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ECONOMIC POLICY, ORGANIZATION, MANAGEMENT

Further on Council of Ministers Debate on Abalkin's Proposals

18200428 Moscow IZVESTIYA AKADEMII NAUK
SSSR: SERIYA EKONOMICHESKAYA in Russian
No 3, May-Jun 89 pp 5-23

[Article by Yu.P. Chaplygin: "The Economic Reform: In Search of Development Strategies. Discussion of the Proposals of the Economics Institute of the USSR Academy of Sciences for Refinement of the Economic Reform Being Carried Out in the Country in a Session of the Presidium of the USSR Council of Ministers (Review)"; for an earlier account of Abalkin's report to the Council of Ministers, see the Soviet Union ECONOMIC AFFAIRS report JPRS-UEA-89-007 of 7 April 1989, pages 1-7]

[Text] On 4 January 1989, the proposals of the Economics Institute of the USSR Academy of Sciences for refinement of the economic reform being carried out in the country were taken up in a session of the Presidium of the USSR Council of Ministers. L.I. Abalkin, member of the academy and the institute's director, presented the report on this question.

The following candidate members of the Politburo of the CPSU Central Committee took part in discussion of the report: Yu.D. Maslyukov, first deputy chairman of the USSR Council of Ministers and chairman of USSR Gosplan, deputy chairmen of the USSR Council of Ministers: A.P. Biryukova, chairwoman of the Bureau of the USSR Council of Ministers for Social Development, and N.V. Talyzin, permanent USSR representative to CEMA; V.S. Murakhovskiy, first deputy chairman of the USSR Council of Ministers and chairman of USSR Gosagroprom; deputy chairmen of the USSR Council of Ministers: L.V. Voronin, chairman of USSR Gosnab, V.K. Gusev, and G.G. Vedernikov; S.A. Sitaryan, member of the academy and first deputy chairman of USSR Gosplan, E.K. Pervyshin, minister of the communications equipment industry, M.A. Korolev, chairman of USSR Goskomstat, A.N. Komin, first deputy chairman of USSR Goskomtsen, V.N. Kudryavtsev, member and vice president of the USSR Academy of Sciences, A.G. Aganbegyan, member and secretary of the Economics Department of the USSR Academy of Sciences, and members of the academy G.A. Arbatov, O.T. Bogomolov, and Ye.M. Primakov.

N.I. Ryzhkov, member of the Politburo of the CPSU Central Committee and chairman of the USSR Council of Ministers, chaired the meeting of the Presidium of the USSR Council of Ministers.

The Heavy-Laden Situation: The Causes and Nature of the Difficulties Being Experienced

There is no doubt that the restructuring of the economy has "made a start," that the new economic mechanism has been "set in motion," and although it is operating arrhythmically, sputtering, thus far, it is today determining the conditions of economic activity, and the "peaks" and "valleys" take it as the standard in judging their actions.

The road to an updated management system is a winding one with sharp turns. We are already traveling that road, we are not marking time. In such an important and large-scale effort, whereby the entire national economy has been drawn into the economic reform, it is natural that every step forward should involve a greater strain and require circumspection and the greatest caution, the ability to change speeds in good time and to prevent "skids."

So long as the reform was a matter of discussion, it was simpler, but today our sky is by no means free of clouds. The sense of euphoria at how easy it appeared seems to have passed, a sobering has set in, and romanticism and cavalier bravery have been cast aside. The country, the party, authorities for administration of the state and management of the economy, and work collectives have entered a difficult stage of practical effort. Its distinguishing feature is that every action gives rise to a counteraction, the mimicry of economic processes and phenomena is intensified, long forgotten collisions break through to the surface of socioeconomic life, while new contradictions are being engendered in its depths. And all of this is happening when many adverse trends have not been altogether smothered or localized. The economy and the machinery for reforming it seem to be experiencing blows from both sides—from the new which has not been mastered and from the old which has not lost its force.

Under these conditions, there can be no trifles left "for later" in the hope that they will resolve themselves. The danger always exists that they will be reborn as major problems requiring serious political and economic efforts. It is all the more unthinkable to leave outside the field of vision the comprehensive, fundamental, and elemental issues of the economic reform which earlier were either not taken note of or were not sufficiently worked on or were difficult to foresee. The Presidium of the USSR Council of Ministers has devoted a rather substantial effort to these issues so as not only to work out specific solutions, but also so as to define long-range measures for the economy's recovery.

The increased attention to such issues, the turn toward them, is urged by acute situations in key sectors of the economy, in the very process of its restructuring. They may be diverse in their nature, but many stress points are bulging, are striking, as they say, to the eye, are not simply putting us on our guard, but are demanding extraordinary measures, decisive actions which are out of the ordinary, and which, of course, have been thoroughly and comprehensively thought through and scientifically substantiated. We cannot but mention in this connection the cautions to be found in V.I. Lenin's article "Better Less, But Better."

