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USSR Report

HUMAN RESOURCES

(FOUO 4/81)

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CONTENTS

LABOR

NEW APPROACH TO GREATER EFFICIENCY IN TEXTILE INDUSTRY REVIEWED

Moscow VOPROSY EKONOMIKI in Russian No 4, Apr 81 pp 88-96

[Article by Ye. Afanas'yevskiy: "The Territorial Organization of Production (From the Example of the Textile Industry)"]

[Text] Regulating the level and improving the forms of industrial concentration serve as one of the major reserves for increasing production efficiency. Among the most urgent practical scientific questions of this problem are a quantitative analysis of the level of production concentration for the purpose of clarifying its rational limit and determining the type and size of the enterprises and increasing the level of territorial concentration and specialization to achieve a closer correlation between the forms of the social organization of production and the new socioeconomic, demographic and urban development conditions.

The elaboration of the designated problems is determined by the need to improve long-range territorial planning and management. This should be carried out in close connection to the elaboration of general plans for the development and placement of the nation's productive forces over the long run.

At present economic literature has not sufficiently taken up the specific relationship between the efficient use of the fixed productive capital, for example, in the textile industry and the process of production concentration.

The results of development in the textile industry in recent years show that the sector has achieved and even exceeded the economically necessary limit of concentration and this, under present-day conditions, has checked the further intensification of fixed capital utilization.

The "Basic Directions in the Economic and Social Development of the USSR for 1981-1985 and for the Period Up to 1990" as one of the major tasks in the 11th Five-Year Plan have posed the question of increasing capital investment effectiveness, shortening the construction time of projects, accelerating the reaching of designed capacity, improving quality and lowering construction cost. Up to the 1960's, due to the availability of manpower for production in light industry, conditions existed for building large enterprises. Determining the most efficient size of enterprises and the rational level of proportional expenditures on construction requires a new approach to solving the given question. With production concentration in the form of a combine, its level should meet primarily the demands of technical integration and integrated combines considering the raw material capabilities.

This makes it possible to realize the advantages found in the intraproduction conditions and at the same time strengthens the dependence of enterprise fixed capital utilization upon socioeconomic factors. Thus the insufficient availability of labor resources inevitably leads to a decline in the operating indicators of an enterprise. The solution to this problem requires major additional capital investments.

The level of fixed capital utilization from the standpoint of the sectorial features should decline in operating this capital and cause additional expenditures on creating an artificial equilibrium between the forms of organization and the real reproduction possibilities. In determining the efficient capacity and form of organizing fixed capital utilization in terms of the individual economic regions, an important role is played by a comparative statistical analysis of the operating results of the existing enterprises of different sizes.

In studying the operating results of the cotton industry, 167 weaving enterprises of the sector were divided into seven groups according to the number of operating looms (see the Table on the following page) with the exception of the small mills which had under 100 looms and the enterprises which were in the stage of development. The elaboration and analysis of the major technical and economic indicators for fixed capital utilization in terms of the enterprise groups with a varying number of looms affirm the close dependence of its level upon a change in enterprise size. With an increase in the size of the enterprises, the productivity of labor and equipment and the other indicators rise. However the efficient use of manpower and fixed capital in the cotton industry has increased insignificantly (by 20-30 percent in the upper group of enterprises in comparison with the lower) in comparison with the other sectors, and in particular with the oil industry, thermal power plants, the food industry and others where with a rise in the level of concentration these indicators increase more rapidly. Thus, in the cotton industry the level of fixed capital utilization depending upon the increase in production concentration is relatively slight.

It is essential to point out that there is also a tendency for a rise in the efficient use of equipment and labor but only up to a certain size of an enterprise. Subsequently, as capacity increases, the efficiency level sharply declines for all the technical and economic indicators. The highest indicators in physical terms (the output of textiles per loom per year, the productivity of a worker and a loom in weft-meters, the number of hours of equipment operation and so forth) are inherent to the groups of enterprises with from 500 to 2,000 looms.

From the data of the table it can be seen that the output of cotton coarse textiles per loom per year increases for all the enterprise groups; however, the ratio of the levels of annual output changes among them in favor of the enterprises characterized by a lower level of production concentration: in 1970, the highest indicators were in Groups IV-VI (1,500-3,000 looms), in 1975 in Groups II-V (500-2,500 looms) and in 1978 in Groups II-IV (500-2,000 looms). Textile output at the largest enterprises of Groups IV-VII increased noticeably more slowly (74-89 percent of the indicators of Group II). In accord with this, the enterprises of Groups II-IV which possessed 30.9 percent of the total number of looms in 1978 produced 34.9 percent of the cotton textiles. At the same time, the enterprises of Group VII which had 44.7 percent of the total number of looms manufactured only 39.8 percent of the total quantity of textiles.

Dynamics of Technical and Economic Indicators for Operation of Cotton Industry Enterprises in 1970-1978

	Year	Enterprise Groups by Number of Looms							Total
		I to 500	II 501-1000	III 1001-1500	IV 1501-2000	V 2001-2500	VI 2501-3000	VII over 3000	
Number of enterprises	1978	53	29	23	18	12	9	23	167
Proportional amount of looms (in %)	1970	4.8	10.3	10.5	10.3	13.1	11.1	39.9	100
	1978	4.4	7.9	10.8	12.2	10.5	9.5	44.7	100
Textiles produced (in %)	1970	3.8	10.9	11.1	11.4	14.0	11.8	37.0	100
	1978	3.7	9.5	12.2	13.2	11.4	10.2	39.8	100
Output of textiles per year per loom (in million weft-meters)	1970	44.8	59.1	59.8	62.4	60.3	60.0	52.2	56.9
	1978	52.2	74.7	70.1	67.3	66.5	66.4	55.2	61.9
Productivity of one loom per hour (in weft-m)	1970	9,304	10,582	10,398	11,002	10,985	10,523	10,433	10,599
	1975	10,201	11,665	11,664	12,155	12,763	11,334	11,017	11,513
	1978	10,904	13,925	12,525	12,479	12,264	12,180	11,463	12,059
1978 in % of 1970		117.2	131.5	120.5	113.4	111.6	115.8	109.9	113.8
Productivity of one worker per hour (in weft-m)	1970	15,414	35,527	33,647	45,684	47,251	47,572	45,769	42,969
	1978	20,310	44,528	54,331	58,331	56,829	55,981	53,287	50,571
1978 in % of 1975		112.4	107.2	116.2	108.2	105.8	105.5	105.4	101.1
1978 in % of 1970		131.8	125.3	161.5	127.7	120.3	117.7	116.4	117.7
Number of loom operating hours	1970	4,874	5,586	5,717	5,670	5,452	5,704	5,006	5,371
	1975	4,756	5,055	5,600	5,528	5,309	5,574	4,868	5,153
	1978	4,790	5,363	5,600	5,393	5,419	5,448	4,812	4,922
1978 in % of 1970		98.3	96.0	98	95.1	99.4	95.5	96.1	91.6

Due to the low average annual output of a loom at just the enterprises of Group VII (115,000 looms), the relative losses, in comparison with the average annual output of a loom at enterprises of Group II, exceeded 1 billion m^3 of cotton cloth. As a whole for all the groups, in comparison with the output level of the enterprises of Group II, these losses were 1.5 billion m^3 of cloth a year. The basic reason for the significant deviations in the level of product output per loom per year at the large enterprises is in the lack of manpower for fully manning the shifts. This is explained by the disparity of capacity at the enterprises of the designated groups to the possibility of recruiting manpower under present-day conditions.

In 1975-1978, the tendency continued to develop of further reducing the number of equipment operating hours at the groups of the largest enterprises of the textile industry (with the exception of Group V). As a whole the equipment of the largest enterprises (Group VII) operated an average of 600-800 hours a year (or 12-15 percent) less in comparison with the smaller ones. At the enterprises of Groups I-III, the number of operating hours rose or was stable.

At the large textile enterprises not only were all the basic technical and economic operating indicators lower, but, as a rule, the level of personnel turnover was significantly higher (20 and more percent). For manning such an enterprise with manpower, each year 1,400-2,000 persons had to be hired and with the shortage of labor reserves this was virtually impossible. Due to this equipment stoppages here exceeded the norm by 2-3-fold. Operators at large combines (Tashkent, Bukhara, Fergana and others) arrived by bus from surrounding rayons which are an average up to 75 km distant. The volumes of freight shipments also increased. Moreover, the questions of specialization and cooperation become more complicated. The designated negative phenomena have grown particularly strong in recent years under the conditions of the developing unfavorable demographic situation.

The use level of production capacity depends not only upon the size of the enterprises but also upon the differences in the mobile manpower resources in the various economic regions. For this reason for increasing the efficient use of fixed capital in the textile industry, each zone of the USSR (the European, Siberia and the Far East and Central Asia) should have a corresponding level of production concentration and a form of organization.

