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USSR REPORT
Economic Affairs
No. 1020

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ECONOMIC PROGRESS OF THREE SOVIET REPUBLICS DISCUSSED

Moldavian SSR

Moscow PLANOVOYE KHOZYAYSTVO in Russian No 6, Jun 82 pp 3-13

[Article by Chairman of the Moldavian SSR Council of Ministers I. Ustiyun: "The Basic Factors of the Development of the Economy of the Republic"]

[Text] In the decree of the CPSU Central Committee "On the 60th Anniversary of the Formation of the Union of Soviet Socialist Republics" it is pointed out that "history does not know a state, which in a very short time has done so much for the all-round development of nations and nationalities, as the USSR—the socialist homeland of all our peoples."  

By using the advantages of the socialist economy, the peoples of the former outlying national regions, which previously were doomed to age-old backwardness, have attained the heights of economic and social progress. Under the guidance of the CPSU a mature socialist society has been built in the Soviet Union. With the increase of the productive forces of the union republics the level of the socialization of production is rising, the system of socialist production relations is being improved, the imposing program of the building of communism is gradually being accomplished.

The economy of Soviet Moldavia is being successfully developed in the unified national economic complex of the USSR. The working people of Moldavia are greeting the 60th anniversary of the formation of the USSR with great achievements in the building of communism and in the development of all the sectors of the economy and culture. By using efficiently the fertile land, modern socialist forms of management and powerful equipment and by displaying skill, enthusiasm and economic initiative, the workers of republic agriculture are growing a fourth of the grapes in the country and a third of the tobacco leaves and are producing a considerable amount of vegetables, fruits, sugar beets, sunflowers, grain, livestock products and other agricultural produce. The sectors of the republic food industry, which are the main sectors of all-union specialization, produce 12.3 percent of the all-union amount of canned fruits and vegetables (including 11.3 percent of the canned fruits), 13.2 percent of the natural juices, 17.5 percent of the dried fruits, 10.2 percent of the fresh frozen vegetables and fruits, 3.7 percent of the

1. PRAVDA, 21 February 1982.
granulated sugar, 4 percent of the vegetable oil and other foodstuffs. The agro-industrial complex accounts for about 60 percent of the gross national product and 54 percent of the national income of the republic.

The sectors of precision machine building, which are developing dynamically in the republic, electrical engineering, instrument making, electronics, a number of works of the chemical and light industry, which are intensively involving the manpower resources of Moldavia in industrial production, are also among the sectors of all-union specialization. In recent years republic industry has achieved considerable volumes of the production of household appliances. In all 6.3 percent of the all-union volume of the production of washing machines, 4 percent of the household refrigerators, about 10 percent of the electric teapots and irons and other household electric appliances are produced here. The share of the output of light industry has increased considerably. The enterprises of the republic produce more than 6 percent of the all-union volume of the production of rugs and carpet items, 3 percent of the knitwear, 2.2 percent of the leather footwear and other products.

Power engineering, transportation, communications, road management and other sectors are ensuring the comprehensiveness of the development of the republic economy.

As a result of the socialist transformations carried out under the guidance of the Communist Party, Soviet Moldavia in a short historical period (during the postwar years) caught up with the other union republics in the level of economic and social development. As L. I. Brezhnev pointed out, "It was possible to do this to a considerable extent because the Moldavian people were able to rely on the support of all the fraternal peoples of our country, on the industrial and the scientific and technical potential which has been created in the USSR and to fully utilize the gained experience of building socialism in our country." 2

The sociopolitical system of the Soviet Union is the basis of the economic and social achievements of all the union republics. During the period of the restoration of the war-ravaged national economy the fraternal assistance of the peoples of the USSR, and first of all the Russian and Ukrainian peoples, enabled the workers of the Moldavian SSR in a 5-year period not only to achieve the prewar level of development, but also to exceed it considerably.

The party and government of the republic successfully used the system of state planning as a mighty lever of economic development. The Law on the Plan of the Restoration and Development of the National Economy of the Moldavian SSR for 1946-1950 was passed in 1946. It was envisaged by the plan to eliminate the severe consequences of the war and to ensure the further development of the economy and culture of the republic. In the right bank regions, which for a long time were under the occupation of Romanian nobles, it was necessary to carry out socialist industrialization, the collectivization of agriculture and social reorganization and to eliminate the remains of the exploiting classes in the city and the countryside.

The increase of the economic potential of the republic during this period was governed for the most part by extensive factors. Industrial capacities were created and

2. L. I. Brezhnev, "Leninskim kursom" [By the Leninist Course], Vol 5, Moscow, Politizdat, 1976, p 172.
increased, a working class was formed. In accordance with a decision of the government equipment in the amount of 25 enterprises, including 9 metalworking plants, was delivered to the republic. By the end of 1948 the fixed capital of republic industry exceeded the prewar level by more than twofold.

Special attention was devoted to the development of the food industry. Ruined canneries, wine-making and sugar plants were restored. A number of new enterprises were built—canneries in Nisporen, Bykovets and Kalarash, a confectionary and a macaroni factory in Kishinev, bakeries in Bel'tsy, Bendery, Kishinev and other cities of the republic. Industry and construction received new, skilled personnel. Measures were implemented on the restoration of agriculture. In connection with the difficulties which arose due to the drought of 1946-1947, Moldavia from the fall of 1945 to the fall of 1948 received from the state about 157,000 tons of seed loans. The workers of a number of krays, oblasts and cities of the country gave the republic much assistance in the development of agriculture.

The development of the productive forces of the Moldavian countryside and the gaining of experience of kolkhoz construction were responsible by 1950 for the development of the kolkhoz movement into the complete collectivization of the majority of rayons. On 1 January 1951 1,639 kolkhozes, which united 97.1 percent of the peasant farms on 99 percent of the area of land, had been organized. The material and technical base of agriculture was strengthened, its power-worker ratio increased. The share of the tractor fleet of machine and tractor stations in the total amount of draft power of kolkhozes came to 64.9 percent.

A plan of the comprehensive development of the agriculture of the Moldavian SSR and the more efficient use of its natural resources and manpower resources was drafted on the initiative of L. I. Brezhnev, who during those years headed the party organization of the republic. Measures were implemented on the considerable expansion of the sowings and the increase of the yield of sugar beets, sunflowers, tobacco and essential-oil crops, the assurance of a rapid growth rate of horticulture and viticulture and the development of animal husbandry.

In the republic the conditions were created for the achievement of a universal compulsory elementary education and the elimination of illiteracy and semiliteracy. And whereas in 1944 the illiterate population amounted here to about 65 percent, by 1951 it has been possible to eliminate illiteracy and semiliteracy.

Having basically built socialism on the entire territory of the republic, the working people of the Moldavian SSR along with the other fraternal peoples of the Soviet Union under the guidance of the CPSU proceeded to further socioeconomic transformations. With allowance made for the prospects of the development of agricultural production and the ascertained disparity between the increasing amounts of raw materials and the possibilities of their processing the USSR Council of Ministers adopted in early 1952 on the initiative of L. I. Brezhnev the decrees "On Steps on the Further Development of Agriculture of the Moldavian SSR" and "On Steps on the Further Development of the Food Industry of the Moldavian SSR."

It was envisaged by the program of the comprehensive development of agriculture and the food industry in the course of 4 years to increase the fixed production capital of the food industry by threefold (as compared with 1950) and to assimilate more than 1 billion rubles of capital investments (in prevailing prices). The
construction of the Gindeshtkiy, Drokiya and Dondyushany Sugar Refineries and the renovation of the Rybnitsa and Bel'tsy Sugar Refineries, the largest in the country, the construction of the Grigoriopol' and Kamenka Canneries and the expansion of the Bendery, Kalarash, Glinyany and Tiraspol' Canneries and the construction of several large wine and cognac plants were planned. The construction, expansion and renovation of enterprises of the meat and dairy, confectionary, tobacco, butter-making, essential-oil and bread baking sectors were also called for. For comparison it is necessary to take into account that the capital investments in the development of the entire food industry of the USSR in 1951 came to about 2 billion rubles.

The organizational management and economic policy in the agro-industrial sphere of the national economy of the republic was aimed at the creation of a system of interconnected works of agriculture and the processing industry. In the 1950's and 1960's, in reality, the foundations of the modern food industry of the republic were created. This period was also marked by the faster rate of enlargement of the areas of perennial plantings. The area of orchards increased by 3.7-fold, vineyards--2.7-fold. The share of the areas under cereal crops in the structure of the sown areas decreased to 44 percent (with a significant increase of the gross harvests), while under fodder crops it increased from 6.5 to 33 percent and under industrial crops—from 15 to 18 percent. Horticulture, viticulture, as well as the cultivation of crops, which previously had limited distribution—sugar beets (the areas under which increased by sixfold), tobacco (twofold) and essential-oil crops (3.5-fold), began to play a leading role in agriculture.

All these measures ensured the expansion of agricultural production and the increase of its efficiency. The increase of the volume of output in 1960 as against the 1950 level in agriculture came to 1.7-fold, in the food industry—3.7-fold; the increase of labor productivity was respectively 1.9-fold (at kolkhozes) and 2.5-fold.

Changes also occurred in the organizational structure of agriculture. As a result of consolidation, specialization and transformation into sovkhozes the number of kolkhozes by 1960 had decreased to 513, while the number of sovkhoz plants and sovkhozes increased to 81; 11 interfarm agricultural enterprises—the first shoots of future extensive interfarm cooperation—were organized.

In the 1950's and 1960's a high level and an increase of the natural growth of the population (from 22.1 people per 1,000 in 1955 to 22.9 people per 1,000 in 1960) and its high density (to 80 people in 1955 and 88.1 people in 1960) were characteristic of the republic.

The Central Committee of the Communist Party of Moldavia and the republic government believed that the problem of the complete use of manpower resources should be solved on the basis of the building and development of labor-consuming works of special and precision machine building, electrical engineering and instrument making. New works for the production of electrical measuring equipment, deep-well pumps, cable and electrical products were set up on the basis of operating machinery plants and enterprises under construction. Among them are such enterprises as the Mikroprovod and Elektrotochirpbor in Kishinev, the Moldavkabel' and Elektrofarfor in Bendery and the Moldavizolit and Elektromash in Tiraspol'. Somewhat later enterprises of the electrical equipment industry were built in Chadyr-Lunga, Soroki and Orgeyev.
During 1951-1960 the growth rate of the volumes of industrial production in the republic came to 436 percent. Machine building, the construction materials industry, the textile and knitwear sectors and the food industry, especially the sugar and the meat and dairy industries, were developed rapidly. The number of skilled workers and the staff of engineering and technical personnel increased.

Improvements occurred in agricultural production. During 1951-1960 the volume of output of farming and animal husbandry increased respectively by 1.67-fold and 2.01-fold. Here the number of those employed in this sector of the national economy increased by only 6.1 percent, while labor productivity increased by 62 percent. In all 91.5 percent of the increase of the total volume of the gross output of agriculture was obtained by means of this factor of intensive growth.

During 1951-1960 the close combination of extensive and intensive factors of economic development were characteristic of the national economic complex of the republic.

During this time substantial changes occurred in the structure of the gross national product and the national income of the republic. The share of the sectors of the national economy in the gross national product in 1960 was: industry—50.3 percent, agriculture—30.8 percent, construction—10.2 percent; in the national income—respectively 36.6, 41.7 and 8.2 percent.

The complete and final victory of socialism in our country afforded new prospects for the economic development of the republic. During the first half of the 1960's the sectorial structure of industry of Moldavia changed in the direction of the further increase of the share of the subsectors of machine building and power engineering—the basis of the further development of the economy. The formation of the unified power system of Moldavia, which was connected by electric power transmission lines with the Southern United Power System, was begun. The placement into operation of the first section of the Moldavskaya GRES made it possible to increase the generation of electric power in the republic from 751.2 million kWh in 1961 to 3.11 billion kWh in 1965.

During 1961-1970 77 large industrial enterprises were built and put into operation in Moldavia. Such enterprises as the Varntisa Plant of Reinforced Concrete Items, the Kishinev Plant of Household Refrigerators, the Rybnitsa Knitwear Factory, the Gyrbov Sugar Refinery and other projects were put into operation.

Industrial production was distributed over the territory of the republic more efficiently, with allowance made for the closeness of raw materials and the availability of manpower resources. Industrial facilities were built not only in the industrial centers of the republic, but also in small cities and settlements—Rybnitsa, Faleshty, Floreshty, Chadyr-Lunga, Drokiya and Bratushany.

The growth rate of the total volume of industrial production during 1961-1970 was 278 percent. Moreover, in power engineering it was 4.3-fold higher, in machine building and metalworking—2.65-fold.

The structure changes in republic industry, which were made in a planned manner, determined the new directions of its production specialization in the all-union division of labor. Formerly a supplier of foodstuffs, the republic appeared on
the all-union market as a producer and supplier of means of production. At the Leipzig International Trade Fair in the fall of 1971 the products of the Moldavian SSR received the highest rating. Of the 12 gold medals, with which the exhibits of the Soviet pavilion were commended, items of the republic received 5 medals. They are the analog computer of the Schetmach Plant; microwire resistors of three makes of the Mikroprovod Plant; a national rug produced by the Association of Folk Handicrafts of the Moldavian SSR Ministry of Light Industry; examples of products of the wine-making industry of the republic.