"We have to come to our senses in good time. We have to penetrate with a saving distrust of a rash fast forward movement, of all bragging, and so on. We have to give thought to verifying those forward steps which we are proclaiming every hour, which we are taking every minute, and then every second proving their lack of strength, solidity, and clarity. Hastiness would be the most harmful thing of all at this juncture. The most harmful thing would be to rely on our knowing at least something or on the fact that we do have some considerable number of elements for constructing a really new apparatus, a socialist, Soviet apparatus really worthy of the name, and so on.... At this point, nothing can be done all in a rush or by an onslaught, by being quick-witted or with a burst of energy.... Whatever it might cost, we have to set ourselves the task of renewing our state apparatus: the first thing is to learn, the second is to learn, and the third is to learn, and then to see that what we have learned does not remain a dead letter or fashionable phrase (and the latter, it has to be admitted, occurs rather frequently with us), so that science truly enters into the bone and marrow, fully and authentically becoming an integral element of everyday life. In short, we have to advance not those requirements which are advanced by bourgeois western Europe, but those which it is decent and fitting for a country to advance which has set itself the task of developing into a socialist country" [1].

In weighing the situation today with the country's main item of business—restructuring the economy, we must precisely "penetrate with a saving distrust of a rash fast forward movement." The aggravations which the year 1988 was "aimed at" were engendered in large part precisely by "rashness" on such fundamental questions as a slackening of attention to the growth of personal income and pricing, observance of discipline in following the plan, by introducing self-financing all in a rush,

and by quick-wittedness in restructuring the organizational structures of management. Without having created an effective new mechanism for regulating the vital proportions of the national economy, we by all appearances destroyed the system, which was not efficient, but did operate, for balancing personal income and its commodity counterpart, the economic ties of enterprises. The result was disintegration of the consumer goods sector of the economy, the critical state of the "mass" of commodity-money imbalance, intensification of social tension; although, as noted in the session, the growth of commodity sales between 1987 and 1988 was a record 25 billion rubles and was more than twice as great as the usual annual growth, personal money income grew 38 billion rubles instead of the projected 19 billion rubles. The market was destabilized.

The second problem, though not a new one, is the unbalanced state budget. For a long time, it was passed over in silence, and attempts were made to make ends meet. We entered the 5-year planning period with budget difficulties. Under the new conditions of economic activity, the situation got out of control, the system for the circulation of money in the country was disrupted, inflationary tendencies became obvious, and the cards had to be laid out on the table. It turned out that over the first 3 years of the 5-year planning period state expenditures exceeded revenues by 183 billion rubles. With that kind of "scissors," there simply can be no mention of an economy in balance.

The third adversity is related to the fact that so far essential shifts have not taken place in the supply of foodstuffs to the public. The growth of the total volume of these products was 1.8 percent in 1988, while the population grew 1 percent.

The situation is compounded by the fact that on the one hand the economy has become accustomed to the reform, has entered it. Which means that correction of the economic mechanism must be such that it does not knock it down, does not turn the restructuring of management of the economy onto another course. On the other hand, there is a manifest need for measures that would have a deep impact on the reform, that would help to weaken in the shortest time the checks triggered by the new economic conditions, to halt the development of the negative things that are old, but have taken on new features. There is also another side of the problem: How and in what directions is the economic reform to develop further?

The Presidium of the USSR Council of Ministers turned for answers to these and other questions to the scientists of the Economics Institute of the USSR Academy of Sciences. In early November 1988, the commission was given and the discussion of the institute's recommendations took place 2 months later.

It might be asked why the government assigned such an important and complicated question to a single institute rather than to a group of leading economic scientists? The Economics Institute of the USSR Academy of Sciences is a center of political-economic research, the leading scientific organization among all the country's 15 economics research institutes. It possesses a strong scientific potential whose work is concentrated on the fundamental issues of the political economy of socialism and the theoretical foundations of comprehensive improvement and planning of the economy. The institute's scientists had a large and useful role in working out the conception, the fundamental issues, and the policy documents for restructuring the economy, for reform of its management, and in the domain of structural, investment, scientific-technical, and social welfare policy. Over the period 1986-1988, they prepared for policy-making bodies more than 50 scientific reports, analytical memoranda, and proposals on key issues of the new economic policy. Many of them became the methodological basis of party-government decisions, so that it can be said that the institute's scientists have been "tuned in" to the issues of recovery of the economy and further development of the economic reform in the sense that they have not been sideline observers, but direct participants in events.

