational results of meat combines and especially leather raw materials enterprises and they do not always meet their requirements for high quality pelts. As a result, up to 30 percent of the pelts received from complexes and approximately 50 percent of the pelts received from kolkhozes and sovkhos are lower than 1st grade quality owing to poor livestock maintenance, physical and planning defects and improper storage. At the same time, the leather raw materials plants lack efficient stimuli for improving the quality of the raw

FOR OFFICIAL USE ONLY

materials. The structure of a state kolkhoz agroindustrial unit in animal husbandry is furnished below (see Chart 2).

Chart 2

Production Relationships in an Agroindustrial Unit for the Production of Meat and Dairy Products on an Industrial Basis



Key:

- | | |
|---|---|
| <ul style="list-style-type: none"> 1. Territorial APO's 2. Organization of procurements, production services and logistical supply 3. Scientific-production associations for the breeding of new strains of livestock, reorganization of selection-breeding and veterinary work, study of the process of preserving leather raw materials and its processing 4. Trade-marketing organizations | <ul style="list-style-type: none"> 5. APO: reproduction farms which produce milk, young large-horned cattle stock, young pigs and raise and fatten young large-horned cattle stock and young pigs; primary processing of meat and dairy products and livestock pelts; state-kolkhoz mixed feed industry. 6. State-kolkhoz mixed feed industry 7. Meat combines 8. Freezer combines 9. Dairy plants 10. Leather plants |
|---|---|

Food agroindustrial units must appear as individual cost accounting systems. However, the organizational-economic interrelationships in the activities of kolkhozes, sovkhoses, specialized enterprises and organizations, engaged in servicing agriculture and processing its products within the framework of agroindustrial associations, should ideally be carried out on the basis of combining the cost accounting and administrative functions and retaining the operational-economic and legal independence of the subunits belonging to an association. If this were not done, the conversion of enterprises and associations within units over to intra-farm accounts would weaken their interest in the final production results.

Territorial agroindustrial associations may become the principal cost accounting elements within the framework of agroindustrial units. Primary cost accounting, inter-farm and agroindustrial production enterprises and associations (sovkhoses, kolkhozes, inter-farm orchards, vineyards and processing departments, enterprises for feed production, specialized kolkhozes, sovkhoses, service enterprises) form within the latter and these are the initial installations of inter-farm cooperation and agroindustrial integration. For the purpose of raising the efficiency and quality of work in the agroindustrial units, organizations engaged in procurement work, production services and logistical supply should ideally also be converted over to cost accounting.

FOR OFFICIAL USE ONLY

As the agroindustrial units form and become stronger, relationships should be developed between the production associations of the first sphere and those agroindustrial units which embrace the second and third spheres of the complex and the existing system for selling the means of production through Goskomsel'khoshtekhnika should be reorganized. The development of agroindustrial units in this direction will lead to improvements not only in the administration of production but also in economic relationships, since opportunities will appear at the unit level and for their production associations for concentrating the planning of procurements, determining the trends for production specialization and concentration and the volumes for output sales, credit and logistical supply and for creating a reserve specialized association for the mechanization, improvement and electrification of production. The withdrawal of differential rent and its use for stimulating the work of subunits of the agroindustrial unit, in the interest of increasing their interest in the production of the final products of the complex, are centralized at the same time. The primary enterprises can solve the problems concerned with the objective organization of production, its detailed structure, the distribution of the funds remaining at their disposal and so forth.

Within the framework of the agroindustrial units, conditions are being created for converting over to the development of continuous plans (commencing with production services for agriculture and ending with the sale of finished products, with the trends for their use being singled out) and for making firm procurement plans available not to individual enterprises but to the associations and to the agroindustrial units on the whole. In the process, the role played by production inter-farm and agroindustrial associations with regard to intensifying specialization and raising production concentration is strengthened. The prerequisites are created for developing uniform criteria for establishing the procurement plans, with all of the production factors being taken into account (economic evaluation of the land, status of production funds and so forth).

The development of state-kolkhoz agroindustrial units assumes a conversion over to a unified system of stimulation for the kolkhozes, sovkhoses and inter-farm enterprises, based upon improvements in the ratios for the procurement prices for various types of products and the use of rental payments in conformity with the quality of the land.