The decisions of the March (1965) CPSU Central Committee Plenum were of particular importance for Moldavia. As L. I. Brezhnev emphasized in a report at the May (1982) CPSU Central Committee Plenum, "the aims of the March CPSU Central Committee Plenum, which were developed by a number of subsequent plena and the 24th, 25th and 26th CPSU Congress, constituted the basis of the present agrarian policy of the party—a scientific policy, the correct policy, from which we have not deviated and will not deviate." As a result of the pursuit of the agrarian policy of the party in the republic a stable trend of the increase of the marketability of the products of agriculture, which stemmed from the intensification of the specialization of farms and the considerable increase of the production volume of industrial crops, vegetables, fruits and grapes, was established. This, in turn, required an increase of the capacities of the processing industry. During 1966-1970 the Kagul Cannery and the Bendery Oil Extraction Plant, 14 plants of primary wine making, a shop for the production of pectin and many other industrial projects were built and put into operation. Moreover, these were large enterprises: canneries with a capacity of 70-100 million cans a year, sugar and wine-making enterprises for the processing in a day of respectively 3,000 tons of beets and 300-500 tons of grapes.

Since the middle of the 1960's in the agro-industrial sector a qualitatively new stage, which is characterized by the development of progressive organizational and economic ties in all its links, the creation and development of primary production units: grape and wine-making, fruit and vegetable canning and essential-oil sovkhoz-plants, has emerged. The number of sovkhozes increased from 61 in 1960 to 145 in 1970. As compared with 1960 the production of grapes increased by 2.5-fold, fruits and berries—6.5-fold.

The increase of the output of agriculture is governed for the most part by the increase of the yield of agricultural crops on the basis of chemicalization, reclamation and modern agricultural technology. Thus, the yield of winter wheat in 1970 came to 24.6 quintals/hectare (that is, it increased in 10 years by 9.9 quintals per hectare); grain corn—respectively 37.3 quintals/hectare (it increased by almost 50 percent). The yield of base crops also increased: fruits and berries—26.7 percent, vegetables—14.2 percent, grapes—9 percent, sunflowers—9.6 percent. The increase of the output of farming in 10 years came to 69 percent, animal husbandry—45 percent, the total gross output of agriculture—62 percent. Here the number of those employed in agricultural production increased by only 2.5 percent. The bulk of the increase of the gross output of agriculture was obtained by means of intensive factors of development.

The progressive changes which occurred in 1961-1970 in industry and agriculture of the republic had important social consequences: urbanization accelerated, new industrial centers emerged, the structure of employment and the occupational skills composition of the population changed.
The formation of a more efficient structure of the economy of the Moldavian SSR, which was subordinate to the main task—the increase of the efficiency of social production—was continued in 1971-1980 with allowance made for the all-union division of labor and the specialization of the economy of the republic. The growth rate of the volume of industrial production during this period came to 205 percent; machine building, the chemical and petrochemical, the glass, porcelain and earthenware, as well as light industry developed rapidly. The processes of the retooling of enterprises, the concentration and specialization of production were stepped up. The ties of science and production were strengthened. The number of implemented measures on new equipment during 1971-1980 increased by nearly 1.8-fold. By 1980 there were 116 production and scientific production associations in the republic—14.5-fold more than in 1970. They accounted for 43.3 percent of the volume of sold output.

The rate of the mechanization and automation of technological processes accelerated noticeably. By the end of 1980 more than 3,500 mechanized flow lines and 240 automatic lines were in operation at industrial enterprises of the republic.

The use of advanced processing methods and modern technology and the high skills of the engineering staff and regular labor force of the republic made it possible to develop items at the level of the best domestic and foreign models. First of all these are products of the sectors of machine building: microwire resistors, special deep-well pumps for operation in corrosive mediums, machines for casting, oscillographs, ultrasonic flaw detectors, explosion-proof electric motors and so on.

The creation of the conditions for the intensive development of the economy and the increase of the capital-labor and power-worker ratios were responsible for the increase of labor productivity in the sectors of industry of the republic and the increase of the production volumes. The corresponding data for 1980 as a percent of 1970 are cited below.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Growth rate of labor productivity</th>
<th>Growth rate of production volumes</th>
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<td>Including:</td>
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<td>machine building and metalworking</td>
<td>196</td>
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<tr>
<td>light industry</td>
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<td>food industry</td>
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<tr>
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The structure of industrial production changed substantially. The share of machine building and metalworking in the total volume of industrial output increased from 9.6 percent in 1970 to 16.4 percent in 1980, light industry—respectively from 18.3 percent to 20.4 percent.

Radical changes occurred in the agro-industrial complex of the republic. By the early 1970's conditions, which promoted the synthesis of industrial and agricultural production, has been created in industry and agriculture under the influence of scientific and technical progress.
An extensive production experiment on the improvement of the management of the kolkhoz-cooperative sector was conducted in the republic. The republic council of kolkhozes and rayon councils of kolkhozes were formed in 1973. The functions of the management of the production activity of kolkhozes, interfarm associations, processing enterprises and service works were assigned to them.

Republic and rayon production associations for rural construction (Mezhkolkhoz-stroy), for animal husbandry (Kolkhozshivprom), for individual sectors of plant growing, as well as for the service of basic production (mechanization and electrification, reclamation, chemicalization, transportation associations and others) were set up.

Tens of specialized enterprises for the production of pork and beef, the reproduction of the milk herd and the production of fodders and mixed fodders belong to Kolkhozshivprom. The share of the association in the kolkhoz production of meat comes to 70 percent and is steadily increasing. Large tracts of industrial orchards and vineyards have been created on the basis of interfarm cooperation by the renovation of existing plantations and the planting of new ones with allowance made for domestic and foreign science and advanced practice.

The basic directions of specialization, concentration and cooperation, as well as the forms of the organization of large-scale specialized agricultural production were stipulated in the decree of the CPSU Central Committee "On the Further Development of the Specialization and Concentration of Agricultural Production on the Basis of Interfarm Cooperation and Agro-Industrial Integration," which was adopted on 28 May 1976.

Under the conditions of the Moldavian SSR the most important directions of the development of the agro-industrial complex are: the intensification of zonal specialization for the purpose of the efficient use of the land, natural and economic conditions; the organization of large state, kolkhoz and interfarm specialized enterprises of the industrial type in animal husbandry and farming; the intensification of the intrafarm specialization and concentration of production and the improvement of the economic relations in the agro-industrial complex.

Considerable work on the sound regionalization and location of agricultural crops and on the implementation of the comprehensive program of the intensification and industrialization of production in the agro-industrial complex has been performed by the Moldavian SSR Gosplan jointly with the Academy of Sciences, ministries, departments and scientific research organizations of the republic. By means of the intensification and efficient location of agricultural production, the improvement of the structure of sown areas and the development of horticulture and viticulture during 1971-1980 the gross production of grain in average annual terms increased by 1.3-fold, sugar beets—1.22-fold, vegetables—2.1-fold, fruits—1.4-fold and grapes—1.4-fold. The changeover of animal husbandry to an industrial basis also promoted the increase of the production of meat by 1.45-fold and milk and eggs by nearly 1.5-fold. The new organizational and economic forms of management in combination with advanced technology ensured an increase of production efficiency. Thus, during the indicated years the yield of cereals in average annual terms increased by 28.8 percent, vegetables—52.8 percent, fruit crops—11.3 percent and grapes—32.3 percent.
In 1980 in the republic 103,900 rubles worth of agricultural produce were produced per 100 hectares of land, this is nearly fivefold more than on the average for the country. During the years of the 10th Five-Year Plan the average annual production was: grain—about 2.9 million tons, sugar beets—3.1 million tons, grapes—more than 1.2 million tons, fruits—more than 800,000 tons, meat—250,000 tons, milk—1.1 million tons, eggs—800 million.

In the development of the agro-industrial complex 13 scientific production associations are providing substantial assistance. Agricultural scientific research institutes, experimental stations, 77 specialized sovkhozes, design bureaus, experimental enterprises, plants and large shops for the processing of seed plants, cereal, industrial and vegetable crops and essential-oil raw materials, as well as educational bases and several other organizations have been included in them.

The extensive introduction in practice of the achievements of agricultural science and modern industrial processing methods, chemicalization and reclamation ensured a high growth rate of labor productivity in agriculture, which during 1971-1980 in social production amounted per worker to 137 percent, while in average annual terms (1976-1980 as a percent of 1966-1970) it amounted to 146 percent. The entire increase of the gross output of agriculture was obtained by means of the increase of labor productivity with a decrease of the number of those employed in agricultural production.

The work of planning organs and scientific organizations on the improvement of the agro-industrial complex, which is being performed in the republic, is aimed at the achievement of high results and the increase of the national economic production efficiency. In conformity with the decisions of the 26th CPSU Congress the Moldavian SSR Gosplan basically has prepared a comprehensive goal food program. A program of the development in the republic of fruit growing and the fruit processing industry is also being drawn up. It includes the creation of large industrial orchards of the intensive type; the increase of the capacities of the processing industry, the means of transportation and storage of products.

The construction of irrigation systems on an area of 336,000 hectares with the use of water of the Dunay is called for by the comprehensive goal program of the development of the southern part of Moldavia, which is being developed in conformity with the decree of the CPSU Central Committee and the USSR Council of Ministers of 21 March 1974 "On the Development of the Irrigation of Lands in the Southern Rayons of the Moldavian SSR." This will make it possible to accomplish the intensive development of viticulture, fruit growing, vegetable growing, technical crops, grain growing, fodder production and animal husbandry.

The intensification of social production, the extensive introduction of the achievements of scientific and technical progress and the increase of labor productivity in industry and agriculture provided an increase of the national income, which in 1980 came to 5.7 billion rubles. Moreover, whereas during 1961-1970 75.6 percent of the increase of the national income was obtained by means of intensive factors, during 1971-1980 79.8 percent was.

At the 26th CPSU Congress L. I. Brezhnev noted that during the 11th Five-Year Plan "each sector is faced with its own urgent tasks and specific problems. But there are problems which encompass all the spheres of the national economy, and the main one of them is to complete the changeover to the primarily intensive path of development."  

The decisions of the 26th party congress and the November (1981) CPSU Central Committee Plenum and the instructions of L. I. Brezhnev were reflected in the state plans of economic and social development of the USSR and the union republics for 1981-1985. During the current five-year plan in the Moldavian SSR a high rate of development of industry, agriculture and other sectors of physical production and on this basis the increase of the well-being and cultural standard of living of the people are envisaged by the state plan. The national income will increase as compared with 1980 by 30 percent and will amount in 1985 to 7.4 billion rubles. It is characteristic that during the last year of the five-year plan it is planned to obtain 85 percent of the increase of the national income by means of the main factor of the intensive development of the economy—the increase of labor productivity.

The strengthening of the social orientation of the 11th Five-Year Plan is appearing in the fact that in the republic, with an overall increase of the production of industrial output by 32 percent, the production of means of production (group A) will increase by 29.9 percent, while the production of consumer items (group B) will increase by 35.2 percent.

Measures on the tightening up of the policy of economy and thrift and on the efficient consumption of electric power, fuel, raw material and other resources are outlined in the plan. This will make it possible in 1982-1985 to additionally reduce the material expenditures per unit of output being produced, work being performed and services being rendered on the average by not less than 3-5 percent as against the 1980 level. It is envisaged to commit to the economic turnover production waste products and secondary raw materials, which are a substantial reserve of the replenishment of raw material and material resources. The volume of the procurement of secondary textile materials and waste paper will increase by 1.6-fold, secondary polymeric raw materials—by nearly eightfold, worn out tires—1.7-fold, broken glass—1.3-fold. The use of ash and cinders, which are formed at the Moldavskaya GRES, for the production of construction materials and of the waste products of sawmill operation and woodworking for the production of wood particle boards, parquet and carpentry items will increase.

The extensive introduction of new, highly economical low-waste and waste-free technologies in the agro-industrial complex is planned. Thus, in the republic about 20 percent of the byproducts and production waste products are formed in the processing of approximately 1 million tons of grapes. The introduction of technological processes and technological equipment arrangements of the production from the waste products of wine making of ethyl alcohol, tartrate of lime and dye, the separation of the grape seeds and the production of fodder meal and other products is envisaged for the purpose of their use in the national economy. In the meat and dairy sector the setting up of a complex of structures for the

mechanical treatment of waste water, which ensures the extraction for technical needs of 95 percent of the fats contained in them, has been completed.

New technological flow lines for the aseptic canning of prepared foods and the freezing of fruits and vegetables for the purpose of the smooth loading of processing enterprises during the period of the mass arrival of agricultural raw materials are operating successfully in the canning industry. The use for the electric processing of fruits and vegetables of a unit like the Plazmoliz, which makes it possible to use raw materials more completely and to increase the yield of juice, is being expanded.

An experimental shop for the production of powders from pressed apple residues with a productivity of 300 tons a year is being built at the Nimorenskiy Cannery. The production of fruit powders will make it possible to supply the confectionary industry with sugar-containing products with a wide spectrum of biologically active substances, to enlarge the assortment of confectionary items with fruit fillings and to save a considerable amount of sugar.

The introduction of a technological line for the complete processing of apples into juice and puree at the Grigoriopol' Cannery, which makes it possible to decrease the output of waste products by 10 percent and to reduce the consumption of sugar when producing jams and apple butter, is envisaged.