In opening the session of the Presidium of the USSR Council of Ministers, Nikolay Ivanovich Ryzhkov emphasized that the main objective today is to exchange opinions, to see where we have been wrong and where we have been right. We would like today's discussion to offer the possibility of penetrating our reform more deeply, of determining whether we are going in that direction. We need to take a very judicious approach to the changes taking place in management of the economy. At this point, we have already entered thoroughly into the reform. One of its main lessons is that the extremes have to be avoided. On the one hand, we cannot delay in performing measures to restore the economy to health, while on the other we should not get ahead of events. We see where our shortcomings are, and wisdom in managing the very course of the reform must lie in moving forward without at the same time creating those collisions that could aggravate the country's economic situation.

What ideas did the Economics Institute propose to the Presidium of the USSR Council of Ministers? On what proposals was the attention of presidium members and the ministers, scientists, and practitioners invited to the meeting concentrated?

In his report and introductory address, L.I. Abalkin, member of the academy and director of the Economics Institute, noted that in preparing the proposals the institute's scientists took as their points of departure the fundamental propositions of the political economy of socialism, a critical reconceptualization of the problems and oversimplified ideas that have accumulated, and an analysis of the lessons of history, including the experience of past reforms.

Certain theoretical propositions and practical recommendations were corrected and revised so as to take into account progress in fulfillment of the 5-year plan and the first steps of the economic reform.

It should be noted that not all the recommendations sounded like a revelation; those who took part in the meeting were to some extent familiar with them from scientific papers, analytical memoranda of the institute's scientists, and their articles in the press. This can to some extent explain the fact that some of the principles in the institute's report were bypassed during the discussion. The greatest interest was aroused by those theoretical premises which clarify the lessons of the economic reform, which make it possible to work out practical solutions and recommendations for overcoming the difficulties that have arisen in the country's economic and social development in the 12th FYP and in the course of restructuring management of the economy.

An evident nonacceptance has been the response to general assessments of the reform. The opinion that it was being accomplished slowly, imperfectly, inconsistently, has in essence been repudiated and rightly judged to have been emotional.

Today, Yu.D. Maslyukov emphasized in his speech, it is not clear why all the blows are being struck against the reform. If everyone is a supporter of the reform, then let it be carried out. Not issue alternative assessments, not take up the position of an unbiased critic, but work together. Let us look at what the reform has given us. We have compelled people to concern themselves with cost accounting (*khozraschet*), people have come to understand what it is. We have discovered forms of production relations which no one even dreamed of 3 years ago. We have changed people's psychology. The economy is beginning to yield growth, and that growth does exist if it is correctly evaluated. Let us conduct a balanced analysis as to what is constructive and what is unfavorable in the reform. There are a number of mistakes which we did not avoid. Gosplan and science are equally to blame in this respect. In the transition to the new economic conditions of a large group of enterprises, we have already taken these mistakes into account and made the necessary decisions. This has to be done now as we think over the character of the extraordinary measures, and those measures need to be undertaken under the banner of reform.

The economic reform, as N.I. Ryzhkov has noted, has really been very difficult to carry out. When the workups were done, when the large-scale experiments were going on, when the enlarged conception of the economic reform was being shaped, we looked more optimistically on the process of conversion of the various segments of the economy to the new conditions. We thought that the job would then go far more easily and experience would be gained for everyone. As a matter of fact, the scale of the economy was a factor that has played its role. What was acceptable for a few ministries yielded different results when applied on a broad scale. I think that there are definite reasons for that. Preferential conditions were created for the economic experiments, which is why the results that were achieved, say, by five ministries, in which the new economic mechanism went through experimental verification could not be carried over mechanically, one-to-one, to the entire national economy.

This can probably be considered the most important lesson of the reform, and we need to draw sensible conclusions from it without dramatizing the situation, without harping on it, as though the reform had turned into a blind alley. This approach prevailed in the speeches of the participants in the session. At the same time, note was taken of the negative role of certain publications and journalists, which, as M.A. Korolev noted, have been distorting the true picture with "homebrew" calculations and frightening readers. Even experts of the U.S. Central Intelligence Agency have been compelled to note in a report entitled "A New View of the Soviet Economy in the Period of Glasnost" that "alternative estimates of general economic growth presented by those critics seem unrealistically low from our point of view."

Approaches to a Unified Conception

The discussion in the Presidium referred openly to the problematical and difficult situation the economy has come to be in. At the same time, it was emphasized that there is every possibility of rectifying this situation, of strengthening the economic reform, and of carrying it further and forward.

The point of departure of the institute's proposal in solving the **political-economic problems of radical restructuring of the Soviet economy** was the idea advanced that refinement of the economic reform being carried out must be based on a unified theoretical conception of a qualitatively new form of Soviet society, of the economic system of socialism and of its inherent model of economic activity. This conception makes it possible to avoid action based on the "trial-and-error" method and will yield reliable points of reference in choosing among alternative versions of the transformations.