The formation of new agroindustrial units must be accompanied by improvements in the system of control over production, at both the regional and national economic levels. At the present time, subunits which can be included in agroindustrial units are subordinate to various departments. For example, six relatively independent republic organs are directly associated with the organization of control over agricultural production in the Moldavian SSR: Ministry of Agriculture, Kolkhoz Council, Ministry of the Fruit and Vegetable Industry, Moldvinprom, Moldeftabakprom and Moldefirmasloprom. These departments and associations are characterized by a scattered structure of planned control and by the absence of operational and all-round control by them, based upon a unified approach for developing all branches of the APK (with the exception of planned control by the republic's Gosplan). This disrupts the integrity of the technological, economic and social relationships within the framework of the complex and it lowers the effectiveness of investments for its development. In order to eliminate these and other shortcomings, a single republic organ is needed for achieving all-round mutual agreement and coordination of the activities of all subunits entering the complex.

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

On the one hand, the state-kolkhoz agroindustrial units should be brought together in the organizational-departmental structure of a regional APK, in particular: viniculture-wine making, fruit and vegetable, food grain, meat and dairy, sugar beets and others, and on the other hand -- the corresponding branch ministries and departments of a region: Ministry of Agriculture, Ministry of Procurements, Ministry of the Light and Textile Industry, Ministry of the Meat and Dairy Industry, the system of logistical supply, rural construction, Ministry of Trade, consumer cooperation and so forth. In the process, control over all of the agroindustrial units and their associated ministries and departments must be carried out through the organ that controls the agroindustrial complex, which must resolve such problems as the organization of inter-branch relationships, distribution of capital investments and resources and so forth.

The principal functions of the particular organ could be: solving inter-branch and inter-departmental problems; accelerating the processes of inter-farm cooperation and agroindustrial integration; achieving a rational structure and maintaining the proportions between the spheres and branches of the complex; carrying out a unified technical and economic program within the APK; developing direct relationships within and between units of the complex and improving the cost accounting relationships; creating more effective stimuli for the purpose of orienting all elements towards achieving the final results of the APK.

The organization of unified control for regional APK's, combined with the formation of production agroindustrial units within their frameworks, will lead to the development of direct relationships between the units and within their production associations and this will create the prerequisites for further intensification of specialization and improvements in the level of production concentration, based upon improved inter-branch relationships. For the formation of a rational structure for the production associations and agroindustrial units, great importance is attached to coordinating the distribution and use of a portion of the net income, within the framework of the units and their subunits and with a real contribution being made by each one of them towards achieving the final operational results.

The development and transformation of the system of production associations into a new structural element of a regional APK and the organizational-economic appearance of the latter are creating the conditions required for implementing a unified economic and technical program, for solving inter-branch and inter-farm problems based upon the creation of a single organizational-economic and program-special purpose system and for achieving a more clear definition of the economic and functional tasks of the component parts of the complex.

With the formation of a regional APK that is complete from a structural standpoint, favorable conditions can be created for the further development of inter-farm cooperation and agroindustrial integration, since the solutions for problems associated with these processes are directly dependent upon how completely changes are implemented in the production conditions in agriculture and in all of its associated national economic branches. Thus the conversion of field crop husbandry over to an industrial basis turns out to be more

FOR OFFICIAL USE ONLY

effective than the creation of inter-farm orchards, vineyards and so forth, to the extent that the conditions for cultivation and those for the introduction of industrial technologies for the harvesting, transporting and processing of agricultural raw materials conform to the requirements.

The same can be said regarding animal husbandry. For example, the functioning of animal husbandry complexes of the industrial type turns out to be more effective only when the feed production, selection-breeding and veterinary work and construction industry systems are industrialized, when the livestock and poultry are raised in a specialized manner, when improvements are carried out in the processing base and, on the whole, when the natural and biological factors are utilized and regulated in a more efficient manner. The successful functioning of the system of specialized enterprises, associations and the units themselves is possible only when there is increased specialization in field crop husbandry, greater development in selection work, seed production and in the systems for providing technical, agrochemical and land reclamation services and increased capabilities and industrialization of those branches associated with the transporting, storage and processing of agricultural output.