For Central Asia, it is essential to envisage a minimum version of the enterprise size as this would help to increase among the workers the proportional amount of the indigenous population and reduce personnel turnover. In the labor-short regions of Kazakhstan, Siberia and the Far East, it is advisable to build first of all automated mills which are small in terms of the number of production personnel as well as enterprises with assembly-line production. The low technical and economic indicators of the combine enterprises with over 3,000 looms and the longer times of their construction and reaching of designed capacity affirm that at present, when the possibilities of attracting a labor force have significantly declined, the approach to determining rational capacity and the form of organizing production at a textile enterprise should be fundamentally changed.

In the middle of the 1960's, the SOPS [Council for the Study of the Productive Forces] under the USSR Gosplan formulated the scientific task of creating a new form of the territorial organization of production. On the basis of centralized

management it would include a "range" of different sized enterprises. In 1968-1971, the task of elaborating the plans for such enterprises was successfully carried out. Later this form received the name of a "cluster" or production association. Their creation has reflected fundamental qualitative changes in the material and social conditions of production as there has been not a full supply of labor resources but rather a growing shortage and territorial dispersion; there has been a change in the nature of personal, social and production consumption; demands have increased on the quality and aesthetic indicators of the product and implements of production.

The modern types and sizes of enterprises require the appearance of new "techniques" for managing and organizing production. These must be introduced into production even if they are expensive. However, in the practices of sectorial planning for a number of years there has been an underassessment of the importance of the new forms of organizing production as well as of the difficulties of a scientific and organizational-planning nature. The insufficient elaboration of complicated scientific problems related to production concentration has impeded the correct orientation of the planning bodies on solving urgent problems. In particular, at present the press has poorly covered the fundamental differences residing in the nature of the sectorial and territorial forms of the social organization of production. The main difference between them is that sectorial specialization, concentration, combination and cooperation meet the needs of considering primarily the technical, production and other intrasectorial features of production, while territorial specialization meets the socioeconomic, historical, natural and other extraproduction conditions.

The methodological principles for setting up the territorial forms of the social organization of production are completely different than the sectorial ones as they envisage primarily a thorough consideration of the specific features of the territory. For this reason neither the interregional division of labor (territorial specialization) nor spatial concentration (the concentration of the productive forces in the chosen region) can be planned or implemented according to the model of sectorial specialization and concentration. In precisely the same manner the development levels of two different forms of the social organization of production should not be compared. Otherwise this can lead to an incorrect conclusion concerning the deconcentration of production and the refusal to build new types of enterprises. In the event of replacing one type of enterprise with another, the same form of concentration is developed although in a different form. The refusal to build a textile or other combine in favor of a production association means not a changeover to deconcentration but rather the transformation of one form of production organization (sectorial concentration) into another (territorial, incomparable and consequently incommensurable with the first). A combine can only be compared with another combine or an association with an association.

The replacing, where possible out of production considerations, a combine by a production association of specialized enterprises is based not on the deconcentration of production but rather on its specialization. This must solve the same task of production intensification but under altered socioeconomic conditions which have determined the inefficiency of large-scale production. The sectorial or point form of concentration in being based on a unity of the production site is replaced by a new form of territorial concentration which can be called conglomeration based upon the centralization of production. The distinct, leading stage of production which

in accord with the requirements of the production methods, the design of purpose of the product should be superior to the other specialized production stages, continues to expand according to the former principle of point concentration, while the capacity of the subordinate production lines is increased by the setting up of affiliate mills located on a new territory. At present, without creating narrowly specialized enterprises combined with their centralized management, it is impossible to increase the supply of manpower for the national economy and put the significant labor resources into serving the socialist society without major additional outlays. In the light and other labor-intensive industrial sectors, the production associations, as a progressive form of territorial concentration, possess unlimited opportunities for further development. At the same time the growth opportunities of sectorial concentration by the consolidation, for example, of textile or machine building combines over the near run are virtually exhausted due to the absence of objective socioeconomic prerequisites.

Reconstruction and modernization of existing capacity and new construction have given rise to types of enterprises, the production associations, which are the same in purpose but differ in terms of the initial nature. The purpose of setting up the production associations on the basis of existing enterprises was with the aid of production centralization to specialize individual installations (subdivisions) by the regrouping of equipment and by carrying out other measures. Such a path has led to the strengthening of sectorial production concentration. But the construction of a new enterprise in the form of a production association envisages a transition from the old "point" or dispersed principle of placement to the new conglomeration aimed at developing the territorial concentration for the economic use of all the advantages of the territory. Such a production association does not serve as a new form of production concentration but rather represents a new form of placement on the basis of utilizing the advantages of the spatial concentration of capacity.

One of the important features for the entry of our society into the stage of developed socialism is the shift in the nature of consumption. This notion must be considered in locating the light industry enterprises. It necessitates a reevaluation of the importance of certain specific elements of the production process for a sector. The starting point for such a reassessment should be the idea that under the new conditions the demand for the greater aesthetic value of light industry products has sharply increased. In the Accountability Report of the CPSU Central Committee to the 26th Party Congress, L. I. Brezhnev pointed out: "The focus on savings and on the more complete and rational utilization of what the nation possesses requires a new approach to many management questions. In particular, this means that we must improve and strengthen the 'upper stories' of the corresponding sectors: the so-called fourth conversion in metallurgy, finishing work in construction and concluding production in light industry. They largely determine the quality and at times the quantity of product."

This shows the necessity of improving the system for training designers, since at present their creative work is seriously impeded; numerous garment, footwear and textile mills are not always provided with these specialists. Hence the importance of an organizational principle for the maximum possible centralization in using higher skilled creative labor.

With such a positing of the question, one understands the definite dependence of product quality upon the development level of several closely interrelated factors in the territorial organization of production: the degree of centralized use of the labor of designers, the completeness of territorial (article and stage) specialization and the changeover of the enterprises from a complete production cycle (of the combine type) to complexes which are associations of enterprises with the separating of the stages of finishing, layout and cutting into independent types of production. At present, the nation has all the objective prerequisites to make a beginning to the new form of placement for the conglomeration-type light industry and this will be used as the basis in forecasting.

Due to the already achieved ubiquitous placement of the sector and to the rather high level of its development in all the Union republics and economic regions, there is an ever-smaller need to create light industry enterprises "from scratch." The number of recently created or already existing centers is so great that from them, in considering the surrounding population points, it would be possible to select those where it is possible not only to expand capacity but also carry out new construction.

The principle of conglomeration placement on the basis of already existing capacity is applicable to a majority of the light industry sectors and primarily to those where there is the highest dispersion of production capacity, that is, garment, footwear and knitwear. The changeover to conglomeration placement is envisaged in the section on light industry of the General Plan for the Development and Placement of the USSR Productive Forces for the Period Up to 1990. It envisages the construction of not cotton and silk combines but rather clusters of stage- and product-specialized enterprises. In being affiliates of the associations, such enterprises can rationally utilize the manpower not only of the small- and medium-sized towns, but also the rural population points where a significant portion of the mobile labor reserves is concentrated. They will also make it possible to use the latent labor reserves, that is, the free time of certain categories of the population (the workers in seasonal sectors of industry and agriculture, women employed in housework and so forth). Over the long run, the dimensional series of light industry enterprises comprising a production association should be supplemented by larger enterprises. The telling necessity for preparing a solution to the question of reducing the standard sizes of enterprises is dictated by the need to promptly consider not only the socioeconomic conditions but also directly the factors of an intraproduction nature, the development trends of equipment and production methods, the introduction of fully automated processes and increased efficiency equipment and the use of many new types of raw materials which possess specific properties.

In 1970, on the basis of introducing assembly lines, full automation of textile production got underway. In 1980, on the basis of the broad use of microcomputers which can be built into any mechanism, this has encompassed the knitwear, garment and leather footwear production, where the surviving discreteness and complexity of the production process until recent years have served as a serious impediment for full automation.

All of this has led to a reduction in the number of production operations and stages, it has reduced the need for live labor in spinning, finishing, carpet weaving and other mills; it has shortened the length of the production cycle and thereby has

made it possible to reduce enterprise size. Automation based on electronically controlled equipment, as foreign experience has shown, is effective even at small enterprises.

The introduction of chemistry into light industry has also contributed to reducing the degree of production concentration. In particular, the use of various synthetic dyes, chemicals, glues, preparations and chemical fibers which possess great uniformity and purity has made fundamental changes in the production methods, it has reduced the duration of the production cycle and the number of production operations and ultimately has led to a reduction in enterprise size.