In shaping the new form of the economic system, one-sided approaches and unwarranted opposition of its individual elements to one another are just as groundless

and illusory as setting hopes on universal expedients which supposedly could take the economy to new frontiers in a single sweep. In the opinion of the institute's scientists, the new economic system of socialism must combine the following:

- the highest production efficiency with the humanistic goals of its development;
- greater differentiation of remuneration in accordance with the results of work along with an advanced system of social welfare guarantees;
- removal of excessive manpower from existing production with full and effective employment of the able-bodied population;
- broad development of cooperative principles with a strengthening and renewal of the public sector of the economy;
- evolution of a socialist market which would have a stronger impact on production with improvement of the methods of centralized planned management;
- achievement of full balance of the economy with its greater flexibility.

The institute's report noted specifically that the shaping of such a complicated economic system requires a comprehensive approach, a program of transformations that is tied to a time schedule, and appreciation of objective internal contradictions. One of the most acute contradictions which would be wrong to underestimate or overlook is the contradiction between economic efficiency and the social orientation of production. Is socialism, while preserving its system of values and social priorities, capable of adhering to the principles of justice and social protection of the individual, and at the same time of guaranteeing high efficiency and flexibility of the economy, its regulation by economic methods, and its receptiveness to the advances of the scientific-technical revolution?

This is the fundamental question in restructuring the economy and in shaping the new system of management. This is the essence of the historic challenge to which socialism and its economic system has to make an appropriate response even in the course of the economic reform. And the institute's report proposes that its further development be accomplished in two stages:

- the first stage covers a period of 5-7 years in which the conditions would be created for broad introduction, thorough assimilation, and effective functioning of the new economic mechanism;
- the second stage would cover the period 1995-2000, in which stabilization of the economy would be followed by the transition to successive evolution of the economic reform.

The institute's scientists believe that enrichment of the forms of socialist ownership and radical renewal of its content constitute the fundamental basis for development of the economic reform. Only on that basis is it

possible to make the reform irreversible, to avoid obstructionism and backward slippage of the transformations that have been initiated in the economy and society.

The positions of the institute are sketched out in definite terms on this question: the state form of ownership cannot serve as a sufficient criterion of the socialist character of property, since it gives rise to alienation of the workers from both ownership and management. Only that property can be recognized as socialist which is the property of all and of each one. Only by becoming the holder of property rights (subyekt sobstvennosti) does the worker or work collective become the boss of production (khozyayin proizvodstva).

The idea of multiple forms of ownership and of preserving and strengthening them was supported in the speeches of a number of participants in the meeting and was viewed as one of the main issues of the economic reform. It was emphasized that full cost accounting, cooperation, and the development of leasing and stockholding relations are stages along the road to multiplicity.

It is also obvious that the entire variety of specific forms and types of socialist property cannot be regulated and established in advance. The legitimacy of that process has to be recognized and there must not be interference with its development, with the generation of new forms of ownership, provided they are highly efficient and guarantee that appropriation is based on work. The report accordingly proposed completion in the period 1989-1990 of the drafting of a system of legislative and normative acts setting forth the plurality of forms and types of socialist ownership and that appropriate amendments be made in the USSR Constitution.

This proposal received support and elaboration during the discussion. In particular, V.N. Kudryavtsev, vice president of the USSR Academy of Sciences, expressed his opinion on legal reinforcement of what has been achieved, which at present is moving slowly. There is already an obvious need for laws on ownership, leasing, taxation, and a number of provisions more thoroughly worked out to regulate the rights, duties, and responsibility of participants in the economic process. There is also a need for a long-term, multiannual, program to back up the economic reform, including its ideological aspect.

The institute's conceptual approach to the issues of radical restructuring of the economy was complemented by the idea of defining its point of departure—the restructuring of agricultural relations. The conception of the reform, O.T. Bogomolov remarked, needs to be realized first of all in agriculture. The economic solutions to the problem are well-known—the leasing contract and cooperatives. Unless we give up the monstrous administrative superstructure in agriculture, unless we give up administrative methods in this sector, unless we

develop market relations in it, our difficulties will be never-ending. On this point, it seems to be better to overestimate the role of the market; otherwise, it will not be possible to achieve a great deal of the reform.

This idea was supported in the statement made by N.I. Ryzhkov: Until we put things to rights in agriculture, until dynamic processes are initiated to make it possible to solve the food problem, it will be difficult to operate the economy as a whole efficiently. We see from the experience of China how problems arise because the entire infrastructure proved to be unprepared. That is why we need to take a very balanced approach to all the alternatives.

How To Evaluate the Growth Rate?

The issue of **strategies for the transition to a new quality of economic growth** had an urgent ring in the session of the Presidium of the USSR Council of Ministers. The institute's scientists consider intensification of the social orientation of the economy to be the main thing in that transition. Measures which have already been adopted in that direction are aimed at overcoming the disproportions that have been formed, at eliminating problems carried over from the past, and essentially at patching up the holes by transferring resources from one weakened social sector to another that is more neglected.