The development of agroindustrial units and the organizational-economic formation of APK's are creating opportunities for ensuring conformity among the levels of industrialization and in the changes in the various elements of the technologically unified agroindustrial production. At the same time, socio-economic changes are taking place in the rural areas, since agriculture in the agroindustrial units is gradually being transformed from a relatively isolated branch into an organic sphere of the APK. The kolkhoz and state agricultural enterprises and associations are included in the overall system of production subunits. This exerts a substantial influence on the further drawing together of the two forms of ownership, from the standpoint of smoothing out the economic conditions for production management and organization. The kolkhoz and state sectors are more organically united as elements of the agroindustrial units. As a result, an increase takes place in the interrelated use of kolkhoz and state resources, for the purpose of converting agriculture over to an industrial basis. Within the framework of the state-kolkhoz agroindustrial units, in the kolkhoz and state sectors, similar type enterprises are formed which serve as the basis for mutual enrichment of the principles and methods for production management. As a result, the forms of economic relationships draw closer together, the methods of control are unified and a single economic mechanism and an overall system of social security are created.

At the present time, the development and reorganization of specialized agrarian and agroindustrial enterprises and associations into food agroindustrial units has only just begun. The establishment of new economic units and their transformation into structural subunits of regional APK's must pass through several stages in conformity with the level of agricultural industrialization and the degree to which solutions have been found for the social problems in the rural areas. A mandatory condition for such a transformation is that of observance of the proper proportions between the rates for inter-farm cooperation and agroindustrial integration and the rates for development of the logistical base and the formation of organizational-economic conditions for production.

FOR OFFICIAL USE ONLY

Moreover, the establishment of new state-kolkhoz agroindustrial units must be accompanied by a smoothing out of the levels of development for the logistical base of kolkhozes, sovkhoses, production services enterprises and the processing base on a new qualitative basis. We have in mind considerable growth in the capital-labor ratio, in the power-worker ratio and in labor productivity and a drawing together of the management conditions in kolkhoz and sovkhos production.

As these processes develop further, combined with comprehensive industrialization of agriculture, the agroindustrial units will exert greater influence on the production structure of enterprises belonging to these units. This will bring about changes in the production-economic relationships between the principal subunits of the agroindustrial unit.

COPYRIGHT: Izdatel'stvo "Pravda", "Voprosy ekonomiki", 1982

7026
CSO: 1824/190

FOR OFFICIAL USE ONLY

AGRO-ECONOMICS AND ORGANIZATION

UDC 338.109.3

EFFICIENCY OF KOLKHOZ ECONOMIC OPERATIONS DISCUSSED

Moscow PLANIROVANIYE I UCHET V SEL'SKOKHOZYAYSTVENNYKH PREDPRIYATIYAKH in Russian No 11, Nov 81 pp 2-5

/Article by A.M. Simakov, chief of Department of Economics of Kolkhoz Production of the USSR Ministry of Agriculture: "Efficiency of Economic Work at Kolkhozes"/

/Text The principal sources for growth in social production are improvements in its efficiency and in the quality indicators. Agricultural production must grow not so much as a result of placing additional capabilities in operation and developing new lands, but rather through improvements in the operation of each kolkhoz, sovkhoz and enterprise and in the use of equipment, each unit and each hectare of land. In the Basic Directions for the Economic and Social Development of the USSR During the 1981-1985 Period and for the Period Up To 1995, special emphasis is placed upon: "Achieving dynamic development for all branches of agriculture, increasing production and improving the quality of output."

The development of agricultural production requires correct and economically sound solutions for the practical tasks concerned with increasing output yield with minimal expenditures of labor and resources. A considerable role in this regard must be played by the economic service, which includes all specialists working at a farm, the leaders of brigades, animal husbandry farms and other intra-farm subunits and also leading production workers. The effectiveness of economic research being carried out in all sectors and all branches, including in the sphere of production control, is dependent to a considerable degree upon the work of this service.

In carrying out the decisions of the party and government with regard to further agricultural development, the Ministry of Agriculture for the Estonian SSR and its organs in the various areas and the republic and rayon kolkhoz councils performed a definite amount of work aimed at increasing the production of farming and animal husbandry products, strengthening their economies and improving social-domestic living conditions for the agricultural workers.