During the current five-year plan the rated capacities for the production of pectin from pressed applied residues should be assimilated at the Bendery and Kalininsk Canning Associations.

The use of electric flotation equipment for the separation and processing of yeast sediments at wine-making plants, as well as the implementation of measures on the complete processing of sugar beets by the recovery of the beet scraps and the press pulp water of sugar production are planned. Moreover, technological processes for the use of grape vines and clippings of fruit trees (the annual amount of which exceeds 400,000 tons) for the production of nutrient yeast are being developed.

In the sphere of the agro-industrial complex the efforts of scientific collectives during the current five-year plan are being focused on research which ensures the stability of agricultural production and the increase of its efficiency. It is envisaged to develop and turn over for state tests more than 180 strains and hybrids of agricultural crops. The achievements of breeders—new strains and hybrids of wheat, high-lysine and high-yield hybrids of corn, high-oil strains of sunflowers and high-sugar beets—will find extensive use.

In technological studies the main attention will be devoted to questions of the optimization of the tilling of the soil, the use of fertilizers and the methods of irrigation for the purpose of the most complete revelation of the biological potential of modern strains and the reduction of the power-output ratio and labor expenditures on the production of a unit of output.

The use of industrial technologies of cultivating agricultural crops is planned on nearly all the sown areas: corn—350,000 hectares, sunflowers—95,000 hectares, soybeans—20,100 hectares, sugar beets—50,000 hectares. The areas of irrigated intensive orchards will be increased to 38,000 hectares.
New, highly productive breeds and hybrids of livestock and poultry, which have been adapted to the conditions of the mechanization and automation of production, and advanced technologies of the production of meat, milk and eggs will become prevalent in animal husbandry.

Particular attention in republic industry is being devoted to the complete mechanization and automation of production. During the current five-year plan it is planned to set up more than 150 completely mechanized and automated sections, shops and works and to introduce about 280 mechanized flow lines, completely mechanized lines and automatic lines. This will make it possible to change over about 10,000 people from manual to mechanized and automated labor.

At the enterprises of the furniture industry individual manual operations will be performed for the first time in the sector by industrial robots. In light industry in 1985 all the sewing enterprises will be completely mechanized with respect to basic production.

During the five-year plan it is planned to assimilate the production of 155 new types of industrial products. By the end of the 11th Five-Year Plan the volume of the output of products of the highest quality category will come to nearly 1.2 billion rubles, which is 1.7-fold more than in 1980, and consumer goods will make up more than a third of them.

Assignments on 11 comprehensive goal scientific and technical programs and 24 programs for the solution of scientific and technical problems, which were approved by USSR Gosplan, the State Committee for Science and Technology and the USSR Academy of Sciences, have been included in the plan for 1981-1985. The institutes of the Moldavian SSR Academy of Sciences and other scientific research organizations of the republic are participating in the fulfillment of these assignments.

The five-year plan also contains assignments on 15 republic intersectorial scientific and technical programs which call for the continuation of scientific research in the following areas: the protection and improvement of the use of water resources; the study of the biological principles of the efficient use, reproduction and protection of the plant and animal world of Moldavia; an adaptive system of agriculture under the conditions of its specialization and concentration; the use in industry of new semiconductor materials, technological processes of the storage and transportation of agricultural products; the distribution of productive forces with allowance made for the natural and economic zones and regions of the republic.

The extensive use of all the means of intensive development is ensuring the dynamic growth of the Soviet economy. The working people of the Moldavian SSR under the guidance of the Leninist party are making their contribution to the implementation of the decisions of the 26th CPSU Congress and the 15th Congress of the Communist Party of Moldavia. The republic will mark the year of the 60th anniversary of the formation of the USSR with new labor achievements.

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Armenian SSR

Moscow PLANOVYE KHOZYAYSTVO in Russian No 5, May 82 pp 81-87

[Article by Deputy Chairman of the Armenian SSR Council of Ministers and Chairman of the Armenian SSR Gosplan P. Sagoyan: "Problems of the Development of the Economy of the Republic"]

[Text] For more than six decades the national economy of the Armenian SSR has been developing successfully in the fraternal community of socialist republics as an integral component of the unified national economic complex. Everything that has been done on the Armenian land during the years of Soviet power has been permeated with the unfading light of the immortal ideas of Lenin and vividly confirms the complete triumph and effectiveness of Lenin's national policy. The socialist path has afforded unlimited opportunities for the development of the productive forces of the republic and the spiritual flourishing of the Armenian people and has ensured the accomplishment of the most profound progressive changes.

In the decree of the CPSU Central Committee on the 60th anniversary of the formation of the Union of Soviet Socialist Republics it is noted that the economy of all the Soviet republics is growing dynamically in the united family of peoples. Modern industry, agriculture, science, the genuine flourishing of culture—that is what characterizes any of them today. At the same time they have their own unique character and nationally peculiar traits.

During these years the Armenian SSR has made great gains in the area of economic development and social progress and has been transformed from a backward outlying district of tsarist Russia into an industrial-agrarian republic with a modern highly developed industry, multisectorial mechanized agriculture, advanced science and culture.

The development of the economy, and particularly of industry, during the past six decades is vivid evidence of the progress and prosperity of the republic. Prior to Soviet power its industry was represented mainly by the mining of copper ores, enterprises for the primary processing of agricultural raw materials and semi-handicraft works. The unselfish assistance of the Great Russian people and their working class and the assistance of other fraternal republics played an enormous decisive role in the development of the economy of the young Soviet republic.

The republic increased its industrial potential rapidly. In 1940—after only 20 years of Soviet power in Armenia—the volume of the gross industrial output exceeded 1919 by 32-fold, while the generation of electric power had increased by more than 230-fold.

The rapid rate of industrial production of the republic, which exceeded the average indicators for the country during practically the entire postwar period, is one of the most typical traits of the development of its production forces. It enabled the republic to make great advances in economic construction. The fact that the volume of industrial production during the past 40 years has increased by more than 40-fold attests to the dynamism of this process.
The rapid development of power engineering was of exceptionally great importance in the radical transformation of the productive forces and the assurance of the economic growth and social progress of the republic. Suffice it to say that with the placement into operation in the 1970's of the Razdanskaya GRES, the Tatevskaya and Shambskaya GES's and the Armyanskaya AES the generation of electric power in 10 years increased by 2.2-fold and amounted in 1980 to 13.5 billion kWh, which made it possible not only to meet the need of the national economy of the republic for electric power, but also to transfer more than 2.7 billion kWh to the United Power System of Transcaucasia.

The role of Soviet Armenia in the all-union territorial division of labor is growing. The republic specializes in the production of individual types of products of nonferrous metallurgy, instrument making, the chemical, electrical equipment, textile and knitwear, wine and cognac and canning industries.

The development of the multisectoral industry was carried out at the same time as the realization of the main direction of the regional economic policy—the assurance of the leading development of the labor-consuming, low material-consuming sectors of industry for the purpose of the most complete and efficient employment of manpower resources.

One of the convincing proofs of the radical changes which have occurred in the economy and culture of Armenia is the steady increase of the contacts with the union republics and foreign countries. Whereas back in the 1960's for the functioning of the national economy the republic imported considerably more physical assets than it exported, since 1973 the situation has been changing. The republic, which takes up 0.1 percent of the territory of the country and has 1 percent of its population, today is sending its products to all the economic regions, union republics and oblasts of the Soviet Union, as well as is exporting over 150 types of industrial items to more than 70 foreign countries. The RSFSR (the Central, North Caucasian and Western Siberian Regions), the Ukrainian SSR and the republics of Transcaucasia have the greatest share in the interrepublic economic relations of the republic.

There are being imported to Armenia: ferrous metals, petroleum products, gas, equipment and machines, passenger cars and trucks, tractors, agricultural machinery, lumber, grain, raw materials for the production of a diverse assortment of items of the chemical and light industries and food products, cultural, personal and household goods. There are being exported from it: mobile electric power stations, generators, transformers, machine tools, products of instrument making, cable products, motor vehicle tires, synthetic rubbers, mineral fertilizers, footwear, fabrics, industrial rubber items, garments, knitwear, wine and cognac items.

The main direction of the improvement of the sectorial structure of republic industry is the increase of the share of the labor-consuming, low material-consuming and science-consuming sector—machine building. Machine building has a definite advantage over other sectors of industry in the assurance of the increase of the needs for manpower. It is manifested in the fact that the policy of the expansion and intensification of labor-consuming industrial production is directly connected with modern scientific and technical progress: the electronics and radio industries, instrument making and precision machine tool building, that is, the sectors which govern scientific and technical progress, at the same time are sectors which "absorb" the skilled portion of the manpower resources.
The measures, which have been elaborated and are being implemented, on the further development of the national economy of the Armenian SSR, the increase of the productive forces, the further increase of the economic and scientific potential, the cultural development of the republic and the efficient use of manpower and natural resources were of truly historical importance for our republic. The implementation of these measures provided a significant increase of the scale of industrial production and its qualitative structural changes during the 10th Five-Year Plan. The volume of industrial output during 1976-1980 increased by 46.3 percent, and approximately 90 percent of its increase was provided by means of the expansion, renovation and retooling of operating enterprises and the increase of the utilization ratio of the functioning capacities.

During 1976-1980 the volume of the output of products of machine building increased by 74 percent with an increase of 46.3 percent for all industry, the increase of labor productivity was respectively 23.4 percent with an increase of 21 percent for all industry. The proportion of the products of machine building in the total volume of industrial output in 1980 was 28 percent. Some 40 percent of the number of industrial personnel engaged directly in production were employed in the sector. One-fifth of the total industrial output was produced by light industry, the production volume of which during the years of the 10th Five-Year Plan increased by 1.5-fold.

Broad prospects of the development of industry in the republic are emerging during the 11th Five-Year Plan. It is envisaged to increase the volume of industrial production by 31 percent. The tendency for the leading development of the output of products for meeting the needs of the population will continue. But in contrast to the 10th Five-Year Plan in this output the volumes of the production of cultural, personal and household items will be increased more rapidly (39.5 percent) in conformity with the increased consumer demand for them.

It is envisaged to increase the volume of the output of machine building by 58.6 percent and to increase its share in the total volume of industrial production to 33.7 percent. The intersectorial works for the output of general machine building products will undergo further development. In the total output of machine tools the production of machine tools of high and especially high precision, as well as machine tools with program control will increase by 68.4 percent.

The structural changes being outlined in the radio industry, the electronics and electrical equipment industries and machine tool building, in which there is a good technical base, which is making it possible to set up the large-scale specialized production of goods for the population and to ensure the proper level of their quality, are especially important from the point of view of the assurance of scientific and technical progress.

Particular attention is being devoted during the current five-year plan to the stable growth of electric power engineering. The generation of electric power will increase by 17.1 percent with a higher rate of its generation at nuclear electric power stations. It is planned to put into operation the Spandaryanskaya GES, to carry out the construction of electric power transmission lines with a length of more than 900 km and to begin the expansion of the Armyanskaya AES.
The construction of the Dzhermuk-Azizbekov-Ekhegnadzor gas pipeline (a tap line from the Kazakh-Yerevan gas pipeline) with completion of the work in 1985 is envisaged for the improvement of the supply of the population of the mountainous rayons of the republic with natural gas.

The more thorough and complete use of reserves of ores of nonferrous and rare metals and the involvement in industrial processing of ores with a reduced content of metals by means of the improvement of the concentration processes and the increase of the degree of their extraction are being planned in nonferrous metallurgy.

The further development of the chemical industry is envisaged in the direction of the expansion, renovation and retooling of operating enterprises and the building of new small-tonnage works for pure substances and household chemical products. The output of synthetic powders will increase by 1.5-fold, household chemical products—1.4-fold, synthetic resins and plastics—34.5 percent, chemical fibers and filaments—20.6 percent.

The further development of the construction materials industry is envisaged for meeting the ever increasing needs of capital construction. The output of large asbestos cement structural slabs, which are in great demand, and asbestos cement pipe and couplings will increase considerably. The production of ceramic items—tiles for floors, glazed tiles for facing, drainage pipes and others—will undergo further development. The output of facing tiles made from natural stone, as well as felite and travertine tiles will be expanded considerably in connection with the rapid development of large-panel and frame-panel construction and with the need for the preservation of the traits of national architecture.

The further development of the sectors of light and the food industries, the volume of the output of which will increase respectively by 35.6 and 13 percent, primarily owing to the increase of the capacities and the technical renovation of operating enterprises, the more intensive use of the production area and the replacement of obsolete equipment with more highly productive equipment, lies ahead during the new five-year plan. A considerable increase of the output of goods of greater demand is being planned: wool fabrics—26 percent, silk fabrics—25 percent, knit underwear—37 percent, knit outerwear—51 percent, leather footwear—23.5 percent. At the same time the annual updating of the assortment of items of light industry by not less than 75 percent and the expansion of the production of fashionable goods which enjoy a greater demand are envisaged.

A number of measures, particularly the provision of operating enterprises with new, advanced equipment, are envisaged for the assurance of the outlined development of light industry. At the spinning works of the enterprises of the cotton industry pneumatic spinning and rotary spinning machines will be installed, at the weaving works the looms will be replaced by pneumatic and pneumatic "foil" [rapirnyy] looms (the share of the latter will come to 45 percent). The enterprises of the wool sector will be completely equipped with draw looms and automated cylinder warping machines. At sewing enterprises it is planned to introduce semi-automatic and automatic machines with program control and sets of automated equipment for the cutting and heat finishing of items.