The need to replace products and to more frequently and rapidly replace equipment, as well as the reduction in the average service life caused by scientific and technical progress have necessitated a further decline in enterprise size. While in previous design studies there was an opportunity to reduce the capacity of the cotton cloth enterprises to 90,000-120,000 spindles and 1,500-2,000 looms in one independent building, subsequently obviously the need will arise to build enterprises with 40,000-60,000 spindles and 500-600 looms. The practices of the socialist and developed capitalist countries as well as economic research indicate that such enterprises where the number of employees could be reduced to 250-300 persons will make it possible to organize management clearly, to recruit personnel comparatively easily, to place the equipment rationally and when necessary to quickly modernize the mill and provide narrow production specialization.

The envisaged dividing of the spinning and weaving mills and the creation instead of of specialized automated mill for spindleless spinning of cotton, wool and chemical fibers and automated enterprises for ladder-type and shuttleless weaving with electronic monitoring and control systems make it possible, in reducing the size of the most labor-intensive types of production in terms of the number of employees, to place them in large groups, sometimes up to several-score enterprises in towns and rural localities around an already existing light industry center. Such a dispersion of labor-intensive production (this is caused by the patterns in the placement of the labor resources), in strengthening its concentration, will be accompanied by a significant rise in the level of concentration in the most crucial and least labor-intensive finishing stage of production by creating units of automated shops for dyeing, finishing, inspecting, storing and packing the materials and articles with a capacity up to a billion meters of cloth a year. At large finishing mills better conditions will be created for hiring highly skilled artist specialists and for increasing the aesthetic quality of the product.

The large textile combines and mills which exist in various regions of the nation comprise a rather diversified production network. In choosing the points for the locating of new finishing capacity, it is essential to consider the presence of this network and to develop the existing spatial structure of the sector and to raise the concentration of finishing capacity at the already created centers for the purposes of achieving higher centralization in the use of the creative labor of the designers and the workers of other specialties.

A complex of interrelated systems where basic and auxiliary production have been centralized and product specialization is combined with production and territorial, will represent the basic type of placement also for other light industry sectors.

All of this will make it possible to avoid further territorial dispersion of capacity and to make fuller use of acquired experience. At the same time such a territorial organization of production will provide an opportunity to better provide the affiliate enterprises specialized in the labor-intensive stages of production with permanent personnel, to accelerate the time of construction and completion of capacity and to reduce operating expenses.

During the Tenth Five-Year Plan, the recommended types of enterprises virtually were not built in light industry. At the same time, in certain republics, due to the acute need for such a form of production, they began organizing small affiliates of enterprises and existing associations in the small towns and rayon centers where there were free labor resources. For example, in Armenia several-score such affiliates and sections were set up. They have reached capacity three or four times faster than large combines and make it possible to significantly reduce proportional capital investments per unit of capacity by lowering expenditures on the development of the construction sites (small affiliates can be located in the populated zone of towns and settlements, close to housing development) and for building utilities in relation to the comparatively small consumption of heat, electric power and water.

All of this has increased the economic efficiency of social production and capital investments and has made it possible in a short period of time to increase the output of consumer goods. Thus, over the years of the current five-year plan, the volume of product output for the Armenian Ministry of Light Industry has risen by almost 50 percent in comparison with 17 percent as a whole for the USSR Ministry of Light Industry. From the example of operating such affiliates one can see many but not all all the advantages of the new territorial organization of production. At the same time, along with the positive aspects, one must not forget certain negative consequences of such construction. It is essential that it be subordinate to the unified scientific placement principles envisaged for the new forms of the social organization of production in the General Plan for the Development and Placement of the Soviet Productive Forces for the Period Up to 1990. The providing of the affiliates with permanent personnel, the reduction in operating expenses and the rise in product quality at them can be achieved only on a basis of linking their production and organizational tasks with existing combines and associations. The affiliates should not be turned into something akin to local industry enterprises the territorial organization of which is not subordinated to a unified system. The refusal to build textile and other light industry combines and the transition to building small specialized enterprises and affiliates which are part of production associations will help to successfully carry out the task posed in the Basic Directions for the 11th Five-Year Plan: "To develop consumer goods production at a more rapid pace."

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LABOR

SOLUTIONS TO LABOR TURNOVER PROBLEM SUGGESTED

Moscow VOPROSY EKONOMIKI in Russian No 5, May 81 pp 33-44

[Article by A. Kotlyar and M. Talalay: "Ways of Reducing Labor Turnover"]

[Text] The heightened efficiency of national production is the major objective of party economic policy in the current stage of communist construction. In his report at the 26th CPSU Congress, L. I. Brezhnev remarked: "In the 1980's the careful and economical use of labor resources will be particularly important. This is a complex matter, requiring the resolution of many economic, technical, social and indoctrinational problems." The objective of the economical, more efficient use of labor resources is also underscored in the "Basic Guidelines for the Economic and Social Development of the USSR During 1981-1985 and During the Period up to 1990."

The strain in the manpower balance is due to many factors, primarily shortcomings in capital investment practices. In several cases, we have indulged excessively in new capital construction instead of modernizing existing enterprises, which would make it possible to manufacture more products without increasing the number of employees. In the plan for 1979, for example, modernization accounted for less than one-fifth of all capital investments in production facilities.[1] What is more, the increase in quantity of incomplete capital construction leads to the dissipation of labor resources and their less effective employment. Sometimes the location of new economic facilities is determined without any consideration for staffing possibilities.

The shortage of labor resources is also connected with defects in the system by which workers are freed and in the organization of manpower redistribution. Economic agencies lack the necessary interest in reducing the number of personnel. Enterprises maintain a manpower reserve for work that is unconnected with their immediate specialty. The fact that wage scales, the size of incentive funds, bonuses and so forth often depend on the number of workers does not promote staff reduction either. Considerable losses in working time, personnel turnover, shortcomings in the organization of labor and output norms and a high percentage of manual labor also lead to the inefficient use of labor resources. In ancillary production units in industry, for example, only the labor of 29 percent of the workers has been mechanized; in metallurgy more than half of all heavy and labor-intensive operations are performed by hand.[2]

Whereas the demographic situation in the late 1960's and early 1970's relieved the strain in the manpower balance (because the large segment of the population born in the first postwar years reached working age), in the 1980's the situation changed, with the number of persons reaching working age decreasing in connection with the drop in the birth rate in the 1960's and 1970's. The rate of population growth in employable age groups decreased from 18 percent in the 1970's to 3.8 percent in the 1980's.[3]

Under the conditions of the planned socialist economy, difficulties in the provision of the national economy with manpower can be surmounted. "We must not rely on the possibility of attracting new manpower," L. I. Brezhnev said at the 25th CPSU Congress, "but only on the augmentation of labor productivity. Comprehensive mechanization and automation and the dramatic reduction of manual labor will be an essential condition for economic growth." Therefore, the present objective is the maximum use of national economic, sectorial, regional and intraorganizational labor reserves. The stabilization of production collectives, the reduction of labor turnover and the reinforcement of labor disciplines are important elements of this matter.

The stability of the personnel staff is a necessary condition for the accumulation of production experience, the improvement of abilities and skills, the development of labor activity and the superior organization of socialist competition, without which the efficient use of modern means of production and the augmentation of labor productivity will be impossible. The permanence of personnel is promoted not only by good production results, but also by the social development of collectives and the creation of a favorable psychological climate within them.

Personnel stability becomes particularly important when production scales grow, economic relations become more complex and technological progress accelerates. This is why economic administrations, enterprise managers, public organizations and soviets of people's deputies must pay more attention to the reinforcement of labor discipline, the improvement of working conditions and the organization of production efficiency and the proper work rhythm. Measures to reduce labor turnover are playing an increasingly important role. According to estimates, more than 20 million people, or around one-fifth of all the workers and employees employed in the national economy (excluding kolkhoz members), transfer from one enterprise or organization to another. Transfers account for approximately two-thirds of total personnel circulation.[4] The CPSU Central Committee, the USSR Supreme Soviet Presidium, the USSR Council of Ministers and the AUCCTU published a decree "On the Further Reinforcement of Labor Discipline and the Reduction of Personnel Turnover in the National Economy" (1979).

Even the initial results of the actions taken in accordance with this decree testify to their effectiveness. Personnel turnover in RSFSR industry, for example, was one-eighth lower in the first half of 1980 than in the first half of 1979. What is more, the rate of personnel turnover in industry decreased even more perceptibly during this period in some cities: by a factor of 2.1 in Rostov-on-Don, 1.5 in Ufa, 1.4 in Kazan' and so forth.