During the years of the Tenth Five-Year Plan, output production per 100 hectares of agricultural land at kolkhozes increased by 27 percent above the level for the 1971-1975 period. This was achieved as a result of having raised the cropping power of crops and the productivity of animal husbandry. The grain

FOR OFFICIAL USE ONLY

yields per hectare increased from 24.9 to 27 quintals, perennial grass hay -- from 36.5 to 41 quintals and milk yield per cow -- from 3,335 to 3,623 kilograms annually.

As a result of measures undertaken to improve the use of equipment, the daily output of a standard tractor was raised by 5 percent during the years of the Tenth Five-Year Plan and reached 8.9 conventional standard hectares and the volume of mechanized operations was increased by 22 percent. Labor expenditures for the production of a quintal of milk decreased by 13 percent, for an increase in weight in large-horned cattle -- by 18 and for an increase in the weight of swine -- by 22 percent. On the whole, labor productivity at kolkhozes during this period was raised by 14.6 percent and gross output yield per average annual worker engaged in agriculture reached 8,400 rubles in 1979. As labor productivity continues to increase, further improvements will be realized from year to year in the material well-being of kolkhoz members (their average monthly wage in 1979 was 198 rubles). The profitability of kolkhoz production was 21 percent.

More complete use of the increasing agricultural potential, for achieving further improvements in production and raising its efficiency, will promote to a considerable degree the organization of economic work in the republic that will actively influence the production-financial activities of the kolkhozes and the development of their branches and farm subunits.

Special importance is being attached to the development of plans for economic and social development and to the proper distribution of the republic's established plans for agricultural product procurements and for the delivery volumes for equipment, fertilizers and other logistical resources. This will ensure that the farms and their subunits enjoy the same opportunities for developing production and fulfilling their plans for selling products to the state.

The republic and rayon kolkhoz councils are devoting special attention to developing production and strengthening the economies of backward farms. Specific measures have been developed and are being implemented by each of them aimed at raising the culture of farming and animal husbandry and increasing the cropping power of the agricultural crops and the productivity of the livestock; the volumes of soil improvement and land reclamation work have been defined; the construction of production and cultural-domestic projects has been outlined; the plans call for an increase in the deliveries of equipment and mineral fertilizers.

In the interest of achieving more efficient planning for agricultural production, the economic service, jointly with the republic's scientific institutes, developed long-range questions concerned with kolkhoz development, particularly the structure of the areas under crops, the number of livestock, the balance in the production and sale of products and feed production and consumption; an optimum structure for the machine-tractor pool was calculated. Recommendations are being issued in a systematic manner on such matters as economics, labor organization and wages and control over agricultural production, with the experience of leading farms being taken into account.

Production agricultural associations have been created in a number of rayons throughout the republic which, in addition to solving the problems associated

FOR OFFICIAL USE ONLY

with coordinating the activities of the agroindustrial complex, have provided broader opportunities for smoothing out the economic conditions of management and improving social-economic development in the rural areas. The associations have centralized funds which are used for creating inter-farm installations, furnishing assistance for strengthening the economies of backward farms, financing capital investments, augmenting the material incentive funds of enterprises having low profitability levels and providing reimbursement for damage caused by natural calamities. Such measures made it possible to avert partial backwardness caused by objective factors and to ensure improvements in the production efficiency of the associations. As a result, during the years of the Tenth Five-Year Plan and compared to the average annual level during the Ninth Five-Year Plan, the cropping power of grain crops at kolkhozes increased from 27.4 to 31.1 quintals per hectare, perennial grass for hay -- from 38 to 46.2 quintals per hectare and the milk yield per forage cow increased from 3,579 to 3,968 kilograms.

Using the centralized funds of associations, it is possible to distribute in a more rational manner the logistical resources among the agricultural enterprises and to carry out practical measures aimed at strengthening the logistical base of backward farms. Thus, last year, at economically weak kolkhozes in Pyarnuskiy Rayon, the technical equipping per hectare of agricultural land was increased by 20 percent, they were allocated 10 percent more mineral fertilizer than other farms and assistance was also furnished in acquiring seed for perennial grasses. As a result, the efficiency of land utilization was raised at such kolkhozes as Khalinga and imeni V.I. Lenin. During the past 2 years alone, the actual crop yields per hectare of agricultural land at these kolkhozes increased by factors of 1.6 and 1.7 respectively and the average milk yield per cow for a year's time increased by 655 kilograms at the first farm and by 350 kilograms at the second one.