Starting in 1985 a new sector of industry—the perfume and cosmetics sector—will be organized in the republic for the purpose of the efficient use of a high quality local raw material—geraniums.
The gradual implementation of a set of measures on the more efficient use of the scientific and technical potential of the republic will contribute to the successful accomplishment of the economic and social tasks facing republic industry during this five-year plan. For the Armenian SSR, which is a labor-supplied region of the country, the task of the efficient location of the productive forces is closely interconnected, on the one hand, with the general directions and peculiarities of the territorial division of labor of the country as a whole and, on the other, with peculiarities which pertain exclusively to the economy of the republic.

In the immediate future the need for the efficient use of the manpower potential and the maximum satisfaction of the growing needs of the population should be taken into account when locating industrial works.

The average annual growth rate of the population of the Armenian SSR during the 1970's (2.1 percent) considerably exceeded the average union level. The leading growth rate of the population is a result of the relatively high rate of natural growth and the positive balance of interrepublic migration.

In the early 1980's two-thirds of the residents of the republic lived in its cities. This is one of the highest indicators of the urbanization of the country and one of the strongest factors which are complicating the efficient distribution of productive forces. The high average annual growth rate of manpower resources will be maintained during the 11th Five-Year Plan. The economic advantage forming with respect to manpower resources is making more urgent for the republic the problem of the assurance of their employment at present and in the immediate future. The tight balance of natural resources as if "opposes" the positive balance of manpower resources.

The areas of agricultural land, the reserves of water power and water resources and commercial timber are greatly limited in the Armenian SSR. The shortage of the indicated natural resources and the absence of the extraction of fuel resources objectively predetermine the moderate development of electric power engineering, power-consuming chemical works, the timber and wood processing industry, as well as agriculture. At the same time the surplus of manpower resources, the adequate reserves in the republic of various metallic and non-metallic minerals and the most abundant mineral water resources, favorable climatic conditions, the relatively low specific expenditures on the development of new territories (the regionwide production and social infrastructure) and their proximity to the most developed economic and cultural centers of the republic are creating real opportunities for the intensification of the specialization of the republic in the system of the all-union division of labor with respect to the output of products of machine building and light industry, nonferrous metallurgy and the construction materials industry and the production of mineral waters.

The historically established territorial disproportion—the concentration of the bulk of the potential raw material resources in the mountainous and piedmont rayons and the accelerating development of the rayons of the Ararat Plain—appeared most distinctly in the 1960's.

The creation in subsequent years of industrial centers—the Razdan, Charentsavan and Aboyan Industrial Centers—as well as an extensive network of branches of industrial enterprises, which were based in small cities and urban-type settlements,
made it possible in 1980 as compared with 1975 to increase the share of the production volume of small industrial settlements in the total volume of industrial production from 30 to 37 percent and to decrease the share of large cities from 70 to 63 percent.

But the problems of the rapid socioeconomic development of the outlying rayons of the republic have still not been completely solved. Thus, in 1980 a little more than 17 percent of the population lived in the mountainous and piedmont rayons, which take up more than half of the territory of the republic. Moreover, the share of these rayons in the total volume of industrial production was approximately 7 percent. The turnover of personnel and the migratory mobility of the population here are higher than on the average for the republic. All this dictates the need for the development of a highly efficient program of the purposeful distribution of productive forces.

At present the capital, Yerevan, accounts for one-third of the population of the republic, half of the volume of industrial production, 46 percent of the number of workers and employees and about 40 percent of the industrial fixed capital.

For the assurance of the rate of development of industrial production, which is envisaged for the 11th Five-Year Plan, it is planned to build two-thirds of the new enterprises in small cities and rayons. In the large cities—Yerevan, Leninakan and Kirovakan—mainly the renovation and retooling of operating enterprises are envisaged, while the construction of new ones is being outlined only in connection with the need for the creation of the production infrastructure—the development of power engineering, the construction base or the sphere of the nonproduction service of the population.

The further development of operating and the organization of new (for example, in Martuninsky Rayon) industrial centers, as well as branches of industrial enterprises and associations are being planned in small cities and rayons in connection with the need for the improvement of the distribution of industrial production.

A unified group system of population centers, which are interconnected by common engineering service lines and transportation lines, will be formed as a result of the creation and development of operating industrial centers. By means of this the removal of land from the agricultural turnover and the outflow of the rural population to cities will be reduced, the implementation of effective conservation measures will be facilitated.

For the republic as a whole during 1981-1985 it is envisaged to attract to new industrial enterprises and to operating ones, which are scheduled for renovation and expansion, approximately 58,000 workers, of them 18,000 in Yerevan, Leninakan and Kirovakan and 40,000, or 69 percent of their total increase, in small cities and rayons.

The increase of the well-being of the population of the republic to a considerable extent is governed by the development of the agro-industrial complex and by the more efficient coordination of all its links for the achievement of high end national economic results, and first of all the accomplishment of the food program.
During the 1970's agriculture of Armenia rose to a qualitatively new level, it became more productive and better provided with capital and power. During the years of the Ninth and 10th Five-Year Plans more than 2.04 billion rubles were invested in agriculture as against 720 million rubles during the preceding 10 years, that is, 2.8-fold more. By the end of 1981 the fixed production capital of agriculture exceeded 1.7 billion rubles, or had increased 3.1-fold as compared with 1965. In terms of 100 hectares of farmland the provision of capital came to 13,200 rubles in value of fixed capital, while the capital-labor ratio per worker came to 7,400 rubles. As compared with 1965 these indicators had increased respectively by 3.2- and 2.8-fold. The power saturation increased by twofold and came to 636 hp per 100 hectares of sown area.

Following the March (1965) CPSU Central Committee Plenum major water management and reclamation operations were performed in the republic, 32 reservoirs with a total volume of more than 220 million m$^3$ of water were put into operation, 100,000 hectares of land were reclaimed. In 1980 850 irrigation systems with a total length of the network of more than 11,000 km were in operation in Armenia, this made it possible to increase the total area of irrigated lands to 291,000 hectares—66 percent of the total sown area of the republic.

The implementation of measures on the further development and the increase of the efficiency of irrigated farming in the Armenian SSR was of great importance for the development of agriculture. The construction of 16 large reservoirs, of which 3 have already been put into operation and 5 are under construction, is envisaged.

The most characteristic feature of the present development of agricultural production is its changeover to an industrial technology and the extensive introduction of chemicalization and complete mechanization. Suffice it to say that now there are 12,400 tractors, about 2,000 grain and silage combines and about 15,000 trucks at the kolkhozes and state farms of the republic. Let us note for comparison that in 1940 there were only 1,555 tractors, 288 grain combines and 1,007 trucks.

During 1976-1980 agriculture of the republic received 422,000 tons of mineral fertilizers in terms of nutrients, which is nearly 16 percent more than during 1971-1975. The steps taken on the intensification of agricultural production ensured the stable increase of the output of products.

The gross output of agriculture during the 10th Five-Year Plan as compared with the Ninth Five-Year Plan increased by 24.1 percent (in average annual terms). During 1976-1980 products worth 760 million rubles more were produced than during 1971-1975. More grain—30.1 percent, sugar beets—29.4 percent, potatoes—67.4 percent, vegetables—31.0 percent, grapes—28.1 percent and fruits—55.5 percent were purchased during the five-year plan.

The traditional and now leading sectors of agriculture—grape and fruit growing—are being developed mainly by means of the development of large tracts which meet the requirements of highly intensive production.

A program of the construction of hothouse combines and vegetable and fruit storehouses is being implemented for the purpose of meeting the needs of the population for fresh vegetables during not only the summer-fall, but also the winter period.
The measures aimed at the strengthening of the fodder base, the mechanization of production processes and the creation of a breed herd, played a most important role in the development of animal husbandry. During the years of the 10th Five-Year Plan the production of fodders (in fodder units) increased by 26.8 percent. Work is being carried out gradually on the creation of large livestock complexes.

The production of livestock products on an industrial basis is also being carried out on the basis of interfarm cooperation. The advantages of such a method have been convincingly demonstrated by the economic indicators. In the mountainous rayons with a pronounced cattle breeding specialization the first steps are being taken on the introduction of an organization form of management, which is new in the republic—territorial production associations.

The advanced methods of managing animal husbandry and its changeover to an industrial basis made it possible to increase during the 10th Five-Year Plan as compared with the Ninth Five-Year Plan the average annual volumes of purchases of livestock and poultry by 34.3 percent, milk—26.4 percent, eggs—71.2 percent and wool—7.6 percent.

Good indicators in agricultural production were achieved last year. A record harvest of grapes—360,000 tons—and vegetables—458,000 tons—was gathered. Considerably more grain, sugar beets and potatoes were purchased than was envisaged in the plan, 2.5 million tons of fodder were procured. The plans and socialist obligations on the production and sale to the state of other basic types of agricultural products were also successfully fulfilled and exceeded.

It is outlined by the plan for 1981-1985, along with the implementation of measures on the further increase of the yield of agricultural crops, to enlarge the areas of irrigated lands by 30,000 hectares, to irrigate 60,000 hectares of pastures, to improve the reclamation status of 20,000 hectares of land, to reconstruct the irrigation systems and to increase their water supply on an area of 50,000 hectares.

Particular attention in the plan is devoted to the development of animal husbandry. By means of the implementation of measures on the increase of the productivity of livestock and poultry it is planned to increase during the five-year plan the average annual production of meat by 12.1 percent, milk—9.7 percent and eggs—25.1 percent.

Given the planned volumes of the production of the basic types of products of farming and animal husbandry, the average annual volume of the gross output of agriculture will increase by 11 percent.

The 11th Five-Year Plan envisages the increase of the role of the republic in the formation of the all-union food fund.

The food program of the republic should be implemented with allowance made for the improvement of the activity and the development of other units of the agro-industrial complex. The problem of the creation of a full-fledged production infrastructure of agriculture and the processing sectors, their supply with refrigerators, warehouse facilities, special means of transportation, packaging and wrapping materials and so on is arising with all urgency. The development of the
infrastructure, of course, requires additional expenditures, but they will be recovered (if we take into account the elimination of the losses of agricultural products) in a short period, which does not exceed 2-3 years.

For the complete quantitative and qualitative meeting of the growing demand of the population and the national economy for transportation great demands are being made on the creation of an efficient transportation system. Much was done during the past five-year plan. The Masis-Nurnus railway line, a new terminal complex at the Zvartnots Airport and the first kilometers of the Yerevan subway were put into operation, 375 km of hard-surface roads were built and renovated and so on.

Given the comparatively small territory of the republic and the relatively developed road system, common-carrier motor transport, which in 1980 accounted for 14 percent of the freight turnover and 44 percent of the passenger turnover, is playing a significant role in the transportation of freight and passengers. The strengthening of the material and technical base and the leading development of common-carrier motor transport, the freight turnover of which will increase by 48.2 percent and the passenger turnover of which will increase by 20.7 percent, is being planned in motor transport.

The implementation of a set of measures on the improvement of the operation of all types of transport is envisaged during the current five-year plan. Train traffic will be opened on the Idzhevan-Razdan railway line, due to which the capacity of the existing railroad lines will increase considerably and a new very short outlet to the main Transcaucasian Railroad Line, bypassing the difficult sections of the existing system, will appear.

In recent years in the republic particular attention has been devoted to the use of nature, particularly the protection and efficient use of the natural resources of Lake Sevan. In 1981 the unique Arpa-Sevan tunnel was put into operation. Work is being performed on the construction of a set of hydraulic engineering structures for the diversion of waters of the Vorotan River into Lake Sevan, and measures aimed at the improvement of the ecological condition of the lake as a whole (the creation of the Sevan National Park and a unified system of treatment facilities, the construction and renovation of fish hatcheries and so on) are also being implemented.

Difficult and responsible tasks face the construction workers of Armenia. During the 11th Five-Year Plan the increase of capital investments from all sources of financing is planned in the amount of approximately 10 percent. Measures aimed at the increase of the effectiveness of capital investments, the speeding up of the placement into operation of the production capacities and facilities at previously started construction projects and the decrease of the number of newly begun construction projects and the above-standard amount of unfinished construction are envisaged in the plan. The capital investments being allocated for retooling and renovation will increase from 30.2 percent in 1976-1980 to 33.4 percent in 1981-1985. For production projects the capital investments being allocated for start-up projects will amount to 38.3 percent as against 27.3 percent during the preceding five-year plan. This will ensure the placement into operation of 18.6 percent more fixed capital than in 1976-1980, which, in turn, will make it possible to decrease the amount of unfinished construction from 126.7 percent of the annual amount of capital investments in 1980 to 98.4 percent in 1985.
The change of the structure of capital investments in favor of the sectors of physical production will be of great importance for the assurance of the further development of the economy, their increase in the sphere of physical production will come to 12.6 percent.

During the current five-year plan the further development of all the sectors of physical production should be based on the strengthening of the effect of intensive factors. By means of the increase of the productivity of national labor it is planned to obtain 80 percent of the increase of the national income and the entire increase of construction and agricultural output.