But this is not enough. We must remember than when the manpower balance is strained, when the capital-labor ratio rises and when the cost of training and retraining skilled personnel increases, the negative national economic consequences of personnel turnover are more noticeable. In his speech at the 16th Trade-Union

Congress, L. I. Brezhnev stressed: "Could we really compare the losses resulting from poor work by a ditch digger equipped with a shovel and wheelbarrow with the losses that are brought about when a walking excavator stands idle?"

The greatest economic losses brought about by personnel turnover are those connected with the worker's nonparticipation in the labor process while he is seeking a new job. A survey indicated that a change of jobs takes an average of 25-30 days. On the national economic scale, this leads to losses of several hundred thousand hypothetical average annual workers and a production deficit measured in billions of rubles. Besides this, the retraining of workers who change their profession when they move from one job to another requires additional expenditures. Approximately two-fifths of the workers who resigned from enterprises changed professions. The decreased output of workers prior to their resignation and during the initial period of their employment in a new job also leads to losses.[5] Estimates have indicated that annual losses in RSFSR industry just from transfers by young workers under the age of 30 exceed 3 billion rubles.

In addition, personnel turnover inflicts considerable moral injuries on the society because it lowers the level of labor discipline, thereby complicating the planning of social processes and disrupting existing relationships within the collective.

While we are discussing the consequences of personnel turnover, we cannot forget the personal damages suffered by the worker who resigns. These primarily consist of his lost income during his search for a new job. He often loses his annual bonus and his place on the housing list. Long intervals between jobs (over a month) or more than one move to another enterprise within a year leads to a break in the worker's service record, and this affects his financial security with respect to social insurance. But the main consideration is that the expectations connected with a job transfer are far from always justified. A study conducted in Orel by the Central Scientific Research Laboratory of Labor Resources (TsNILTR) indicated, for example, that only one-third of the workers who changed their place of employment were completely satisfied with the transfer. Therefore, the reduction of labor transfers is in the personal interest of the workers as well as in the national economic interest.

By its economic nature, personnel turnover is a form of manpower redistribution distinguished by the disorganized (unregulated by plan) transfer of workers from one place of employment to another. Resignation from a job is the result of the unsatisfactory, in the view of citizens, observance of their requirements in regard to a place of employment (production, housing, consumer service and other factors). To some degree, turnover reflects progressive changes in productive forces and is effected by the law of labor modification. This is true, for example, of transfers connected with the desire to combine a professional specialty with an educational specialty, the mastery of a more promising profession, the acquisition of higher qualifications, the move to a job which is consistent with the worker's specialty, abilities, inclinations and state of health, and so forth.

The positive value of these transfers can be reinforced with the aid of their planned organization. City placement bureaus could be of great assistance to persons who wish to change their place of employment. Experience in this has been accumulated in the Belorussian SSR. If the worker's reasons for resigning are

sufficiently sound (for example, due to a change of residence), his case is accepted. The bureau informs the citizen of appropriate job vacancies and signs a candidate for the job he has left. This helps to reduce interruptions in the labor process and aids in the selection of a place of employment that is most consistent with the inclinations and needs of the worker. Naturally, when an employed citizen comes to the bureau, his reasons for wishing to change his place of employment are carefully reviewed, and if they are not sufficiently valid the bureau strives to convince the citizen to change his mind. The bureau's data on actual conditions at other enterprises in the city are used for this purpose. As a result, over 10 percent of the citizens who come to the bureau decide not to seek new jobs.

It must be said that transfers for valid reasons account for only a small share of total personnel turnover. This indicates that turnover in general is a negative phenomenon which injures the society as a whole and the individual enterprise and worker.

When we determine the place occupied by turnover in the system of manpower redistribution, we should note that the recruitment of workers by enterprises is largely based on this. In some oblasts of the RSFSR, 60-87 percent of the personnel recruited by enterprises were people who had resigned from other organizations.

The factors lying at the basis of personnel turnover can be divided into objective factors, stemming from various external aspects of manpower reproduction (for example, the system of personnel training, the organization of labor and wages, housing and consumer service conditions and so forth), and personal factors, stemming from such characteristics of the worker as his age, sex, education, service record and so forth. The interaction of objective and personal factors forms the worker's attitude toward his job and his determination to stay or leave. Therefore, the reasons for personnel turnover consist of specific combinations of factors. By influencing these factors, we can eliminate or reduce the effects of causes of personnel turnover.

The final goal of the struggle against turnover is the guaranteed stability of production collectives. The stability of labor collectives, apart from the reduction of turnover, depends on the reorganization of other types of manpower circulation: the reduction of resignations for educational reasons (by improving conditions for part-time study) and the return of the military reserve to previous places of employment.

The production collective is a community with multifaceted internal relationships, including relationships of a production and non-production nature. Relationships of a production nature are formed directly in the labor process and depend on working conditions, the distribution of workers, their vocational goals, vocational training and qualifications, and their degree of participation in efficiency augmentation work and in socialist competition. Relationships of a non-production nature grow broader as housing and consumer service needs are satisfied (by the place of employment), during the process of worker participation in amateur activities and recreational sports, and so forth.

An analysis of personnel turnover can reveal the reasons for the disruption of the worker's relationship with the production collective, and the study of stability can indicate the most effective ways of forming relationships. In this process,

the relationships encountered in the study of personnel turnover and stability will differ. The circle of interests (serving as prerequisites for the formation of relationships) revealed through reasons for resignation in the study of the causes of personnel turnover is much more meager than the actual range of workers' interests. Reasons for resignation generally reflect primarily the most significant production and non-production interests: professional qualification possibilities and demands in regard to working conditions, wages, the provision of housing and preschool establishments and so forth. The worker can be connected to the enterprise by a much broader circle of interests, however, and these may seem secondary on the surface but they are actually extremely important--for example, personal attachments with comrades at work, the presence of a tennis court for tennis players and so forth. This must be taken into account in the work of forming comprehensive and strong relationships between workers and the labor collective, which also envisages the resolution of problems connected with the production stability of personnel.

The correlation between personnel stability and turnover predetermines the distinctive features of the study of each facet of this single problem. In our opinion, it is expedient to draw a distinction between the study of causes of turnover in specific cases--that is, the disclosure of critical points in relationships which are disrupted more often than others--and the study of ways of forming and maintaining various relationships between workers and the production collective.

Many years of research by economists and sociologists have paved the way for the study of theoretical and methodological questions connected with the socioeconomic essence of personnel turnover.[6] This established a theoretical basis for studies of an applied nature. Now we must concentrate on the elaboration of measures to reduce personnel turnover and stabilize production collectives with a view to the distinctive features of specific branches, regions, enterprises and so forth.

Recommendations regarding the reduction of personnel turnover must take three aspects into account: demographic, sectorial and regional. The demographic aspects of turnover presupposes an analysis of sex and age patterns. The most urgent problem here is turnover by working youth, which exceeds the rate of turnover by workers over 30. Studies conducted by the TsNILTR at more than 180 industrial and construction enterprises established the following basic reasons for the high rate of turnover among working youth: unsatisfactory conditions for the combination of work and education, dissatisfaction with one's profession, work that is inconsistent with one's specialty, inadequate housing and so forth.

The combination of all these causes also reflects the peculiarities of youth as a manpower category. We know, for example, how important education is in the young person's system of values. Around 30 percent of all young workers combine work with education. The shift work system, however, makes it difficult for them to attend night classes in VUZ's and tekhnikums and training courses, and this often motivates them to resign from an enterprise. The successful combination of work and education is promoted by a shift system of classes in academic institutions. This is how classes are organized for part-time students in two Volgograd institutes, for example--the polytechnical institute and the institute of the national economy. The students of these VUZ's, as well as the students of academic

institutes that are now being established as part of large enterprises, can attend classes in the morning or evening, depending on the shift they work in production. This eliminates one of the widespread causes of resignations. For example, there have been virtually no resignations among part-time students at the Neva Machine-Building Plant imeni V. I. Lenin. The academic process in this plant's educational institution has been organized in such a way that years of part-time study (with classes taught in two shifts) alternate with years of daytime classes.

Inadequate vocational guidance work with youth leads to a situation in which many young people choose a career under the influence of passing circumstances and later resign from enterprises because they are dissatisfied with their profession. According to TsNILTR studies, the proportion accounted for by persons who chose their profession with the aid of intelligent vocational guidance (on the recommendation of the secondary school or job placement commission, familiarity with the enterprise and so forth) was only 23 percent in industry and 28 percent in construction. This is the reason why 75 percent of the young workers who resign from enterprises change their professions.

A statewide vocational guidance system must be established in our nation, envisaging vocational guidance work in secondary schools and at enterprises and the organization of an interdepartmental vocational guidance service. On the lowest levels of this system, this work should consist of vocational training and counseling in schools and the organization of vocational counseling centers at enterprises to offer specific placement recommendations and subsequently oversee the professional adaptation of youth.