Economic operations at a majority of the republic's kolkhozes is directed towards uncovering and making maximum use of existing reserves in farming and animal husbandry and also employing progressive technologies, scientific achievements and leading experience on an extensive scale. Cost accounting tasks are being prepared on this basis, with the participation of a large group of kolkhoz members, and prior to the end of next year they will be made available to the subunits, with constant control to be exercised over their fulfillment. The operational results are reviewed each month, quarter and once every 6 months in the collectives of production subunits and at brigade councils and production meetings. Here measures are defined for eliminating existing shortcomings, compensating for a shortfall in individual types of products and ensuring complete utilization of the favorable opportunities which appear throughout the year for over-fulfilling the plans. When necessary, operational analysis promotes a timely effect on production-financial activities directed towards the fulfillment of plans and the achievement of improved results.

Economic operations are well organized at the Kolkhoz imeni Y. Lauristin in Khar'yuskiy Rayon. Here the activities of the subunits are analyzed on a monthly basis, unused production reserves are brought to light and timely measures are undertaken to correct shortcomings in the management of the branches. As a result, constant improvements are realized in the production and economic indicators. Thus, in 1979 and compared to 1970, the cropping

FOR OFFICIAL USE ONLY

power of the grain crops on the farm increased from 19.2 to 31.7 quintals per hectare, milk production per 100 hectares of agricultural land -- from 511 to 601 quintals and meat -- from 95 to 147 quintals. Production profitability on the average for 4 years of the Tenth Five-Year Plan was 31 percent.

The annual results of the production-financial activities of the kolkhozes are discussed at general meetings of the kolkhoz members and in the balance committees of rayon agricultural administrations, with interested organizations and departments participating in the discussions.

Special attention is being given to organizing the establishment of norms and to improving the system of material and moral incentives. These questions are constantly the objects of attention by the economic services and they are directed towards increasing the interest of kolkhoz members in raising the efficiency of output production and the quality of work.

Material incentive measures for kolkhoz members, for having increased output yield, are developed both for individual categories of workers and also for subunits on the whole. Special importance is attached to stimulating the work of kolkhoz members with regard to performing their work during the best agrotechnical periods and raising the quality of the products being produced. This is promoting annual growth in the sale of high quality products to the state. Thus, in 1979, the kolkhozes produced the following: milk of 1st grade quality -- 97 percent, large-horned cattle in a high state of nourishment and of heavy weight -- 83, swine of the 1st and 2d categories -- 68, chicken and broilers of the 1st category -- 67 percent of the overall volume of procurements. Additional earnings from the sale of high quality products amounted to 33.3 million rubles. An improvement was realized in the quality of the feed being procured. Compared to 1979, when the requirements for 1st and 2d grade hay amounted to 51 percent, in 1980 -- 85 and for haylage -- 75 and 96 respectively and silage -- 65 and 86 percent.

The republic's economic service devotes daily attention to the problems concerned with improving labor organization and production control. At the present time, 34 kolkhozes, or one fourth of their overall number, are operating on the basis of a departmental control structure. Work is being carried out towards creating a dispatcher service and on one half of the farms such a system has already been introduced into operations. This has raised the level of control, problems are now being solved in a more efficient manner and improvements have been realized in the activities of production subunits and in the use of tractors, motor vehicles and agricultural machines. Unproductive runs by tractors have been reduced by 30 percent, idle time of sowing units -- by 10 percent and their productivity has increased by 8 percent. The Ipatovo method for organizing labor in field crop husbandry has been introduced into operations on an extensive scale. Thus, in 1980, 309 harvesting-transport complexes were employed for the harvesting of grain crops, 240 for potatoes and 380 for harvesting root crops. This made it possible to carry out the principal field operations rapidly, in a high quality manner and with minimal expenditures of labor and resources. As a result of the introduction into animal husbandry of scientific labor organization and an advanced technology, the workload for a milkmaid in 1979 was raised 21 percent above the figure for 1975, for a worker in swine breeding -- raised 67 percent and labor productivity

FOR OFFICIAL USE ONLY

FOR OFFICIAL USE ONLY

for the branch on the whole -- raised 18 percent. Compared to 1970 when a milkmaid obtained an average milk yield of 82.6 tons of milk, in 1979 -- 168 tons or a twofold increase.