This is clearly not the way to solve priority problems nor to guarantee future development. The report's authors see the way out in the drafting of long-term programs targeted on the ultimate goals of restructuring. In their opinion, a program for radical change of the content of work and creation of working conditions fitting for the citizen of a socialist society, a program for full and effective employment of the population, a comprehensive program for improving the health of the people, and a program for raising the cultural level of the population might become such programs. All of these programs would be summarized and reduced to a single program for radical improvement of the quality of life of the population.

The Economics Institute considers the transition to economic growth on a balanced basis, eliminating shortages in all their forms and manifestations, to be decisive for the historical destiny of restructuring. To that end, it proposes drafting a program for transition of the Soviet economy to a balanced and deficit-free type of economic growth and its adoption as a priority program.

What elements of this program were clarified during the discussion? First of all, there is a need for radical restructuring of theoretical formulas, for development of a new ideology of planning and economic activity.

Another important aspect is the structural revamping of the economy, overcoming the very acute contradiction between the strategic course of comprehensive satisfaction of man's needs and the present mechanism of social

reproduction, its cost-base nature, its tendency to generate shortages, and its inherent sluggishness. Note was taken in this connection of the erroneousness of the conception that was made the basis of the 12th FYP in that it calls for simultaneous acceleration of rates of economic growth, the performance of major social tasks, and the development of radical transformations of the material and technical base of social production. Realization of that conception would have thoroughly broken the chain of connection: the orientation toward high growth rates would have held back full-fledged reconstruction and retooling of production, without which large-scale application of resource-saving technologies is impossible. This would have aggravated the shortage of materials and equipment, which in turn would have meant failure to attain targets for the growth rates of production and reduction of production cost, and a rise of inflation.

Probably the issue that was discussed most keenly was that of methods of measuring rates of economic growth. If output is planned in physical terms of measurement, then clearly its volume will increase when quality standards are lowered. If money terms are taken as the basis, then as a rule prices will be raised on products without increasing their quantity or improving their quality, and rates of economic growth are distorted under the influence of the value factor, the dynamic behavior of the turnover tax, above-allowance inventories at enterprises, and unfinished construction.

A firm position was taken on the question of growth rates: universal orientation toward economic growth measured by indicators of the volume and the gross, L.I. Abalkin emphasized in his speech, belongs to yesterday and is the result of extensive economic development and the cause of the economy's unbalanced condition.

The Economics Institute proposed, first, abandoning the notion that high rates are the most important evidence of the advantages of the economic system of socialism; second, curtailing directive planning of economic growth rates at the level of the economy and the corresponding volume targets for enterprises, retaining for these indicators computational and analytical functions, so that they would be used only for work on balances; third, in the remaining 2 years of the 5-year planning period stop putting pressure on enterprises to achieve the assigned volumes and rates, and do not strive at all costs to make up the lag that occurred earlier.

The participants in the discussion were not altogether receptive to these proposals. It is nothing new that present methods of measuring the growth rates of social production are unsatisfactory. The problem has been discussed persistently and for a long time by economic and planning agencies, in scientific organizations, and in the press.

As N.I. Ryzhkov emphasized, we are not in favor of rates for their own sake. But what kind of rates should we have, what should they be filled with, what will be the new content? Finally, how is the movement of the economy to be measured? As for the structure of rates, for example, the growth rates of production of metal, petroleum, and coal, or the growth rates of the production of consumer goods, the issue is clear: There is no point in our pushing metal when there is enough quality metal, the volume of consumer goods perhaps does not need to be centrally planned, but all responsibility for saturating the market could be placed on enterprises and republic and local authorities. But altogether renouncing the planning of growth rates without knowing where the country is going—forward or back?!

If we do not know the rates, if we do not follow them, the structural changes will not be visible. As M.A. Korolev noted in his speech, this is the principal tool for obtaining knowledge of the economy. If we do not know the proportions, the structure, and the dynamic behavior, then there will be nothing at all to analyze. We cannot restrict ourselves solely to physical indicators. Once we institute an economic community, we have to have an instrument for interchange. In our country, value will play an ever greater and greater role, especially as the market mechanism develops. That is why it would be a patent error to give up value indicators.

The indicators of the national income and the gross social product, the scientists of the Economics Institute object, are altogether suitable for these purposes. They make it possible to monitor the process of resource conservation and development of the social sphere. The problem is not to break them down to enterprises, to sectors and branches, nor even to republics. These indicators are reference criteria for the entire national economy.

In theory, this approach seems rather clear. But members of the Presidium of the USSR Council of Ministers had questions: By what instruments would the state, the government, put pressure on republics, ministries, and enterprises to guarantee fulfillment of the programmatic principles of the party's social welfare policy: for example, to guarantee that by the year 2000 practically every family has a separate apartment or dwelling, to satisfy the needs of the people for consumer goods and services over the next 5-7 years, to accomplish social reorganization of rural areas? The answer is this: to operate through the state order, ensuring, for example, the guaranteed minimum of housing for each Soviet individual, or, say, assigning in the 5-year plan of every republic and oblast a target for reducing the amount of waiting for housing. But the question is how these targets will differ from the directive targets that were assigned?