The interdepartmental service should be responsible for the coordination of vocational guidance measures in schools and in the production sphere, the distribution of information about current and long-range manpower requirements and the provision of special vocational counseling in particularly complicated cases. There are many examples of the successful functioning of each of these links. The graduates of schools in Leningrad and Minsk received a vocational recommendation compiled by pedagogues and a physician in addition to their secondary school diploma. The rate of turnover has dropped noticeably among new young workers at Moscow's Clock Plant No 2, where a vocational guidance and placement office assists in the selection of jobs for new workers. Interdepartmental vocational guidance offices in Vilnyus and Kaunas have worked successfully with upperclassmen, teachers and parents. The time has come to turn this work into a statewide vocational guidance system and to conduct it everywhere.

Personal inconveniences often motivate young workers to resign from enterprises. The need for workers' dormitories has still not been fully satisfied. There is a pronounced shortage of dormitories of the boardinghouse type, which could be used as temporary housing for young families. Estimates indicate that at least 70 percent of all workers' dormitories should be of this type, but the present proportion is only one-third or one-fourth of this figure. Enterprises prefer to build the conventional type of dormitory because it accommodates more people. However, after they start a family, young people often resign from enterprises in the hope of finding better housing. The statement in the decree "On the Further Reinforcement of Labor Discipline and the Reduction of Personnel Turnover in the National Economy," regarding the fact that "new dormitories should be primarily of

the boardinghouse type, with accommodations for young families," is of great significance under these conditions. The experience of construction organizations in Kiev, where the construction of such dormitories has noticeably reduced personnel turnover, proves that this is a promising practice.

One of the factors which keeps young workers on the job is professional advancement. One out of every seven of the young workers interviewed in our survey, however, said that there were no possibilities for professional advancement at his enterprise. This lowers the level of job satisfaction.

The abovementioned decree makes special mention of the need to pay more attention to young workers, particularly those who have just started work, and assist in the growth of their professional mastery and their involvement in collective matters. It envisages the introduction of a system of professional advancement at enterprises, based on experience accumulated at the Volga Motor Vehicle Plant imeni 50-Letiya SSSR [VAZ]. The principle of equal opportunities and order of advancement is in effect here, signifying that workers are informed in advance of the requirements of a specific job or rank (education, skills and so forth), and an order of advancement is established if there are several contenders for the vacancy. Job vacancies at the VAZ which require superior skills are filled primarily by the personnel of this plant.

The experience of leading enterprises has proved that the rate of personnel turnover dropped noticeably when attention is given to questions of the labor, education and personnel circumstances of young workers. Conversely, wherever the necessary work is not conducted with young personnel, they do not stay on the job. Suffice it to say that the rate of turnover among young workers at the enterprises surveyed by the TsNILTR ranged from 3 percent to 114 percent. What is more, the rate of turnover often differed as much as 10-20 points at neighboring enterprises of the same branch.

Personnel turnover has certain distinctive features in other demographic groups as well. For example, men in the production sphere have a higher rate of turnover. Their resignations are generally connected with dissatisfaction with wages, the organization of labor and housing conditions. Women resign because of dissatisfaction with labor conditions and schedules and inadequate preschool establishments. It is obvious that measures to reduce turnover will only be effective if the sex and age structure of personnel at specific enterprises and organizations is taken fully into account. For example, the rate of personnel turnover at the Darnitskiy Silk Combine (Kiev) is almost half as high as the national average for enterprises of light industry. This was achieved by means of a group of measures aimed at improving the labor and personal conditions of women, who make up three-fourths of the enterprise staff. The three-shift work scheduled at the combine has been drawn up in such a way that each woman works only two night shifts a month. The demand for preschool establishments, Pioneer camps and dormitories has been completely satisfied. The combine has a health clinic and a summer vacation camp.

Many of the problems connected with personnel turnover are revealed when its sectorial aspects are analyzed. For example, when the TsNILTR analyzed the reasons that workers resigned from enterprises of the RSFSR Ministry of the Food Industry, it learned that two-thirds of the resignations were motivated by dissatisfaction with the technical conditions of production, 16 percent by dissatisfaction with

housing and consumer service conditions, and 16 percent by personal reasons. The enterprises of this branch had the highest rate of personnel turnover in RSFSR industry. The principal reason is the low level of mechanization. The number of personnel performing their work with the aid of machines and mechanisms and the number overseeing the operation of automatic units was 1.3 times lower than the average for RSFSR industry in 1975. At the same time, the number of personnel performing their work by hand with the aid of machines and mechanisms was 2.3 times as high as the average in republic industry, and the number of those performing their work by hand without any machines was 1.2 times as high.

The incorporation of new technology at the bakery combine in Maykop serves as an example of the way in which the rate of personnel turnover is affected by the comprehensive mechanization of production. Between 1975 and 1978 the enterprise installed 195 new pieces of equipment, which led to a rise of 35 percent in labor productivity and made it possible to institute a two-shift work schedule, with all personnel having the same days off, and considerably reduce the amount of manual labor. As a result, the rate of turnover at the enterprise fell to one-fifth of its previous level.

The measures envisaged in the decree "On the Further Reinforcement of Labor Discipline and the Reduction of Personnel Turnover in the National Economy" to improve material and technical supplies and the power-labor ratio, to reduce the need for manual labor and to improve working conditions with the extensive use of internal resources, in line with experience accumulated in Moscow, Leningrad and cities in the Latvian SSR and Zaporozhskaya, Kuybyshevskaya and Chelyabinskaya Oblasts, are a significant prerequisite for the reduction of personnel turnover.

Workers who resign from enterprises of this branch often state their dissatisfaction with the organization of labor norms and wages. The average percentage of technically substantiated output norms in the food industry is not high--83 percent--and in some subbranches it is even below 70 percent. There is a clear tendency, however, toward a lower rate of personnel turnover when the percentage of technically substantiated norms rises. It is also interesting that the average wage of similar food industry enterprises in a number of cities differs significantly: In Astrakhan', for example, the wage ranges from 110 rubles at Bakery Plant No 1 to 162 rubles at Bakery Combine No 2, and so forth. These unjustified differences in the wages of workers with the same skills arouse job dissatisfaction and, consequently, increase personnel turnover. This is why the improvement of the organization of wages and labor norms, the broad-scale inclusion of labor collectives and public organizations in the settlement of these matters and the consistent moves toward collective forms of labor organization and wages are becoming particularly important.

The relatively meager supply of communal housing for branch workers and the long waiting period for residences also have something to do with the rate of turnover. The decree of the CPSU Central Committee, USSR Supreme Soviet Presidium, USSR Council of Ministers and AUCCTU, which envisages the creation of housing and construction cooperatives by associations, enterprises and organizations, provides significant opportunities to eliminate this cause of personnel turnover. The heads of these cooperatives will be authorized, with the approval of the Trade-Union Committee and with consideration for the recommendations of labor collectives, to use incentive funds for financial assistance and the partial repayment of bank loans for cooperative and individual construction by workers who have

been at the specific enterprise for at least 5 years, and for newly-weds who have been at the enterprise at least 2 years. This practice has already been conducted at enterprises in Rubtsovsk (Altayskiy Kray) and plants in Perm' (Kamkabel', the electrical equipment plant and others), where personnel turnover has decreased noticeably.

Therefore, the analysis of personnel turnover from the sectorial standpoint testifies that significant steps can be taken by the appropriate ministers to reduce personnel turnover at enterprises under their jurisdiction. These will primarily be connected with general technical policy and the improvement of labor norms, wages and production and personal conditions.

When we examine personnel turnover from the regional standpoint, we see considerable differentiation in the rate of personnel turnover at enterprises in various parts of the nation. In the northwestern, central and Volga-Vyatka economic regions, for example, the rate of personnel turnover in industry is only two-thirds to one-half the rate in the West Siberian, Far Eastern and East Siberian regions. The more severe natural and climatic conditions of East Siberia in comparison to the western regions of the nation and the present relatively low level of public services complicate the formation of stable production collectives in this region. Under the conditions of this zone's intensive economic construction, the manpower shortage is felt quite keenly, and this also heightens the intensity of personnel turnover to some degree. In his report at the 26th CPSU Congress, L. I. Brezhnev remarked: "When a person moves away from, let us say, Siberia, it is usually not because the climate is unsuitable or his salary is too small, but because it is more difficult to acquire housing or enroll a child in kindergarten there and there are not enough cultural centers. This is why we plan to speed up the construction of residential buildings and the entire sociocultural complex even more in the next 5 years and improve the system for supplying the population of these regions with consumer goods."

Personnel turnover is a particularly acute problem in the cities. It is within the city boundaries that most labor transfers take place, and migrants account for no more than 20 percent of annual placement figures.