With a decrease of the increase of the capital investments being allocated for production construction by nearly 30 percent and of the increase of the manpower resources being used in the sectors of the production sphere by one-half the increase of the national income will rise by 2.4 percent as compared with the 10th Five-Year Plan, while the increase of the output of industry will remain at approximately the same level. As a result, whereas in 1976-1980 each ruble of increase of the amount of production capital investments accounted for an increase of the national income by 2 rubles 40 kopecks and an increase of industrial output by 3 rubles, during 1981-1985 respectively 3 rubles 50 kopecks and 4 rubles 30 kopecks are envisaged. Each unit of increase of the manpower resources used in the production sphere during the 10th Five-Year Plan accounted to an increase of the national income by 9 rubles 80 kopecks and an increase of industrial output by 12 rubles 50 kopecks, while during the 11th Five-Year Plan respectively 19 rubles 60 kopecks and 24 rubles are planned. The improvement of the ratios of these indicators in the case of the maintenance of an absolute increase of capital investments and manpower resources will be one of the most important prerequisites of a high stable rate of economic growth during the 12th Five-Year Plan.

Measures aimed at the increase of the output-capital ratio, first of all by the shortening of the periods of the assimilation and the improvement of the use of production capacities and the retooling of the operating production system, have been elaborated and should be implemented.

The efficiency of the use of material resources has to be increased sharply. It is envisaged to decrease the materials-output ratio per ruble of national product from 53.2 kopecks in 1980 to 51.3 kopecks in 1985 with a relative saving of expenditures of 235 million rubles.

During the current five-year plan special emphasis is being placed on the rapid development of science and technology—the main factor of the changeover of the economy to the path of intensification. Comprehensive programs of the most important statewide, intersectorial and territorial problems, with their orientation toward the end national economic result, will be drawn up on the basis of the goal program method of planning. The performance of work on nine republic comprehensive goal scientific and technical programs is envisaged for the 11th Five-Year Plan. They cover: the development of power engineering with allowance made for the solar potential and geopotential of the republic; the increase of the degree of the thorough extraction of nonferrous metals and the complete use of ores; the complete use of deposits of local nonmetallic materials; the development of the saline soils of the Ararat Plain; the further industrialization of construction and installation work; the mechanization of manual labor in the sectors of the national
economy of the republic; environmental protection and the efficient use of natural resources, including with respect to the Sevan basin; the introduction in the national economy of the republic automated control system; the introduction of the republic comprehensive system of product quality control.

An extensive program on the further increase of the material and cultural standard of living of the population has been outlined in the plan for the 11th Five-Year Plan for the accomplishment of the main task of the 11th Five-Year Plan—the assurance of the further increase of the well-being of the Soviet people. The national income will increase by 31.3 percent. Three-fourths of it are envisaged for consumption, and with allowance made for the expenditures on housing and sociocultural construction more than four-fifths of the national income are being allocated directly for the well-being of the people. The increase of the national income and the production of consumer goods, as well as the development of services will ensure an increase of the per capita real income in 1981-1985 by 15.5 percent.

The dependence of the wage on the end results of production and the efficiency and degree of economy of work will be increased. The average monthly wage of workers and employees will increase by 12.8 percent and by the end of the five-year plan will come to 183 rubles.

On the basis of the increase of the monetary income the volume of consumption of foodstuffs and the provision of the population with nonfood consumer items will increase and their structure will be improved; 500,000 people will improve their housing conditions.

An important source of the increase of the income and well-being of the population is the increase of the payments from public consumption funds. On a per capita basis the consumption funds during the 11th Five-Year Plan will increase by 11.1 percent and by the end of 1985 will amount to 388 rubles. In 1985 721 million rubles, or 53.7 percent of their total amount, will be allocated from public consumption funds for meeting the needs of the population for material goods and services, as against 573 million rubles, or 52.9 percent in 1980. The monetary payments to the population will increase as compared with 1980 by 21.8 percent.

Not only the increase of income, but also the increase of the production of goods entering the sphere of consumption will be a condition of the increase of the consumption of material wealth. The volume of the retail commodity turnover will increase by 30 percent and the structure of the commodity turnover will improve. The per capita retail commodity turnover in 1985 will come to 1,029 rubles as against 869 rubles in 1980. It is envisaged by the plan for the 11th Five-Year Plan to ensure the expansion of: stores by 80,600 m², public dining enterprises by 45,200 seats, general merchandise warehouses by 63,700 m² and the capacities of distribution refrigerators by 14,300 tons.

The development of the personal service of the population will be oriented more and more toward the meeting of the demand for services and the decrease of the expenditures of labor in housework. The volume of the sales of personal services during the five-year plan will increase by 45.6 percent, including 46.7 percent in rural areas.
The working people of Soviet Armenia, like all the Soviet people, are actively striving for the successful fulfillment and exceeding of the assignments of the 11th Five-Year Plan and are making a significant contribution to the implementation of the program of the economic and social development of the country.

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Kazakh SSR

Alma-Ata NARODNOYE KHOZIAYSTVO KAZAKHSTANA in Russian No 5, May 82 pp 3-7

[Article by Deputy Chairman of the Kazakh SSR Gosplan Zh. Abatalipov: "In the Fraternal Family of Peoples"]

[Text] In the united harmonious family of Soviet peoples the Kazakhs are going to meet a glorious anniversary of our homeland—the 60th anniversary of the formation of the USSR. Moreover, they are now marking another significant historical date—the 250th anniversary of the voluntary association of Kazakhstan with Russia.

Two and a half centuries together with the Great Russian people. A quarter of a millenium hand and hand with them. This contributed to the activization of the economic and sociopolitical life of the region, which was once backward in every respect, and speeded up the breakup of the patriarchal-feudal foundations, the development of the most abundant natural resources, the creation of centers of industry and the development of farming.

Kazakhstan achieved the greatest surge in its development after the Great October Socialist Revolution, which commenced a new era in the history of mankind. Owing to the wise leadership of the Communist Party, which steadfastly implemented Lenin's national policy, the economy and culture of our republic attained unprecedented heights.

"Since the first years of Soviet power," Comrade L. I. Brezhnev said in the Accountability Report to the 26th CPSU Congress, "our economic and social policy has been organized so as to raise the former outlying national districts of Russia as quickly as possible to the level of development of its center. And this task was successfully accomplished. The close cooperation of all the nations of the country and first of all the unselfish assistance of the Russian people played the most important role here."

In confirmation of this thesis Leonid Il'ich said further:

"Take, for example, Kazakhstan. It is experiencing a period of the genuine flourishing of the economy and culture. During the 10th Five-Year Plan alone more than 250 modern industrial enterprises, large shops and works were put into operation here. The Kazakhstan billion poods of grain, which along with the grain of the RSFSR and the Ukraine constitute the basis of the food fund of the country, have become customary."

Our republic, a former backward outlying district of tsarist Russia, has become such. Such leading sectors as ferrous and nonferrous metallurgy, the coal, petroleum and gas industries, machine building and the chemical industry represent its
modern industry. Power engineering is being developed rapidly. The development of rail, air, motor and other types of transport and means of communications has assumed an enormous scale.

And this is not only and not so much for our internal needs. The economic, scientific and technical ties of Kazakhstan with the fraternal republics are being extended and broadened more and more, its importance in the socialist cooperation and division of labor in the unified national economic complex of the USSR is increasing.

"Now Kazakhstan," Comrade D. A. Kunayev says, "is a major economic region of the country, the role and importance of which are increasing with every year. The solution of major and most difficult problems is within its power."

From five-year plan to five-year plan the economy of Kazakhstan is growing and becoming stronger, while at the same time its role in the all-union division of labor is increasing. Suffice it to say that the fixed production capital of the republic by the end of 1981 came to 72 billion rubles, that is, it had increased by 5.5-fold as compared with 1960. Moreover, in the past 15 years it has been completely replaced. Now more than 24,000 enterprises and organizations, which produce industrial and agricultural products, are in operation.

In the amount of the gross national product and the national income the republic holds third place in the union, while in industrial production it holds fourth place. It accounts for 30 percent of the copper produced in the country, 50 percent of the zinc, more than 70 percent of the pork, nearly 90 percent of the phosphorus and 40 percent of the fodder phosphates. Kazakhstan holds second place in the production of petroleum and third place in the generation of electric power, coal mining, the production of pig iron, steel, rolled metal products and agricultural machinery.

The share of Kazakhstan in the production of agricultural products is also high. It accounts for nearly a fifth of the gross harvest of grain in the country, among the union republics second place belongs to it in the production and procurement of wool, third place—meat and eggs, fourth place—the production of milk.

The economy and culture of the Kazakh SSR will undergo even greater development during the 11th Five-Year Plan. The capital investments and material resources being allocated to the republic will make it possible to increase its role in the fuel and energy balance of the country and in the development of ferrous and non-ferrous metallurgy, agricultural machine building, as well as the chemical, petro-chemical, light and the food industries and other sectors of industry. Kazakhstan, as in the past, will remain a major grain and livestock base of the Soviet Union.

The amount of produced national income by the end of the five-year plan will come to 23 billion rubles, or will have increased by 20 percent. The per capita national income will have increased as against 1960 by nearly threefold.

Every economic region of the country as a part of the unified national economic complex produces what is expedient for itself and others and receives in a planned manner from the latter what it is more efficient to produce there. The combination
of the sectorial and the regional principles of planning is promoting the achievement of the optimum proportions between them. The former is called upon to meet the needs of the country for specific types of products, the latter is called upon to ensure the comprehensive development of the region itself and the most complete and efficient use of its potentials.

The solution of some major problems requires enormous capital investments, the attraction of assets, the assistance of union ministries and departments and specific links with the budget of the country. The scale of the economy of the union republics and the development of the specialization and cooperation of production have now reached such a level that it is inconceivable to ensure the proportionate growth of any region without close economic cooperation. This can be clearly seen from the example of our republic.

The Kazakh SSR has permanent economic ties with all the union and autonomous republics and supplies industrial products to more than 60,000 consumers. The ties with the RSFSR hold a special place. In particular, the Urals account for 52 percent of all the freight shipped from the republic, including 72 percent of the coal. And, on the other hand, petroleum products, ferrous metals, high quality refractory and mineral construction materials and especially products of machine building (equipment, machine tools, production apparatus and so on) are being delivered to us from the Urals.

In all 20 electric power stations of the Urals, Western Siberia and Kazakhstan are powered by Ekibastuz coals. After the completion of the construction of the Ekibastuz Fuel and Power Complex five thermal electric power stations will annually deliver to the European part of the country 42 billion kWh of electric power. The Ekibastuz-Center and Ekibastuz-Chelyabinsk superhigh voltage DC and AC electric power transmission lines are being built for this.

Metallurgical combines of the Urals and Siberia operate on the crude iron ore of Kustanayskaya Oblast, the alumina of Pavlodar is being supplied to many aluminum plants of the country. Petroleum, coal, nonferrous and ferrous metals, chromite ore, crude phosphorus, mineral fertilizers, tractors, various machine tools and equipment, agricultural machinery, construction materials, meat, dairy and fish products, cotton, wool, fabrics, hides and others are also being shipped to other republics.

The life-giving force of the cooperation of the peoples of our country can be seen especially clearly in the implementation of the agrarian policy of the CPSU. All the Soviet people and envoys of all the fraternal republics took part in the development of the virgin and fallow lands of Kazakhstan. Some 240 plants of Moscow and Moscow Oblast supplied us with equipment, 70 collectives of Leningrad worked for the virgin land, hundreds of other enterprises of the union filled the orders of the workers of the virgin land.

The role of Leningrad in the development of industry of Kazakhstan and in the training of national personnel for many sectors of its economy and culture is enormous. Close labor cooperation links the Leningrad machine builders and designers with the Pavlodar Tractor Plan and the builders of the Ekibastuz electric power stations.
By means of deliveries from Siberia and the Far East our republic is meeting a significant portion of its needs for lumber. Siberian petroleum is flowing through the Omsk-Pavlodar petroleum pipeline.

It would also not be superfluous to mention the following facts. More than 1,000 enterprises and organizations participated in the building of Kazakhstan's Magnitka, while the representatives of 36 nationalities built it. In all 20 planning institutes of the union participated in the designing of the Ust'-Kamenogorsk Titanium and Magnesium Combine, while 300 enterprises supplied raw materials, materials and various equipment.

All the fraternal republics gave and are giving assistance to Kazakhstan in the formation and development of a multisectorial industry. For example, equipment for the metallurgical and sugar industries, buses, railroad cars, crane trucks, electrical equipment, items of the chemical industry and bucket wheel excavators are being supplied to us from the Ukraine. Belorussia is supplying tractors, heavy-duty trucks and dump trucks. Motor vehicles, diesel engines, drilling rigs, mobile electric power stations, machine tools, motors, compressors, silk fabrics and silk items are being delivered from the republics of Transcaucasia. Moldavians are sharing with us their experience in developing the agro-industrial complex.

Close economic ties are being maintained with the republics of Central Asia. The questions of the efficient use of water resources are being worked on in the interests of the common cause, the problems of the development of cotton growing and the cultivation of other industrial crops are being examined jointly. Cotton picking machines, various machine tools and equipment, natural gas, construction materials, cotton and silk items and products of the fruit and vegetable, oil and fat and wine-making industries are being delivered from these republics. With the placement into operation of the Kungrad-Beyneu railway line the transportation links were strengthened even more, while the route from Central Asia to the central regions of the country was shortened by 750 km.