It is evident that the present economic situation, its extraordinary nature, could drive management authorities back to the old methods of administrative command. This possibility was manifested with particular

vividness in discussion of the proposals concerning the economy's recovery. The institute proposed drafting a program of extraordinary measures in the shortest time to bring the Soviet economy out of the precrisis situation. In the framework of that program, one of the central places would be given to the conception of accelerated revamping of the structure of social production, a conception whose development the institute is ready to take upon itself. The following, in the opinion of the report's authors, must be defined in that conception:

- the basic stages and time periods for structural revamping;
- the directions of the structural shifts and the methodology for selection of the production groupings that would be curtailed through reconstruction, reorientation, or complete elimination and the production groupings in need of expansion and accelerated development;
- measures necessary to accomplishing the structural shifts;
- socioeconomic consequences of structural revamping of social production.

In structural revamping, it is proposed on the one hand that expressly mandatory targets for the growth rates of social production and of its sectors and basic components be given up. The institute believes that this restructuring is supposed to create conditions for carrying out a policy of differentiated pressure for accelerated development of some production groupings, restraint of others, and curtailment of still others. This pressure must mainly be exerted through economic regulators that would take into account the efficiency of the particular production groupings in question, but with the proviso that it would not extend to those of them carrying out priority social programs.

On the other hand, it is envisaged that the output of the consumer sector of the economy, science-intensive branches, and the most up-to-date technologies must grow at high rates. A slowing down of growth and curtailment of inefficient production operations, above all in the sectors of heavy industry and the capital goods complex, are seen in the report as a first step toward a balanced economy. Production groupings manufacturing basic resource-saving technologies must at the same time evolve at a fast pace. It is considered indispensable even within the 13th FYP to assimilate approximately 100-150 of the most efficient types of resource-saving technologies that have built up in the world so that over the next 5-7 years the road would be traveled toward the effective resource conservation which the industrially advanced capitalist countries traveled in the seventies.

Investment priorities must be changed correspondingly. Priority investment should go to the production infrastructure, above all in rural localities. In a sector-by-sector breakdown, priority must be given to the nonproductive sphere (housing construction, development of the material and technical base of health care and

science), to the production of consumer goods, and to environmental protection. As for the machinebuilding complex, it would retain strategic priority. At the same time, in the opinion of the Economics Institute, capital investments in this complex must be brought in line with its potential for innovation, its capabilities for R&D, for machine tool making, and for assimilation of the investments appropriated.

A separate issue is overcoming the inertia of investment processes, which is evident in the capital investments that become tied up in unfinished construction. The scale of this factor is evident from the fact that 80 percent of the capital investments intended for the 13th FYP are tied up in this way. Simply reducing the rates and the absolute growth of capital investments cannot eliminate the sluggishness of the economy's structure. The institute's scientists see the way out in overcoming the limits of the traditional structural maneuver by means of increments of growth and by envisaging a reduction of the volume of investment achieved in the past in the particular branches of heavy industry, the defense industry, and the construction complex, which will make it possible to substantially reduce budget expenditures to finance capital investments, eliminate the chronic surplus of demand for capital construction, and bring it into line with real capabilities.

Even on this list of measures for recovery of the economy proposed for accomplishment over 2-3 years, directive planning is the principal instrument. As L.I. Abalkin noted, the alternative of going back to the command system is not excluded, at least until a model of economic activity is created that motivates manufacturers to be concerned about selling their product, until the imbalance between revenues and expenditures is eliminated, and until the pumping of "light" money into the economy ceases. There must be one shortage—the shortage of money. There should not be a shortage of anything else. Only in that kind of model will enterprises go out looking for orders, and then reference figures and state orders will become unnecessary.

As a practical matter, it was noted in the meeting, this model of structural revamping signifies that in addition to economic methods the government will also be compelled to make command decisions, sometimes even harsh ones, especially in those cases when the matter concerns priority social needs, in particular the saturation of the market.

The question of the relation between centralized and decentralized capital investments arose in connection with proposals on carrying out a vigorous structural policy. What are to be the shares of the state and enterprises in capital investments so that the country's scientific-technical progress is not allowed to slip away? Will the total volume of investments be fixed in the 5-year plan or not?

The position of the Economics Institute was expressed in definite terms: the total volume of capital investments should not be fixed in 5-year plans, their proportions cannot be fixed in advance, they are determined by the general strategy. First, under the conditions of self-financing many investment questions are settled by the republics and enterprises independently. Second, the volume of their capital investments cannot be reliably determined for the 5-year planning period. As for centralized capital investments, their volume and proportions can and need to be determined and adjusted for the reduction of the financing of new construction financed out of the state budget.