In most cases, the personnel turnover problem is investigated on the level of individual enterprises. The measures worked out as a result of this are often of a strictly intraorganizational character and cannot always aid in solving the problem on the national economic level. What is more, enterprises located in the same cities have considerably different working and personal conditions, causing personnel to leave one enterprise and go to another and distabilizing the labor force on the municipal scale. The resolution of the personnel turnover problem, however, requires effort on the part of municipal agencies as well as individual enterprises. Local soviets, whose functions include the organization and regulation of manpower distribution and redistribution within the city, have an important role to play in the correct management of the processes.

The study of manpower transfer processes conducted by TsNILTR in Orel indicated that 48,000 people (approximately one-fourth of all those employed in social production in the city) apply for work at enterprises and organizations each year. More than half of them (61 percent) transfer from one enterprise to another, mainly for reasons having to do with labor turnover. In view of the fact that

labor transfers take workers out of the direct process of labor, the time spent on them must be subtracted from the society's full amount of work time. The figure to be subtracted rises as the number of transfers increases, all other conditions being equal. Naturally, the minimization of the total number of labor transfers will first require the reduction of unjustified transfers which are not truly in the interest of enterprise personnel or the society as a whole.

When the justifiability of labor transfers in a city is being appraised, it must be borne in mind that the transfers which are socially expedient are those connected with the involvement in social production of persons from the educational sphere, housewives, subsidiary farmers and persons discharged from the armed services. The majority of all other labor transfers can be classified as personnel turnover. What is more, only 30-50 percent of these transfers (depending on personnel age groups) are justifiable in the sense that they are truly in the interest of the worker and satisfy his needs. Obviously, this kind of labor transfer can be called expedient from the standpoint of the society's interests as well. The research findings indicated that more than 40 percent of the labor transfers in Orel in 1976, for example, were not in the interest of the municipal economy or the workers themselves. The elimination of these unjustifiable labor transfers would be equivalent to the involvement of approximately 2,200 more people in the Orel economy. This would not only correct the present personnel shortage in the city but would also fill 400 new jobs. The reduction of surplus manpower circulation within the city will require the institution of a complex of measures by economic agencies and by local party and soviet organizations. This would help to nullify the exclusively departmental approach of some enterprises to the matter and would guarantee the institution of citywide measures.

When solutions to the personnel turnover problem are being planned on the municipal scale, it is important to determine the main personnel flow patterns between plants. Depending on the goals of the study, the direction of the labor flow can be determined on various planes and scales (for example, if the sectorial approach is taken, the flow patterns from the sphere of physical production to the non-production sphere, from industry to consumer services and from enterprise to enterprise will be measured).

A study of labor flow patterns between plants in the city indicates, firstly, enterprises with balanced reciprocal labor flows; secondly, those with no compensating reciprocal transfers (those which primarily acquire or lose personnel); and, finally, enterprises with no personnel exchange at all. As a result, it is possible to learn which enterprises are contributing to the chronic manpower deficit. As a rule, they are the enterprises with the highest rate of turnover. It must be said that most of the heads of personnel departments (in Orel, for example, more than half of them) know little about the traffic patterns of resigned workers and, consequently, about the reasons for these transfers.

Comparisons of production, social, cultural and personal conditions at various enterprises can be used in the planning of sound measures to stabilize production collectives and to reorganize personnel exchange patterns. The complex of measures planned within a city must also envisage the regulation of labor transfers by workers of various age groups. In Orel a citywide plan of measures to heigthen the stability of young workers was compiled to reduce turnover in the most mobile age group--the under-30 group. It envisages the coordination and considerable

augmentation of the work at enterprises and organizations in the city to improve the conditions of the labor, education, home life and recreation of young workers and to equalize these conditions (on the level of the best enterprises).

The scales of a city offer considerable opportunities to coordinate the work of enterprise personnel offices for the purpose of conducting a common personnel policy, partly to weed out "rolling stones" and to prevent the enticement of the personnel of other organizations. It would also be helpful to hold regular conferences and seminars in the city (instructive seminars and meetings for the exchange of work experience) for the workers of personnel departments, including public agencies. In the organization of this work, it would help to create "boards of personnel department chiefs" (like "boards of directors") in cities.

It is only on the citywide scale that such matters as the organization of good transportation services for workers can be resolved. In particular, neighboring enterprises could start work at different times and transport schedules could be coordinated with their hours of operation.

The greatest difficulties in solving the housing problem are encountered by small enterprises and organizations which do not have the resources for independent residential construction. The city could be of decisive help in this matter, namely by creating a centralized residential construction fund, made up of contributions from individual enterprises and administered by the ispolkhom of the city soviet. This has been done in several cities in our country. With this system, all of the housing is built for a single client (the city soviet) and is distributed proportionately on the basis of enterprise contributions.

The further development of the network of public job placement bureaus and the improvement of their work, envisaged in the previously mentioned decree, are also being accomplished primarily on the municipal scale. Plans have been made to give fuller consideration to the experience of cities in which citizens are informed of enterprise manpower requirements and are placed in jobs with the aid of local labor agencies. It is obvious that organized job placement services are preferable to independent job-seeking. Almost all of the large cities in the RSFSR have public job placement bureaus. In 1979 alone, 1.1 million people in the Russian Federation found jobs with the aid of these bureaus. Further improvement is needed, however, in placement services. For example, city soviets of people's deputies could require the managers of all enterprises and organizations in the city to report all job vacancies to these bureaus on a monthly basis. A procedure, according to which all information about job vacancies would be printed in newspapers, broadcast over the radio and posted on the bulletin boards of municipal information services and bureaus only with the consent and authorization of the job placement service, must also be established in cities.

The mass-scale organization of the struggle for the effective reduction of personnel turnover, which is essential at the present time, should rest on a scientifically substantiated procedural foundation. Some experience has already been accumulated in this work, and this will help in determining the basic conditions that must be met by methods for the study of personnel turnover at enterprises and organizations. Above all, it will be important to focus on a specific object, with consideration for its distinctive features. This object could be a specific

manpower group with its own peculiar circulation patterns (for example, working youth) or a type of economic organization (for example, cement plants). Methods of accumulating information, such as the study of the working and personal conditions of personnel (based on direct observations with the aid of information in statistical reports, daily accounts and personnel files) must be combined with surveys of enterprise workers and persons who submit resignations (to determine the motives for resignations and the motives and scales of potential turnover) and the recommendation of ways of reducing personnel turnover with regard to the specific object. Finally, when the studies involve branches, regions, cities and so forth, recommendations on the disclosure and summarization of progressive experience in the work of personnel stabilization will be of great importance. Examples of this could be the TsNILTR recommendations on the study of the causes of turnover among working youth in industry and construction, recommendations on the study and organization of the stabilization of graduates of general educational schools at industrial enterprises and the procedure of studying the reasons for citizens' resignations with the aid of information from municipal public placement bureaus.

All of these recommended procedures have been put to practical use. For example, the use of the procedure for studying the causes of resignation with the aid of placement bureau data made it possible to survey 559 enterprises of the food industry in the Russian Federation in just 5 months. The study resulted in a complex of measures to reduce personnel turnover in the branch. The existing procedural recommendations are inadequate as yet, however. There are no standard recommended procedures for the comprehensive study of this problem on the level of the city, branch or individual enterprise with consideration for its production features. As a result, studies conducted at enterprises (or in branches) do not have a common procedural basis, their content and methods (including the questionnaire) differ significantly, their data analysis and processing methods are not the same and there is no single system for the classification of factors contributing to turnover. All of this makes it difficult to compare their results and formulate general conclusions and recommendations. The development of procedures, envisaging the combination of general procedural principles with an emphasis on sectorial or regional peculiarities, is completely possible. This will necessitate the coordination of the efforts of scientific establishments of an interdepartmental nature--for example, the Institute of the Economics and Organization of Industrial Production of the USSR Academy of Sciences' Siberian Department, the Scientific Research Institute of Labor and TsNILTR--with the efforts of sectorial economic institutes. On this basis, it would be quite possible to quickly provide each branch of the national economy and industry with standard procedures for the study and organization of measures to reduce personnel turnover.

The improvement of methods for the study of personnel turnover must be accompanied by a more efficient system of statistical records. At present, these records are kept only in industry, construction and transportation, and only for rank-and-file workers. What is more, all reasons for leaving an enterprise are covered up by the official formula of resignation "for personal reasons." Time-consuming and costly (and not always competent) studies are organized in each specific case to obtain the necessary information. The systematic acquisition of information and the guarantee of procedural uniformity, however, will necessitate the inclusion of data on the scales (including individual data on youth) and motives of personnel turnover in all branches of the national economy and industry in state statistical records.