Jointly with the agricultural specialists, the economic service is constantly working to strengthen breeding work, improve the technology for meat and dairy cattle husbandry, realize a more efficient division of labor on the farms and achieve further intra-farm specialization and concentration of the animal husbandry branches in the farm subunits.

It bears mentioning that the construction of new farms is making cattle yards available so that they can be modernized for the maintenance of young stock and dry cows and for the organization of delivery sections. Thus the cost of a cattle billet costs 2-3 times less than at newly built installations.

Great importance is being attached to the work of the Bureau of Economic Analysis, which examines the operational indicators of subunits and the carrying out of cost accounting tasks, it summarizes leading experience for introduction into production operations on an extensive scale and it develops and introduces for discussion by the kolkhoz administrations measures aimed at eliminating shortcomings and raising operational efficiency.

The Bureau of Economic Analysis created at the Put' Kommunizma Kolkhoz in Novoodesskiy Rayon, Nikolayevskaya Oblast in the Ukrainian SSR can share its operational experience. Its structure includes farm leaders and specialists, heads of farms, chiefs of mechanized detachments and the best machine operators and animal husbandrymen. The work is directed by the chairman of the kolkhoz and the chief economist is his deputy. At a meeting of the Bureau of Economic Analysis, attention is given first of all to the reports delivered by the leaders of cost accounting subunits which tolerated overexpenditures of resources; subsequently measures are developed aimed at eliminating the shortcomings and raising operational efficiency and the measures are then submitted to the kolkhoz administration for review.

During the past 10 years, the farm achieved considerable success in raising the efficiency of kolkhoz production and strengthening its economy. Net profit increased from 175,000 to 1.1 million rubles and gross output production -- from 2.1 million to 5 million rubles. Profitability and gross income increased by more than twofold.

The kolkhoz councils and agricultural organs in the Estonian SSR attach great importance to ensuring that kolkhoz production is supplied with skilled cadres of leading workers and middle echelon specialists. Raised requirements are imposed upon them for mastering the methods of economic analysis and management, utilizing the latest achievements of scientific labor organization and production control, employing modern computer equipment, observing the principles of socialist management in a strict and consistent manner and other considerations which promote improved effectiveness in the organizational and agrotechnical measures being carried out on the farms. At the kolkhozes, 93 percent of the chairmen possess higher or secondary specialized educations, chief economists -- 95, other specialists -- 74 and middle echelon specialists -- 61 percent. On the average, there are 49 specialists at a

FOR OFFICIAL USE ONLY

kolkhoz, with 12 of them possessing higher educations. Of the overall number of tractor operator-machinists, 56 percent are classified as 1st or 2d class specialists and 50 percent of the milkmaids are masters of machine milking 1st or 2d class.

A considerable amount of attention is being given to the training of chief economists for the farms. Such training is being provided in the various regions in the economics departments of national universities and at republic and rayon seminar-conferences. The students attend lectures on vital aspects of agricultural economics, delivered by the republic's leading scientist-economists and specialists from the ministry and the rayon agricultural administrations. The economists of leading farms share their operational experience. Republic and rayon competitions are conducted on a regular basis for the farm economists.

The economic training of middle echelon specialists and leaders is being conducted at kolkhozes on the basis of a three year program. Thus, at the kolkhozes Syprus in Khaapsaluskiy Rayon, Edasi in Pyarnuskiy Rayon and Orissaare in Kingiseppski Rayon, specialized groups have been organized which have appropriate subject exercises and which are headed by the leaders and chief specialists of the farms. This is promoting more active participation by them in solving the production tasks and uncovering reserves for increasing output production and further lowering expenses.

The republic's kolkhoz council and the Ministry of Agriculture for the Estonian SSR are constantly devoting attention to improving economic work, intensifying its effect on production-financial activities and raising the role it plays in strengthening the kolkhoz economies. At their meetings, systematic discussions are held on the status of the economic work and training, on observance of the Model Regulations for a Kolkhoz, on the results of the production-financial activities of farms and on other subjects associated with raising the efficiency and quality of work.

COPYRIGHT: Izdatel'stvo "Kolos", "Planirovaniye i uchet v sel'skokhozyaystvennykh predpriyatiyakh", 1981

7026

CSO: 1824/189

END