Equally unambiguous objections were raised: leaving the financial content to one side, the volume of all capital investments for the country as a whole must be determined; otherwise, it will be impossible to establish how much needs to be appropriated for development of the various sectors of the economy, how much for social purposes, without which it is not possible to get the general picture.

This has in fact occurred in practice. This incident was referred to in the meeting. When the proportions of capital investments were discussed, a 3-percent growth was recommended for adoption for 1989. But at the same time the task was set of registering in the plan all the money which enterprises earned. This did not occur, and about 30 billion rubles of capital investments that existed in enterprises were not included. They sent their money onto the noncash market. This resulted in a shortage of building materials, machine tools, and other equipment. A mistake was made, and the problem now is not to repeat it.

The Objectives of the Reform

The central place in further refinement of the reform of the economic mechanism, in the opinion of the Economics Institute, must be taken up by the problems of refining methods of centralized regulation of the economy, the shaping of the socialist market, financial recovery of the economy, carrying out the reform of prices and pricing, and the restructuring of the organizational structure of production and management.

A leading direction in further development of the reform, in the opinion of the report's authors, must be expansion of its scope and achievement of integrity of the changes taking place. When the independence of enterprises develops and the functions of the center do not change, when economic methods are introduced and the content of a state order is still mandatory, and when the transition is made to full cost accounting and material and technical supply is still based on allotment of stocks, we can hardly say that the economic reform is being carried out in a comprehensive way. The main reason why it is being held back, the scientists of the Economics Institute believe, is that it is not directed toward a single objective.

The comprehensiveness of the reform, of course, is a basic condition of its development and of its fast forward movement. At the level of generality, this is an indisputable premise. But how realistic is it in practical terms? In and of itself, the reform is not a one-time act, but a process that is relatively prolonged and contradictory, a process with its own internal logic, stages of development reflecting not someone's intention, but the degree of readiness of the various components of the economy and management to work in the new way, their inherent capacity for rapid restructuring. It is not just natural sluggishness that needs to be taken into account, but also economic and managerial reality. Are all enterprises ready for economic independence? Hardly anyone will answer affirmatively. Which accounts for the indispensable need of retaining the managing effect of the center, whose functions cannot but change as a function of the degree to which enterprises take upon themselves those functions of which they can already take advantage.

Are enterprises operating under the new conditions ready even now to guarantee, as required by the USSR Law on the State Enterprise (Association), satisfaction of the needs of the economy over their entire range, in full conformity with the interests of trading partners and society? The experience of the first steps of the reform yields an answer in the negative. Which is why there is an indispensable need for planned state regulation of production itself through the system of state orders. Incidentally, by its nature the state order is a method of economic rather than command regulation of production, a method that envisages that the material and technical supply and sales of products will be competitive and guaranteed. The fact that the state order still has not become a method depends more on the enterprises themselves than on central planning authorities. It is sufficient to mention the flow of demands for the state order that have gushed from enterprises themselves. And this stream is no accident; both the traditional mutual distrust between suppliers and consumers and the general conditions of economic activity, which at present are tied down by the absence of a socialist market, are intertwined in it.

Finally, it is hardly legitimate to assert that full cost accounting has stumbled over supply based on allocated stocks. The scientists of the Economics Institute themselves believe that we still do not have a single enterprise operating on full cost accounting. As for elimination of supply through allocated stocks and the transition to wholesale trade, it would be extremely naive to suppose that it could be accomplished in the matter of an hour. There is still a need to study wholesale trade both on the part of supplier enterprises and their trading partners and also on the part of material and technical supply authorities.

The main shortcoming in the development of wholesale trade and in formation of the socialist market for means of production in the present stage, as was rightly noted in the institute's report, is the absence of a realistic record

of the relation between effective demand and supply. That is the reason why many enterprises, in attempting to set up market relations with trading partners in the dark, meet at best with their indifference, with a reluctance to cooperate in a businesslike way. For example, the association "Tyumentransgaz" proposed last year to 640 supplier plants that they conclude direct contracts for product delivery. They received 181 replies, 150 of them containing rejections [2]. It is difficult to say which is better in this case: naive faith in immeasurable economic freedom or the hope for "fisherman's luck"—that by chance something will fall into the broad dragnet. Neither is suitable for normal market relations and neither will yield anything except to discredit those relations.

Other proposals of the Economics Institute concerning further development of the economic reform were also taken up in the meeting from the standpoint of realities. They can hardly be said to be original and to open up a visible theoretical prospect for restructuring management of the economy. They are burdened with declarations, with popular clarifications of well-known principles, and with petty picking at the "painful" points of the reform for whose treatment prescriptions and drugs are already being developed or already exist.