Economic ties are being expanded with the Baltic republics, which supply Kazakhstan with radio-telephone equipment, minibuses, mineral fertilizer spreaders and items of light, the food and the fish industries.

In turn, the working people of Kazakhstan are constantly helping the fraternal peoples of the country. They took part in the construction of the Magnitogorsk and Kuznetsk Metallurgical Combines, in the restoration of the national economy of the western regions of the country and in the building of new sections in Tashkent and Olympic facilities in Moscow and are providing assistance in the construction of the Baykal-Amur Railway Line and the Atomkombinat Plant and in the development of the natural resources of Western Siberia and the Nonchernozem Zone.

Owing to the socialist cooperation and division of labor, the close cooperation and assistance of the fraternal republics all the sectors of industrial and agricultural production of Kazakhstan are developing rapidly. This enabled it to enter the world arena. From year to year its foreign economic ties are being expanded and its international prestige is increasing. Today our republic has ties with 82 countries of all continents. In all 180 enterprises, which supply more than 200 types of products, are working for the international market.
Within the framework of the Comprehensive Program of Socialist Economic Integration more than 70 percent of the export products are being delivered to the CEMAC countries. Draw benches, pumps, reinforcement steel and pig iron and agricultural machinery are being exported to Bulgaria; drop hammers, generating sets, small-displacement motors and various types of hardware are being exported to Hungary; yellow phosphorus, rolled ferrous metal products and metallurgical equipment are being exported to the GDR; nonferrous metals, forge and press equipment and transformers are being exported to Czechoslovakia; agricultural machinery, rolled nonferrous and ferrous metal products, mining equipment and products of the chemical industry are being exported to Mongolia. Spare parts for tractors and agricultural machinery are being delivered to all the socialist countries.

The Soviet Union is exporting various products with the Kazakh trademark to highly developed capitalist states, including the United States, England, France, the FRG and Italy, to major countries of Asia and Africa, which recently freed themselves from the colonial yoke, as well as to countries of Latin America. Among the items being delivered are draw benches, automatic presses, agricultural machinery, lathes, instruments of automatic equipment, ferrous and nonferrous metals, ferroalloys, chromium and phosphorite ore, asbestos, cement, hides, X-ray equipment, original items made from ceramic clay, fur products, lint, veterinary compounds and others.

The products of the Aktyubinsk and Yermak Ferroalloy Plants, the Chimkent Lead Plant, the Ust'-Kamenogorsk Lead and Zinc Combine and the Balkhash Mining and Metallurgical Combine, the Aktyubrentgen Plant, the Alma-Ata Plant of Heavy Machine Building, the Karaganda Synthetic Rubber Plant, the Alma-Ata Cotton and Fur Combines, the Chimkent Karakul Plant, the Gur'yev Fish Canning Association and a number of other enterprises are well known in many countries.

Under the conditions of mature socialism the process of the convergence of the socialist nations and the national cultures of the fraternal peoples is intensifying. This was displayed with particular vividness in the Days of the Literature and Art of the Kazakh SSR in the RSFSR, which were held in April and were devoted to the 250th anniversary of the voluntary association of our republic with Russia. They were successfully held in Moscow, Novosibirsk, Orenburg and Ulyanovsk.

The achievements of the scientists of Kazakhstan also clearly demonstrate this. During the years of its existence the Kazakh SSR Academy of Sciences has been transformed into a major scientific center, which in a number of directions holds a leading place in the country. The economic impact from the introduction of research in 1980 increased as compared with 1976 by 4.5-fold. All the scientific achievements in Kazakhstan are a result of the unselfish assistance of the scientists of the USSR Academy of Sciences and the academies of the union republics.

Let us say more. The scientific subdivisions of the Academy of Sciences of Kazakhstan are conducting joint research on 34 themes with colleagues from the socialist countries, as well as with scientists of the United States, Japan, Sweden and France. The holding of numerous international conferences, meetings, seminars and symposia is contributing to the strengthening of these ties.

The republic is giving scientific and technical assistance and medical aid to many countries. At our higher educational institutions foreign students are studying and workers of the mass occupations are improving their skills.
Annually hundreds of specialists are sent abroad on assignments from Kazakhstan. They are taking a direct part in the designing and construction of industrial enterprises, power and agricultural projects, in the performance of engineering surveying, in the prospecting of mineral deposits and in the performance of topographic work and aerial photography.

As Comrade D. A Kunayev pointed out in his book "Sovetskiy Kazakhstan" [Soviet Kazakhstan], the work of the Kazakh people on providing technical assistance to foreign countries was rated highly at the construction site of the Erdenet Mining and Concentration Combine in the Mongolian People's Republic, the largest in Asia, the Basra-Baghdad petroleum pipeline in Iraq, the bauxite mining complex in Guinea, the (Bhokar) (India) and Iskenderun (Turkey) metallurgical combines and irrigation structures in Vietnam, Cuba, Yemen, Algeria, Mauritania and Nigeria.

The members of all the creative organizations of Kazakhstan maintain close contacts with their colleagues from the fraternal republics and with friends from abroad. During the past 5 years alone more than 10 countries of the world have published works of Kazakh writers. The epic "Abay" of Mukhtar Auezov has been translated into 31 languages, has been published in 3 million copies and by right has become a part of the treasury of world culture. More than 260 book trade firms of 50 countries are purchasing Kazakh books. The republic participates in international book exhibition-trade fairs. Moreover, Kazakhstan is a customary representative of many major exhibitions and trade fairs. The Kazakh SSR Chamber of Trade and Industry has been awarded the international Gold Mercury prize.

Our contacts with the masters of culture and figures of science of foreign countries are fruitful. The most prominent representatives of literature and science of 70 countries of the world participated in the Fifth Conference of Writers of the Countries of Asia and Africa and the Days of (Al'-Farabi), which were held in Alma-Ata, while delegations of more than 100 states attended the international conference of the World Health Organization on primary medical and public health assistance.

The capital of Kazakhstan was the site of the holding in 1977 of the All-Union Theoretical Science Conference with the participation of foreign guests on the theme "The Historical Experience of the CPSU in the Struggle for the Strengthening of Peace and Friendship Among Peoples."

Party and state, party and governmental, parliamentary, trade union and youth delegations of foreign countries are familiarizing themselves with the achievements of the republic. During 1981 alone 14 trade union and more than 20 youth delegations visited here.

The Kazakh Society for Friendship and Cultural Relations With Foreign Countries is performing much work on the promotion of the gains of the Soviet Union. It maintains contacts with 97 states of all continents. Photographs, movies, printed publications and other informational materials are being sent abroad, sociopolitical measures are implemented annually in 20-25 countries. Days of our republic were successfully held in 1981 in the United States and India.

The Kazakh Committee of Youth Organizations, the Kazakh Committee for Solidarity With Asian and African Countries, the Kazakh Committee for the Defense of Peace,
the Society for Cultural Ties With Countrymen Abroad and departments of the Soviet societies for friendship with foreign countries are performing considerable work on the strengthening of friendship and mutual understanding among peoples.

The economic, scientific, technical and cultural relations of Soviet Kazakhstan with foreign countries will be broadened and strengthened. From year to year its economic potential is growing, its role and importance in the all-union division of labor is increasing.

Today we can say at the top of our voice that after only six decades the previously backward Kazakh people have achieved the unprecedented heights of socialist civilization. And this became possible only owing to the unity and support of the working people of all the republics of our homeland, and first of all the Great Russian people, who two and a half centuries ago extended to it the hand of fraternal assistance. An equal among equals and proud of its good deeds and accomplishments, Kazakhstan is confidently entering its communist future.

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REGIONAL DEVELOPMENT

TIMANO-PECHORSKAYA TPK DISCUSSED

Moscow KOZAYSTVO I PRAVO in Russian No 4, Apr 82 pp 14-18

[Article by I. Morozov, member of the CPSU Central Committee, deputy of the USSR Supreme Soviet, first secretary of the Komi CPSU Obkom: "The Complex on the Timan"]

[Text] A great international family, closely consolidated around the native Communist Party and its Leninist Central Committee, the peoples of our country are greeting a glorious occasion—the 60th anniversary of the founding of the USSR. Implementing the decisions of the 26th CPSU Congress, they are confidently increasing their material and spiritual potential. An example of this is the success of the workers of the Komi ASSR. In the first year of the Eleventh Five-Year Plan alone they gave the country's national economy more than 28 million tons of rock coal, 20 million tons of petroleum and gas condensate, 20 billion cubic meters of natural gas, 21 million cubic meters of timber, about 200,000 tons of paper, 75,000 cubic meters of plywood and many other kinds of products. And this was in a region which until recently, several decades ago, was neglected and backwards.

The dialectic of the development of the USSR is such that each republic, while increasing its contribution to the country's material and spiritual wealth, at the same time expands the possibilities of its own flourishing and further progress. Hence it is in the vital interests of all the large and small nations of our country to increase all-around cooperation. The Timano-Pechorskaya Territorial Production Complex which is being formed by decisions of the 25th and 26th CPSU Congresses on the territory of the Komi ASSR and the Nenetskiy national district, will be a new step in strengthening this cooperation. It is called upon, in the first place, to provide the economy of the European part of the country with fuel and energy resources, timber and wood processing products, and raw material for nonferrous metallurgy and other branches of industry, and, in the second place, to increase the comprehensiveness of the utilization of natural resources and the efficiency of public production as well as to improve the socio-economic and cultural development of the one of the largest northern regions.

The possibility of forming a complex on the Timan is brought about by the fact that it is perhaps the only region in the country which has such diverse fuel and energy resources: rock coal, petroleum, natural gas, combustible shale and peat. One should also note the high quality and diversity of kinds of the aforementioned fuel and energy resources: found together here are deposits of high-energy coal and coking coal, in addition to light petroleum there is also heavy petroleum, and the natural gas of certain deposits contains helium.
The Timan area and the neighboring Urals-Pay-Koyskaya ore zone are known for a large number of minerals—iron, copper, lead, zinc, wolfram, silver, gold, chromites and so forth. The Yaregskoye deposit of titanium ores and Timan bauxites that have been discovered here hold certain prospects for industrial assimilation, which plays an important complex-forming role and has made it necessary to organize and develop a number of industries within the Timano-Pechorskiy TPK or in the territory adjacent to it. Thus the need to produce titanium dioxide can give rise to the development of chemistry (chlorine production) on the basis of the salts of the Seregovskoye deposit, and the needs of the aluminum industry for limes can serve as a basis for intensive assimilation of the deposit of these on the Bel'gop.

The preconditions for the formation and development of the Timano-Pechorskiy TPK are not fully revealed if one does not pay attention to the wealth of timber of this region. The overall supplies of timber in the Komi ASSR amount to 2.8 billion cubic meters. The scale of lumbering has still not reached the calculated level. Large quantities of timber are inefficiently shipped outside the republic in unprocessed form, and therefore the possibilities of woodworking and lumbering are significant.

Another favorable factor for the creation of the complex is the availability of practically all the main kinds of construction materials here: timber, clay, limes, dolomites, sand and gravel mixtures... their extraction, processing and utilization will contribute to accelerating construction and making it less expensive, and enterprises of the construction materials industry will begin to effectively augment the branch structure of the territorial production complex.

Industrial production is not limited by such factors as water and land resources either. The territory of the complex has more water than many other regions of the country. We also have great possibilities of selecting free land for industrial, transportation and housing construction.

The Timano-Pechorskiy Territorial Production Complex is not being formed in an empty place. The republic has long been assimilating the natural resources—timber, coal, petroleum, gas and so forth—on a considerable scale. With the help of the nations of our country, a large economic potential has already been created here. The territorial structure of this potential includes industrial centers (Sytyvkar, Ukhta and Vorkuta) and developing industrial points which have formed a system of cities and workers' villages. They are the arena for the economic offensive on the inadequately studied and unassimilated territories of the northern regions. For example the Ukhta and Vorkuta industrial centers are already large support bases for material and technical supplies for the assimilation of the territory of Bol'shezemel'skaya tundra and the great resources of the Yamal Peninsula. And the cities of Vorkuta and Ukhta are gradually becoming large scientific and design centers for the entire European Northeast.

Also included among the factors that contribute to intensive development of public production in the Timano-Penchorskiy are the favorable demographic conditions which are brought about by the rapid population growth and the comparatively high indicators of its reproduction. It is advantageously distinguished from the regions being assimilated in Siberia by its proximity to densely populated regions of the European part of the country, its accessibility by transportation and the possibilities of utilizing interregional migrational ties. There are more than 1.2 million
people living in the republic. During the years of the Tenth Five-Year Plan alone more than 30,000 people resettled in the Komi ASSR. This shows that the republic has become even more multinational. During this same period the overall indicators for the natural growth were almost 90 percent higher than the average for the RSFSR. The sex and age structure of the population is characterized by a high proportion of men and people of working age, which shows the area's great labor potential. One of the problems we are solving is that of retaining labor resources, mainly skilled personnel, on the basis of considerable improvement of the socio-economic conditions for the labor and life of the population.

I should like to add two more circumstances that favor intensive development of the complex. The first is the relative proximity of its territory, which is 1,000 kilometers closer than, for example, the northern Ob' area to the industrially developed central area and European northwestern area which are experiencing a critical need for raw materials. This is of great economic significance for the transportation of large volumes of fuel. The second factor is the existence of developed and assimilated transportation ties with the aforementioned regions: the Kotlas-Vorkuta railroad, the Siyaniye Severa gas line and the Ukhta-Yaroslavl' petroleum line.