The comprehensive implementation of all these suggestions could aid in the "stabilization of personnel and reduction of labor turnover," envisaged in the Basic Guidelines for the Economic and Social Development of the USSR During 1981-1985 and During the Period up to 1990."

FOOTNOTES

1. VOPROSY EKONOMIKA, No 6, 1980, p 35.
2. SOTSIALISTICHESKIY TRUD, No 3, 1980, p 73.
3. "Trudovyye resursy SSSR" [Labor Resources in the USSR], Izdatel'stvo Ekonomika, 1979, p 12.
4. "Trudovyye resursy SSSR, p 237; "Dvizheniye rabochikh kadrov v promyshlennosti" [Manpower Circulation Patterns in Industry], Izdatel'stvo Statistika, 1973, pp 15-16.
5. For example, studies conducted by the Scientific Research Institute of Labor indicate that workers fulfill output norms by an average of 70-75 percent in their first month at a new place of employment, 90 percent in their second month and 95-97 percent in their third (see "Nekotoryye problemy teorii statistiki i statisticheskikh issledovaniy" [Some Aspects of the Statistical Theory and Research], pt II, Moscow, 1971, p 25).
6. See, for example, Ye. G. Antosenkov and Z. V. Kupriyanova, "Tendentsii v tekucheskti rabochikh kadrov" [Labor Turnover Trends], Novosibirsk, 1977; "Dvizheniye rabochikh kadrov v promyshlennosti"; V. A. Pavlenkov, "Dvizheniye rabochey sily v usloviyakh razvitogo sotsializma (Voprosy teorii i metodologii)" [Labor Circulation Patterns in the Developed Socialist Society (Aspects of Theory and Methodology)], Izdatel'stvo MGU, 1976; and others.

8588
CSO: 1828/111

LABOR

SOCIALIST COMPETITION SPECIALISTS MEET IN GOMEL'

Moscow VOPROSY EKONOMIKI in Russian No 5, May 81 pp 153-154

[Article by A. Glushetskiy and I. Lashchinskiy: "Participation by Labor Collectives in Production Control"]

[Text] In 1980 a section on "Socialist Competition and the Further Development of Participation by Labor Collectives in Production Management" was set up as part of the Scientific Council of the USSR Academy of Sciences and the AUCCTU on Problems in Socialist Competition.

The development of the socioeconomic activity of working people is one of the most important ways of improving the mechanism of economic management. But there are many unsolved problems in the theory and practice of this development. There is no system for classifying forms of socioeconomic activity, the relationships between various forms of activity and the process of management and its various levels have not been established, there are no precise guidelines for interrelations between public, "amateur" organizations and the managing bodies of enterprises, and so forth.

The new section is supposed to determine major guidelines and plan and coordinate scientific work in this field. The investigation of theoretical aspects must be combined with the summarization of the actual experience accumulated in labor collectives and the drafting of recommended procedures for the more efficient involvement of workers in production management. The work methods of permanent production conferences, workers meetings, scientific and technical societies, societies of inventors and efficiency experts and mass artistic associations for workers are to be analyzed for this purpose. The heightened effectiveness of collective bargaining, the activities of factory and plant local committees and participation by workers in the management of socialist competition, counter-planning and the social development of labor collectives will be matters of constant concern. Plans also call for the study of the various forms taken by contacts between labor collectives of related enterprises and associations, particularly the examination of initiatives regarding the more careful observance of cooperative delivery agreements, a move from complaints to mutual assistance, and so forth.

At the end of December 1980 the section held its first out-of-town meeting in Gomel'. The topic of discussion was "Socialist Competition and Other Active Forms of Participation by the Working Public in Production Management (as Exemplified by

the Gomsel'mash Production Association)." The successful work of Gomsel'mash (the association fulfilled the production volume assignment of the 10th Five-Year Plan a year and a half ahead of schedule) was largely a result of the proper organization of socialist competition and the extensive development of various forms of worker involvement in production management.

Production association workers and administrators, representatives of central, republic and local trade-union councils and scientific personnel spoke at the section meeting.

Reports were presented by General Director N. Afanas'yev of the association and Chairman S. Boretskiy of the trade-union committee. They discussed the association's experience in the organization of socialist competition and the development of other forms of worker participation in production management. More than half of the association's personnel work in all of its public managing bodies (around 60 percent of them are workers, 32 percent are engineering and technical personnel and 8 percent are employees). The work of permanent production conferences, which consider ways of heightening production efficiency and attaining the collective's main social objectives, is particularly noteworthy. Another extremely important form of participation by workers in management is socialist competition. Virtually the entire collective takes part in organizing the competition and in analyzing and summing up its results.

Several problems in the development of various forms of worker participation in management were discussed in the reports and speeches. Their resolution is often complicated by insufficient scientific research. Speakers pointed out instances of parallelism and duplication in the work of the public organizations and functional departments and offices of the association, which lead to the "erosion" of responsibility. The organization and management of competition within a production association have not been analyzed sufficiently. A flood of various initiatives and recommendations complicates the work of organizing competition. Speakers stressed that the effectiveness of competition will be heightened and the participation of workers in production management will be expanded only in the presence of constant contact between science and production. They expressed the hope that the activities of the new section of the Scientific Council will aid in the quickest possible resolution of an important national economic problem--the continued development of participation by labor collectives in production management.

8588
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DEMOGRAPHY

KAZAKHS APPROACH 7 MILLION IN 1979 CENSUS, GROWTH SLOWS

Alma-Ata BILIM ZHANE ENGBEK in Kazakh No 4, Mar 81 pp 28-30

[Article by demographer Maqash Tatimov, senior research worker at the Philosophy and Law Institute of the KaSSR Academy of Sciences: "Kazakh Population Distribution and Growth"]

> [Text] /The party central committee has worked out a useful demographic policy in accordance with the instructions of the XXV party congress and is devoting special attention to carrying it out and to the difficult issue of a future population balance./ [in boldface]
>
> From Comrade L. I. Brezhnev's report to the XXVI Congress of the CPSU.

The results of the 1979 All-Union Census will form the foundation of this demographic program. During the next few years the systematized, summary figures from the large amount of raw census data will be published as individual volumes. This rich and carefully processed census data will have very great significance for research.

The first census returns have just been issued by the Politizdat Press as individual brochures and volumes. The bulk of the data, however, is being published in the journal VESTNIK STATISTIKI, the organ of the USSR Central Statistical Office, from issue five for 1980.

These official census returns show that all the peoples of the Soviet Union, among them the Kazakhs, are enjoying total prosperity. We will let the figures speak for themselves.

The rapid growth of the Kazakhs can be seen from just the most recent Soviet censuses alone. In 1939 there were 3,101,000 Kazakhs, in 1959 3,622,000, in 1970 5,299,000 and in 1979 6,556,000. Our people have grown more than 2.1 times in 40 years in spite of heavy losses during the horrible Second World War. The growth, however, has not been uniform if looked at in terms of 10 year periods. Thus growth was practically non-existent during the difficult 1940s, reached 20 percent during the 50s, radically increased to 40 percent during the 60s and fell off to 27 percent in the 70s. During the 1980s the growth rate will fall somewhat, to about 23-25 percent, and will begin to decline drastically during the next

decades. The Kazakhs will remain, however, like other neighboring peoples of Central Asia, among the ranks of rapidly increasing populations. According to the results of the 1979 All-Union Census Kazakhs number 6,556,442. Of the total, 80.7 percent lived in the KaSSR and 19.3 percent in other union republics. Table one shows the number of Kazakhs by republic. One large group of Kazakhs (736,700) lives in contiguous Central Asian areas but some 530,400 live in the RSFSR and in other republics (see Table 1).

The numbers of small groupings of Kazakhs in republics, oblasts and regions rather distant from the KaSSR grew considerably in the 1979 census as compared to the 1970 census. Most were comprised of students studying outside the republic, persons in military service, tourists and workers on assignment. On the other hand, the large numbers of Kazakhs settled in rayon contiguous to the KaSSR tended to be drawn back into the KaSSR. The major stimulus for this was the opening of new educational institutions, construction projects, industries and mines. This process is likely to continue in the future. The creation of new oblasts and rayon within the republic and the growth of many new cities and the expansion of new sovkhoz will guarantee that this is the case.