In spite of the diverse and immense supplies of natural resources in the Timano-Pechorsky region and the basis that has been created here for their assimilation, we must state that as of now its contribution to strengthening the country's economic might is much less than is possible. It seems that this is related to a considerable degree to the departmental separation of the activities of the branch enterprises and organizations. Thus there are 240 enterprises under the jurisdiction of 25 ministries and departments that are utilizing the region's timber resources. They are mainly small ones: only 41 enterprises are able to ship more than 200,000 cubic meters of timber a year. More than 400 agricultural and transportation enterprises have another 600 small gang mills. As a result, about half of the timber that is procured is shipped outside the republic in round, unprocessed form. Resources of deciduous and poor-quality conifer timber are poorly utilized. Moreover, a considerable amount of it remains in the forest stands and the wastes from woodworking and lumbering are burned.

Because of the narrow departmental approach to the assimilation of resources, the hydrocarbon raw material of the Vuktyl'skoye gas condensate deposit is being utilized inefficiently. The system for its development, which is based on the natural release of the layer, leads to irretrievable loss of gas condensate: during the time the deposit has been worked about 18 million tons of condensate has precipitated and has not been extracted. And this is at a time when, precisely as a result of the exhaustion of the supplies of hydrocarbon raw material, the capacities of the Sosnogorsk plant, under the jurisdiction of the Ministry of the Gas Industry, are not being fully loaded, when the Ministry of the Petroleum Industry has put the first of the three planned sections of the new Ukhta gas processing plant into operation.

The organizations engaged in construction on the territory of our republic are under the jurisdiction of 16 various ministries and departments. This separation has led to low concentration of construction, a low level of specialization, dispersion of financial and material resources, and large volumes of incomplete construction.
In order to increase the role of the Timano-Pechorskiy TPK in the country's national economy, it is necessary, in our opinion, to solve a number of problems. Here is one of them. Broad recognition has been given to the Pechorskiy coal basin, which played an important role during the war years and is presently the supplier of high-quality coking coals for the northern metallurgical base (Cherepovets) and the Novolipetsk metallurgical plant as well as high-energy coal for the northwestern economic region. The increased geological prospection work in the Pechorskiy basin in recent years has made it possible to create a considerable store of industrial supplies. And it is essentially losing its prospects for development. As of now there is practically no reserve of possibilities of extracting coal: during the years of the past two five-year plans' construction had not been started on a single mine and by 1985 some of the existing mines will have been closed down.

It seems that the problem of the Pechorskiy basin should be considered on a broader plane than the utilization of the coking and high-energy coals that are being extracted here. It must be considered in close connection with the prospects of the socio-economic development of the region as a whole and in direct connection with the basin's role as a base for the study and assimilation of the natural resources of the Bol'shezemel'skaya tundra, the polar Ural area and the coastline of the northern seas. And a strictly branch oriented approach to questions of the development of the Pechorskiy basin in no way corresponds to the interests of our country's development.

How does one think about side-stepping departmental barriers? First of all it is necessary to have an established special-purpose program for the formation of the complex, developed under the aegis of the USSR Gosplan. A good deal of time has already passed since the 25th CPSU Congress set the task of creating the Timano-Pechorskiy TPK. But planning agencies have not yet begun to draw up this program.

The comprehensive plan that has been drawn up for the socio-economic development of the cities, rayons and the republic as a whole have essential shortcomings. They do not have the force of law and they are not compulsory for enterprises of union-republic significance. And plans for socio-economic development should be formed with the consent of the local soviets who know both the prospects and the financial capabilities of the enterprises. It is difficult to consider all these questions from one central point.

The creation of territorial production complexes is a process which must be controlled. And the process of the formation of the Timano-Pichorskiy TPK is especially complicated since the complex is being created on the territory of two administrative regions—the Komi ASSR and the Nenetskiy national district of Arkhangelskaya Oblast, and several ministries and departments will be participating in it. In order to combine interests and direct the separate actions of local soviet agencies, ministries and departments onto the right track—toward the creation of an efficient large industrial complex—it is necessary, in our view, to have a single authorized administrative agency. But the problem of administration of territorial production complexes has not been solved in practice yet and has not even been sufficiently investigated.

Therefore we are suggesting that an interdepartmental agency be established for both the formation and development of the Timano-Pechorskiy TPK—a commission permanently
located in Syktyvkar under the chairmanship of an authorized representative of the USSR Council of Ministers. This commission should include management workers from the main ministries and departments participating in the formation of the TPK, managers of the leading enterprises of the complex, and responsible representatives of the USSR Gosplan and the Gosplans of the RSFSR, the Kom's ASSR and the Arkhangelskaya Oblast planning agency. It seems that a territorial commission of the USSR Gosplan for the Timano-Pechorskiy TPK should be organized as a permanently functioning staff of the interdepartmental commission.

In our opinion, the interdepartmental commission should handle the following problems: drawing up an overall interbranch territorial plan for the development of the economy of the TPK; coordinating the activity of enterprises and organizations operating in the region; providing for efficient development of a unified production, social and natural protective infrastructure on the territory of the TPK; exercising control over the level of utilization of the natural resources that are brought into national economic circulation; in conjunction with the USSR Gosplan, developing and implementing a long-term special-purpose program for the formation and development of the Timano-Pechorskiy complex as a planning document that is approved by the USSR Council of Ministers. It seems that the creation of the scientific foundations for this program should be the responsibility of the Kom's branch of the USSR Academy of Sciences.

Industry is moving farther and farther to the north and the scale of its assimilation of natural resources is becoming greater and greater. And the larger the scale of our plans, the more complex the problems being solved by the country, the greater attention the Leninist party devotes to strengthening our fraternal friendship. The natural complex of the Timano-Pechorskiy region is quite unique. We are convinced that through the will of the party and the efforts of the peoples of the USSR, it will multiply its contribution to the good of our great homeland, to the good of communism.

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CSO: 1820/165
REGIONAL DEVELOPMENT

ISSYK-KUL'SKO-CHUYSKIY TPK DISCUSSED

Frunze SOVETS'KAYA KIRGIZIYA in Russian 4 May 82 p 2

[Article by A. Matveyenko, head specialist of the Kirgiz SSR Gosplan: "No Delays Tolerated"]

[Text] The decree of the CPSU Central Committee and the USSR Council of Ministers, "On Improving Planning and Stepping Up the Influence of the Economic Mechanism on Increasing Production Efficiency and Improving the Quality of Work," envisioned drawing up programs for solving large regional problems and developing the most important territorial production complexes. The main task of these programs is to improve territorial planning, to account more fully for material and labor resources in the plants of the various regions of the country, and to distribute production forces more efficiently.

The Issyk-Kul'sko-Chuyskiy Territorial Production Complex (TPK) is to be formed in Kirgiziya in the next twenty years. It will be of immense significance for the republic's economic and social development. It will create conditions for comprehensive utilization of the rich mineral and raw material, land, water, power and recreational resources of Issyk-Kul'skaya Oblast and the rayons of the Chuyskaya valley. It is also important that the creation of the TPK will make it possible to solve the most urgent problems of ecology and provide for preserving the unique complex of the Issyk-Kul' lake whose level has dropped considerably because of the rapid increase in the consumption of water which is not returned to the lake.

The main task that will have to be carried out is to find water resources for the needs of the TPK. This will make it possible to stabilize the level of Lake Issyk-Kul', to irrigate approximately 200,000 more hectares of land and to create capacities for producing almost 5 billion kilowatt-hours of inexpensive electric power which is necessary for the construction and operation of enterprises of nonferrous metallurgy and other branches, electrification of agriculture, municipal and household needs of the urban and rural population and also for the creation of comfortable sanitoriums in the Issyk-Kul'skaya area.

In keeping with the Basic Directions for the Economic and Social Development of the USSR During 1981-1985 and the Period up to 1990 we have now developed scientific research and planning and investigatory work. This makes it possible to determine the ways and means of bringing the complex's natural resources into national economic circulation and also to determine the effectiveness and most expedient time periods for carrying out specific measures. Leading institutes of the republic
Academy of Sciences and many other scientific and planning organizations are participating in this work.

In the next stage, taking into account the data that has been obtained, we shall draw up a special-purpose comprehensive program for the formation and development of the Issyk-Kul'sko Chuyskiy TPK, which will be a most important constituent part of the state plan for the republic's economic and social development.

It is important to conduct the envisioned scientific research and planning and investigatory work on a high level and within the established time period. At the same time, without slowing up, it is necessary to do geological prospecting work and to construct the facilities that are related to the formation of the TPK which were envisioned by the plans of the ministries and departments.

The Kirgizgiprovodkhoz institute has been assigned no small role in carrying out planning and investigatory work. As the developer of the land reclamation part of the plan, it must determine the optimal variant of the utilization of the additional water resources and envision the necessary environmental protection measures. But it is considerably behind schedule in carrying out its assignment. A great deal of assistance in accelerating this work and completing it this year should be rendered by the institutes of geology and biology of the republic Academy of Sciences, scientific research institutes of economics and organization of agricultural production of the Ministry of Agriculture, institutes of health resorts and physiotherapy of the Ministry of Public Health, the Kirgiz Gidrorobyproyekt Scientific Research Institute and others.

The construction of the ore enriching combine is proceeding slowly. The Ministry of Construction is not doing its preparatory work energetically, and during the year it has assimilated no more than a million rubles' worth of capital investments. This led to a situation where the construction of the boiler had not been completed by the winter of 1981-1982. Small stoves had to be used to heat the residential buildings and dormitories of the construction workers' settlement that had been created. The dining room at the construction site is not in operation yet and there is no store here.

One million rubles have been allotted for continuing the construction of the combine and starting up the most important facilities this year. But the number of workers has decreased to one-third of last year's level, which has caused a great deal of alarm about the fulfillment of the established plan.

The unsatisfactory supply of electric power is a serious impediment to the construction of the combine and the development of geological prospecting work. The diesel electric power stations of the geological expedition operate intermittently since it is not always possible to deliver fuel on the bad mountain road. The electric power transmission line—110, which was intended for bringing electric power to the combine from the state energy system, must "come to the rescue." But the problem is that the construction of this has been inadmissably prolonged. For the first section of this electric power transmission line with a distance of 77 kilometers, the construction administration of Kirgizenergoostroy took almost three years, and there are still two more sections like this to be built. The construction workers are finding dozens of reasons that are supposed to justify the failure to meet the deadline. They include the difficulties of working under mountainous conditions.
and the shortage of technical equipment. They have an especially large number of complaints against the subcontractors: Kиргизвзрывпrom has not conducted blasting work on time, the Frunze plant for reinforced concrete items of the Energostroindyria trust of the USSR Ministry of Power and Electrification has held up the delivery of structures, and so forth. But if Kиргизэнергострой were more responsible about meeting the construction schedule and the client Kиргизглавенерго would step up control and provide the necessary assistance to the contractor, the electric power transmission line could be put into operation in 1983 as was earmarked by the plan.

The republic's geologists are called upon to do a great deal. Under the current five-year plan they must create a reliable raw material base for the mining and metallurgical industry of the TPK and carry out prospecting for coal, construction materials, thermal-mineral water and fresh water.

It is no less important to accelerate the creation of the necessary transportation ties, in order to provide access to the prospecting points and the places earmarked for the construction of hydrotechnical structures, energy facilities and other facilities, and also to join them to the existing network of highways. This important task is the responsibility of the republic Ministry of Automotive Transportation and Highways and Construction Administration No 16 of the USSR Ministry of Transportation Construction. They will have to work on the difficult sections of the highway that go through mountain passes to the construction site of the combine and provide for the delivery of various kinds of equipment and construction structures. There can be no delay in this matter. But the road construction workers are experiencing difficulty in transporting workers, fuels and lubricants as well as organizing the supervisory section on the route.

The elimination of these and other shortcomings will contribute to improving the organization and implementation of measures for forming and developing the Issyk-Kul'sko-Chuyskiy TPK. To accomplish this there must be more active participation on the part of the corresponding ministries, departments and scientific and planning organizations of the republic, and also the Issyk-Kul'skaya party obkom and oblispolkom.

Taking into account the fact that construction, installation and road workers as well as geologists are working under difficult, high mountain conditions and carrying out an assignment that is of statewide importance, it would be expedient to solve the problem of providing incentives and increasing the material motivation to accelerate the completion of the work. I have in mind giving them priority in acquiring apartments, providing industrial goods that are in short supply and passenger cars to be sold to the outstanding workers, and also other kinds of incentives.

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CS0: 1820/165
FOUR-MONTH RESULTS OF ESTONIAN INDUSTRY REPORTED

Tallinn SOVETSKAIA ESTONIYA in Russian 14 May 82 p 1

[Article: "The Republic's Industry: Results of 4 Months"]

[Text] The republic fulfilled its 4-month plan for the overall volume of sales and output of the most important kinds of items ahead of schedule, on 28 April. All ministries and departments fulfilled the assignments for the production volume and increased labor productivity. The output of industrial products and also labor productivity increased in April.

In excess of the 4-month plan we extracted 231,000 tons of shale and produced 43 million kilowatt-hours of electric power, 113,000 rubles' worth of air conditioners, 14,900 tons of mineral fertilizers, 3,500 tons of benzol, 114,500 square meters of chipboard, 2,200 square meters of window glass, 1,700 cubic meters of mineral wool, 4,400 square meters of ceramic tiles, and many other kinds of products. Many consumer goods were produced in addition to what was planned, including 605,000 square meters of cotton fabric, 171,000 square meters of linen, 167,000 square meters of upholstery fabric, 45,000 pair of socks and stockings, 2.2 million rubles' worth of knitted items, 2.7 million rubles' worth of sewn items, and 5.8 million rubles' worth of cultural and personal goods.

The fishermen and workers of the fish combines worked well in April. Thus, as compared to the corresponding period of last year, enterprises of the Estonian SSR fishing administration increased the output of products by 18.2 percent and the collectives of the Estrybrom production association increased it by 8.3 percent. In the four months as a whole the republic's fishing industry produced 3.7 million rubles' worth of products more than last year. High rates of increase in the output of products are typical of the Tartu fish combine, and the Saare Kalur, Khiyu Kalur and Mayak fishing kolkhozes.

The output of products at enterprises of the timber and wood processing industry had increased by 5.3 percent in April. During the first four months of the year the enterprises of this branch produced 3.6 million rubles' worth of products more than they did a year ago. The net output at the Kokhtla-Yarve furniture factory increased by 13.4 percent, at the Pyussi combine for wood slabs and the Tallinn plywood-furniture combine--by more than 11 percent, and at the Biysnurk combine--by 9.1 percent.

In monetary terms, the greatest increase in the output of products for the four months was achieved in light industry--9.5 million rubles. High growth rates were
achieved by collectives of the Mistra association, the Sangar sewing factory, the Sulev factory, the Tartu leather footwear combine and the Tallinn textile and haberdashery factory.

During the four months the enterprises of local industry increased their production volume by 3.2 percent, including the Tartu experimental plant for plastic items—by 16 percent, the Salvo factory—by 6.9 percent, the Flora association—by 6.4 percent, and the Norma association—by 5.3 percent. Collectives of enterprises of the Ministry of Construction, the Ministry of Automotive Transportation and Highways and the Ministry of Housing and Municipal Services are working in a good rhythm.

During April 34 percent of the production program for the second quarter was fulfilled. Thus the majority of enterprises laid a firm foundation for successful fulfillment of the plan for the second quarter and the first half year.

A comprehensive system of quality control is being developed. During the first third of the year 200 kinds of items were awarded the State Emblem of Quality. In April the Emblem of Quality was awarded to several items of the Baltika and Marat associations, the sewing production association imeni V. Klement', and the Tallinn ERSPO trade equipment plant. There are now 1,209 kinds of items produced at 76 enterprises of the republic with the Emblem of Quality.

A most important task for industrial workers of the republic is to reach by the end of the year the production level earmarked by the five-year plan. To do this each collective must consistently discover and introduce internal reserves for increasing the production volume and labor productivity, intensifying production and efficiently utilizing all resources and the entire existing production potential.

It is necessary to develop more extensively socialist competition for the achievement of high final results through efficient utilization of supplies of fuel, thermal and electric power and metal.

During the first fourth of the year the majority of labor collectives fulfilled assignments for economizing on material resources. Industry saved 14.1 million kilowatt-hours of electric power, 57,200 gigacalories of thermal energy, and 6,900 tons of conventional fuel. Good results in efficient utilization of fuel and energy were achieved, for example, by the Tallinn machine building plant, the Il'marine, the Estrybprom association, the E tremrhythm production association, the Tallinn chemical and pharmaceutical plant and many enterprises of the food industry and other branches.

But thrifty consumption of material supplies has not yet become the rule for all collectives without exception. The assignments for economizing on fuel and energy were not fulfilled by the Maarduskiy chemical plant, the Estonbumprom association, the Vyro, Tartu and Payde dairy products combines or the Punan Kunda plant. For a long time the Vol'ta plant for nonferrous rolled metal has failed to fulfill its assignments for economizing. This is because of shortcomings in technology and organization of the work.

In order to achieve good final results with reduced expenditures, it is necessary to utilize modern technology and technical equipment more extensively and to improve the base for norm setting in accounting, including control and measurement
equipment, and also to improve the system of incentives and to increase the personal responsibility of each worker for economical utilization of production resources.

The four-month plan for the production volume was not fulfilled by eight industrial enterprises, including the Vtorchermet and Prompribor associations, the Eesti Kaabel' and Puanane Kunda plants, the Loksa ship repair plant, and the Keyla and the Tamsalu grain products combines, although some of them did cut their arrears in half. In the next few months these collectives will have to cover their indebtedness and catch up with the planned schedule.

Many enterprises are fulfilling their commitments for deliveries of products unsatisfactorily. Greatly in debt to the consumers are the Estonbumprom production association, the Vol'ta plant, the electrical equipment plant imeni M. I. Kalinin, the Kommunar association, the Pyarnu fishing combine and several other enterprises.

Under the conditions of specialization and cooperation of production the final results of the labor of the collectives depends more and more on the well-arranged operation of all enterprises. Failure to fulfill the plans in terms of products lists or the commitment for deliveries of products even by only one collective can lead to serious difficulties in fulfillment of the plan at many other enterprises. It is necessary to develop more extensively socialist competition for prompt fulfillment of all orders, which is a criterion for evaluating the results of the operation of each collective.

One should now analyze in depth the results of the work of the first third of the year, earmark and implement measures for eliminating bottlenecks in production, and utilize all reserves for increasing the volume of production and increasing labor productivity. The rates of work during the forthcoming months will determine the results of the year as a whole and will be the basis for the fulfillment of the five-year assignments.

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CSO: 1820/165
REGIONAL DEVELOPMENT

ESTONIAN SUPPLY OFFICIAL INTERVIEWED

Tallinn SOVETSKAYA ESTONIYA in Russian 1 May 82 p 2

[Interview with Yu. Rappaport, first deputy chairman of the State Committee of the Estonian SSR for Material and Technical Supply: "The Country to the Republic, The Republic to the Country"]

[Text] Our correspondent's questions are being answered by the first deputy chairman of the Estonian SSR State Committee for Material and Technical Supply, Yu. Rappaport.

[Question] We came to you, Yury Ovsheyevich, with the thought in mind that the Estonian SSR Gosnab is crisscrossed with thousands of threads that join the republic and the country.

[Answer] Yes, both in operation and in documentation one might say that there is an extremely adequate reflection of the reality, of those commodity flows which move to and from us along highways and railroads, along sea and air routes. But not everything in the Gosnab is fixed since certain materials, parts and components come to enterprises through their own ministries, under a policy of cooperation and so forth. Another aspect: the products of trade organizations do not pass through the Estonian SSR Gosnab. That is, we are now and will henceforth be speaking about commodity exchange for production and technical purposes. Thus each year it has approximately 300,000 items with an overall value of about 1.5 billion rubles.

[Question] As I understand it, this figure is immense . . . .

[Answer] In terms of our republic scale this is undoubtedly true. Unfortunately, I find it difficult to illustrate this . . . you know I cannot come up with an example like when they say that so many million kilometers of fabric will wrap around the globe so many times or so many tons of extracted shale loaded on platforms will reach to the moon. A figure can only be compared with a figure. Well, for instance, with this sum it would be possible to construct dozens of average sized chemical plants.

[Question] I understand. And how is it formed?

[Answer] This is an extremely complicated procedure which involves repeated coordination of orders from enterprises for raw materials, processed materials and equipment, the determination of the suppliers, the deadlines, the capabilities of
livering, and subsequent storage at bases and in warehouses. Most of this work is
done by our specialized organizations—Estelektrokomplektsnab, Estmatellosnabtby,
Estlesbumsnabtby, Estkhimpishchenabtby, Estmash, Eststroy, Estleg. I will not
go into the details of their activity; I will only say that specialists are con-
centrated in these organizations and they work in close contact with enterprises
of the Estonian SSR, organizations of the USSR Gosnab, supply and sales organiza-
tions of other republics and union ministries and departments, and they make exten-
sive use of computer equipment . . . . In general it is a science and a system.

[Question] What do you know about the specific deliveries under the motto "The
country to the republic"?

[Answer] (Thoughtfully) This would require a mountain of documentation! For in-
stance we obtain rolled metal from the Cherepovets metallurgical plant. But its
address does not include RSFSR. This is so clear! And our papers do not always
indicate the republic either. We indicate only the departmental jurisdiction.
This can be required. Incidentally, when a question is raised I now call in spe-
cialists, and we jointly give oral information. [The phone rang and after a little
while A. Kaer, the chief of the material resources division, and N. Denisenko, the
chief of the division for control over deliveries, appear in the office. Then we
all three dictate together). RSFSR: lumber, synthetic resins, plastics, rubbers,
ferrous and nonferrous metals, flax, apatite, fabrics, tires, equipment for chemi-
cal enterprises, bearings, machine tools, transformers, forge and press equipment,
varnishes, paints. The Ukraine: wool, rolled metal, coal, busses. Latvia and
Lithuania: fabrics, equipment, radio telephone equipment. Belorussia: tractors,
drying oil, radiators. Moldavia: industrial oils. Georgia, Armenia, Azerbaijan:
electrical installation items, steel pipes, chemical equipment, pharmaceutical raw
material. Kazakhstan, Uzbekistan, Turkmenia, Kirgizia and Tajikistan: cotton,
textile and knitting equipment, power electrical equipment. Summary: the list is
far from complete. I only wished to show that all economic regions of the country
participate in commodity exchange and to establish that in many cases the needs of
the Estonian SSR economy are satisfied only as a result of deliveries from other
union republics.

[Question] Now let us look at what the republic delivers . . .

[Answer] Also, incidentally, thousands of kinds of items. Let us take those for
which we might say we have no competition. These include Talleksa excavators, in-
struments and transformers from the Tallinn electrical equipment plant imeni M. I.
Kalinin, Il'marine ventilation equipment, Prompirbor flow meters, gas analyzers
from the Vyrlo plant imeni A. Veymer, air cooling equipment from the Tallinn machine
plant imeni I. Lauristin, a number of items from the Slantsekhim association imeni
V. I. Lenin and the Kivibyli shale and chemical plant . . . .

[Question] The decisions of the 26th Congress and the party and government decrees
concerning improving the economic mechanism envision further development and
strengthening of direct long-term ties between the supplier and the consumer. Do
enterprises of the republic participate in these ties?

[Answer] We even have accountability under PDKhS—direct long-term economic ties.
I should remind you that these take into account the mutual interests of the enter-
prises in terms of the products lists and time periods, and it becomes possible to
have mutual coordination. Hence its special effectiveness. And the republic's industry is, of course, actively assimilating this form of business contacts. Thus last year the volume of them increased by 23 percent and amounted to 306.7 million rubles. These include, for example, deliveries of large batches of wool yarn, artificial fiber, leather tanners, trucks, diamond instruments, machine tool accessories, lifting-transportation equipment and mining equipment. At the present time more than 100 enterprises and associations in the republic obtain products for production and technical purposes under PDKhs. The list includes almost all of the shale and smelting coke, two-thirds of the pig iron, cement, cardboard, methanol, one-third of the welded electrodes, slate, paper, plywood and tires, and so forth.

[Question] In regard to these ties one must ask you the following kind of question. Do you recognize the importance of personal contacts between the supplier and consumer?

[Answer] I not only recognize them, I consider them necessary! Let us think about this. Two enterprises—the supplier and the consumer—are related by a long-term contract for an entire five-year plan. And they expect certain progress in the assortment and quality of the products. It is necessary to have reciprocal information and problems must be solved in their common interests. And how can this be done without a meeting of the specialists face to face? For example, other workers of the Estonian SSR Gossnab and I have had occasion to visit almost of the large metallurgical industries of the country. There was a purpose: to become familiar with the possibilities of specific deliveries and the prospects for the assimilation of new assortments. Later this helped us to optimize orders and to improve the supply of metals.

[Question] We have a planned economy. But there are also extreme situations and there are priorities of orders. How is this manifested in practice?

[Answer] There are examples. We had had difficulties with coal in the winter. We went through union agencies to the Kuzbass and Donbass. And we received support. Or another example. Talleks fills orders for the nonchernozem zone on time each year. And this is being done in the interests of the entire national economy.

[Question] Just as the republic makes its contribution to the assimilation of the regions of Siberia?

[Answer] Precisely. As you know we are constructing roads and housing there, and regardless of our difficulties with plans for the same excavators and construction materials, we are obliged to deliver them to the regions of the petroleum and gas complex precisely on schedule or ahead of it. We attach the same importance to deliveries for agricultural needs. Let us look, for example, at how enterprises of other republics have fulfilled their commitments to Estonian SSR agriculture in the first quarter of this year. (Let us open the register). Rolled ferrous metals—more than 100 percent. Steel pipes—the same. Metal cutting machine tools, steam boilers, automated cranes, bulldozers, graders, fittings, bearings—nowhere less than 100 percent. Cable items, transformers, accumulators—100 percent. Chemicals and industrial rubber items—100 percent. Lumber and paper—more than 100 percent. Sanitation and technical items and construction materials—all items from bathtubs and wash basins to linoleum—100-150 percent. That is the way our suppliers work and we, in turn, also try to work the same way.
[Question] If only if were that way everywhere . . . .

[Answer] I agree.