Table 1. Numbers of Kazakhs by Republic

Republic	Number	Percent
KaSSR	5,289,394	80.7
UzSSR	620,136	9.5
RSFSR	518,060	7.0
TuSSR	79,539	1.2
KiSSR	27,442	0.4
TaSSR	9,606	0.1
UkSSR	9,171	0.1
BSSR	1,355	0.02
AzSSR	1,010	0.02
GSSR	820	0.01
LiSSR	567	0.01
MSSR	533	0.01
LaSSR	447	0.01
ESSR	226	0.003
ArSSR	199	0.003
Soviet Union	6,556,442	100.000

[as published]

Table 2. Numbers of Kazakhs by KaSSR Administrative Unit, Rates of Growth and Kazakhs as a Percentage of Total Administrative Unit Population

Administrative Unit	Numbers in Thousands	Growth Rate 1970-1979	Percent of Total Population
Chimkentskaya Oblast	797.8	31.3	51.0
Kzyl-Ordinskaya Oblast	428.0	24.4	75.6
Dzhambulskaya Oblast	410.4	26.8	44.1
Semipalatinskaya Oblast	371.2	19.4	48.0
Aktyubinskaya Aqtobe Oblast	328.4	25.5	52.1
Alma-Atinskaya Oblast	319.6	22.1	37.6
Taldy-Kurganskaya Oblast	305.3	21.2	46.1
Uralskaya Oblast	301.1	19.3	51.5
Guryevskaya Oblast	281.5	26.1*	76.1
Eastern Kazakhistan Oblast	223.3	14.0	25.4
Pavlodarskaya Oblast	216.1	23.5	26.8
Dzhezkazganskaya Oblast	184.3	27.0*	41.0
Karagandinskaya Oblast	181.5	27.0*	14.5
Tselinogradskaya Oblast	167.8	19.0	20.7
Kokchetavskaya Oblast	161.8	21.1	26.3
Kustanayskaya Oblast	156.2	13.5	16.6
Alma-Ata City	147.9	67.7	16.4
Mangyshlakskaya Oblast	111.9	26.1*	44.3
Turgayskaya Oblast	99.5	38.4	36.8
Northern Kazakhstan Oblast	99.3	14.8	16.7
KaSSR	5,289.3	24.5	36.0

* Gur'iv, Mangyshlakskaya, Karaganda and Dzhezkazganskaya oblasts were created during the intercensal period. Growth rates are given here for comparative purposes.

The Kazakhs are unevenly distributed in the KaSSR. They are concentrated in the southern oblasts in particular. Thus Chimkentskaya oblast is conspicuous for the number of Kazakhs living there. The numbers of indigenous people in the eastern and western oblasts of the KaSSR are also large. Numbers of Kazakhs are, however, much smaller in northern and central oblasts. Numbers of indigenous people are very small in the newly created oblasts of Turgay, Mangshlak and Dzhezkazgan while numbers of migrants residing there continue to grow. The growth rates of the last two oblasts, for example, exceeded 30 percent taken alone, during the 9 year period [as published]. Regional differences in Kazakh natural growth rates are noticeable compared to previous years. This is, above all, a reflection of limitations of family sizes. The rate of population growth in Chimkentskaya oblast was 2.3 times greater than in Kustanayskaya oblast. The increased rate of growth of the Kazakh population in the capital of Alma-Ata is a clear reflection of a growing concentration of Kazakh young people in the large cities.

Table 3. Numbers of Kazakhs in Union Republics and Growth Rates

Administrative Unit	Numbers in Thousands	Growth Rate 1970-1979
I. UzSSR	620.1	30.2
1. Karakalpakskaya ASSR	243.9	31.1
2. Tashkentskaya Oblast	208.0	26.6
3. Bukharskaya Oblast	70.2	36.6
4. Dzhizakskaya Oblast	35.5	38.0[1]
5. Syrdarinskaya Oblast	17.7	38.0[1]
6. Khorezmskaya Oblast	11.2	25.6
II. RSFSR	518.1	8.4
1. Astrakhanskaya Oblast	107.0	10.6
2. Orenburgskaya Oblast	98.6	5.2
3. Saratovskaya Oblast	63.2	10.4
4. Omskaya Oblast	61.2	16.1
5. Volgogradskaya Oblast	34.9	10.7
6. Kurganskaya Oblast	14.0	11.4
7. Altayskiy Kray	10.8	-13.8[2]
8. Tavli-Altay Aut. Oblast	8.7	20.5
9. Kalmykskaya ASSR	6.1	-13.7[2]

III. Turkmen SSR	79.5	16.0
1. Krasnovodskaya Oblast	26.5	34.1[1]
2. Tashauzskaya Oblast	25.2	5.4
3. Maryyskaya Oblast	15.3	7.1
4. Chardznouskaya Oblast	6.2	8.8
5. Ashkhabadskaya Oblast	4.4	34.2[1]
IV. Kirghiz SSR	27.4	24.0
1. Frunze Oblast	20.0	32.0
2. Issyk-Rul'skaya Oblast	5.3	22.5
V. TaSSR	9.6	15.7
VI. UkSSR	7.2	-5.2[2]
All Union Republics	1,267.1	19.1

1. Growth rates of Syr-Darinskaya, Dzhizakskaya, Ashkhabadskaya and Krasnovodskaya Oblasts, which were created during the intercensal period are given for comparison.

2. Negative growth rates are indicated by - .

What do the census data on numbers of Kazakhs settled on the territories of union republics and growth rates mean? They mean that there are Kazakhs in all of the areas bordering Kazakhstan and, as we have seen, there are three rather large concentrations of Kazakh settlement outside the KaSSR, namely the Tashkent area with 300,000 (my calculations), the lower estuary of the Amu-darya with 280,000 and the area around the mouth of the Edil with more than 220,000. Kazakhs also live in the oblasts of Orenburg and Omsk, which border the KaSSR on the north, and in the oblasts of Bukhara and Dzhizak, which border the republic on the south.

Some administrative units have not been included in our tables since information on them has not yet been made available separately in published 1979 census returns. Numbers of Kazakhs enumerated in them 10 years ago, in the 1970 census, may be taken as minimums: Chelyabinskaya Oblast, 27,600, Novosibirskaya Oblast, 12,200, Kuibyshevskaya Oblast, 10,400, Sverdlovskaya Oblast, 4,200, the City of Moscow, 4,200, Moscow Oblast, 4,000, Primor kray, 2,200, Khabarov region, 1,700, Chitinskaya Oblast, 1,600. All belong to the RSFSR. Likewise there were 15,200 Kazakhs in Tashkent city, 6.100 in Samarkandskaya Oblast, 4,700 in Frunze city, 2,200 in Surkhandarinskaya Oblast and 1,300 in Leninbadskaya Oblast in Central Asia.

Table 4. Numbers and Growth Rates, 1970-1979, of Kazakhs by Region

Region	Numbers In Thousands	As Percent Of Total Population	Growth Rate 1970-1979	Natural Increase 1970-1979	Difference
I. Southern Kazakhstan	2,409.0	44.0	29.0	25.0	+4.0
II. Western Kazakhstan	1,023.4	56.0	23.7	22.0	+1.7
III. Eastern Kazakhstan	810.6	33.0	18.7	21.6	-3.7
IV. Central Asia	736.7	---	28.1	32.0	-3.9
V. Northern Kazakhstan	595.1	20.0	17.3	20.0	-2.7
VI. RSFSR	530.3	---	8.0	16.0	-8.0
VII. Central Kazakhstan	465.3	24.0	29.3	23.0	+6.3

[as published]

Growth rates for Kazakhs in union republics vary. This is first of all a reflection of large natural increase rates and their stability and secondly of declining rates of natural increase and increasing out-migration. Thus numbers of Kazakhs decreased in the Altay region, for example, and in the Kalmykskaya ASSR and the UkSSR and increased in the oblasts of Dzhizak, Bukhara and Krasnovodsk and in the Karakalpakskaya ASSR.

Oblasts in the last two tables are arranged into seven geographical areas. The total is largest for southern Kazakhstan, the percentage of total population constituted by the Kazakhs is highest for western Kazakhstan, the observed or actual rate of growth is highest for central Kazakhstan and the rate of increase is highest in Central Asia. The rate of natural increase is two times higher there, for example, than the rate of natural increase for Kazakhs in the RSFSR.

Three of the seven regions are receiving migrants but out migrants are more numerous than in-migrants in four. There is Kazakh migration from all areas to southern Kazakhstan but migration to western Kazakhstan is from the RSFSR and Central Asia and to central Kazakhstan from western, northern and southern oblasts.

Numbers of Kazakhs in the Soviet Union will reach 7,000,000 by September, 1981. However, if Kazakhs living in foreign countries are added in the number of Kazakhs reaches 8,000,000. Of these nearly 1,000,000 live in the Chinese People's Republic, more than 90,000 in the Mongolian People's Republic, 40,000 in Afghanistan and 25,000 in Turkey and in other western and eastern countries.

Numbers of Kazakhs will reach 8,400,000 in the 1989 All-Union Census and 10,000,000 by the year 2000.

END

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