It is proposed, for example, that new economic methods be implemented not so much under pressure from above as through initiative from below. It is considered "fundamentally important" that the economic regulators of the center figure as incentives affecting the interests of commodity producers and create conditions for economic competition among them in order to pursue the interests of the entire nation. It is said that the state order issued for 1989 does not meet the requirements of a special economic form for realization of the interests of the entire nation, and it is proposed that consumers be given the right to issue the order and supply the resources: ministries, committees, intersector scientific-technical complexes, large associations, and other organizations which are head organizations under programs. This is seen as creation of a real economic base for contractual regulations concerning the state order and mutual economic liability of the parties. But as a matter of fact it is a question of washing away that "special economic form for realization of the interests of the entire nation," of imparting to the state order a departmental character, of replacing it with ordinary business contracts between manufacturers and consumers. Development of the state order along horizontal lines of business relations, it was emphasized in the meeting, is itself an error and deforms the state order into simply an order. Nor is the cause saved by the consumers being "large": There is also a new danger hidden here—replacement of the manufacturer's dictate by the equally harsh dictate of the consumer.

At the same time, one cannot but agree with the proposal of the Economics Institute on the need to draft for the 13th FYP a regulation on the state order, of course

pursuing the principles set forth in the Basic Principles of Radical Restructuring of Management of the Economy, adopted by the June (1987) Plenum of the CPSU Central Committee: guaranteeing satisfaction of the priority needs of society, competitiveness, mandatory inclusion in the plan of state orders issued, and the mutual liability of the parties. This approach is broader than the narrow scheme of contractual foundations and competitive principles proposed by the institute.

The report also proposes new approaches to the system of charges on resources. One can agree that one of its most important functions is to reimburse the costs of reproduction of the resources in question. The other function, it would seem, has been unjustifiably narrow and limited to the task of merely equalizing the starting conditions for economic activity.

After all, there is also another possible approach to those charges, one which is being proposed by certain economists—abandonment of this form, which in essence is taxation of the enterprises. The charges on resources are in a way long-term standard economic rates. So, would it not be better to treat them as such, to include them in a unified turnover tax or tax on cost-accounting income, rather than to proliferate a great number of forms of taxation between which there is always room for loopholes?

As a matter of fact, in this case the scheme of functions of long-term standard economic rates, proposed by the institute, takes on a more structured form. These standard rates can justifiably be represented in the form, first, of unified taxes whose levels are supposed to create conditions for normal cost-accounting activity, including expanded reproduction; second, in the form of special-purpose tax benefits stimulating reduction of production costs, expansion of the output of progressive and scarce products, resource conservation, application of environmentally clean technologies, trimming the work force, and the training and retraining of qualified personnel.

Of course, the new system of taxation of cost-accounting enterprises would have to be introduced in the 13th FYP. But it would be advisable, as proposed by the Economics Institute, that certain of its elements, for example, the special-purpose tax benefits for reduction of production costs, for application of progressive and competitive technologies, or, say, the production of particularly scarce consumer goods, be introduced before the end of the current 5-year planning period, if only as an experiment.

The Tactics and Strategy of Recovery

The program for financial recovery of the economy probably aroused the greatest interest of participants in the meetings of the Presidium of the USSR Council of

Ministers. The essence of the proposal might be reduced to the idea of the synchronized performance of interrelated measures throughout all the components of the financial and credit system.

In recent years, the report noted, the gap has widened between the dynamic behavior of the revenues and expenditures of the state budget, the growth of the national income is lagging further behind the growth of expenditures from the state budget. L.I. Abalkin's statement emphasized that in the first 2 years of the 5-year planning period the average annual growth of the national income was 10.5 billion rubles, while budget expenditures increased 25 billion rubles. As a consequence, in 1987 the share of the budget reached 72 percent of the country's national income. This is utterly intolerable in the context of the economy's turn toward self-financing.

For purposes of putting the budget on a sound footing, it is proposed that its share in the national income be reduced to 56-60 percent in 3 years. Among the priority measures intended even for 1989 are the mothballing of a number of projects under construction and suspension of the financing of expensive new projects, a change in approaches to subsidy policy, reduction of expenditures for defense, and relieving the budget of the need to finance enterprises operating at a planned loss. If those enterprises actually are necessary to the particular sectors or associations, then logically they should be the ones to make up their losses.

The institute's scientists mentioned among long-term strategic measures to restore the soundness of the budget confinement of the turnover tax to its excise function, collection of tax after products are sold, establishment of single taxation of enterprises, adoption of taxes on total personal income on the basis of tax declarations and progressive rates.

The second line for recovery of the country's financial condition runs, in the opinion of the Economics Institute, through major changes in credit-money policy and a deepening of the revamping of the organizational structure of the banking system. Here, the first place should be given to the recommendation that it is not permissible to use the loan fund to cover budget expenditures. This practice, it is rightly observed in the report, has become one of the main reasons for the deepening of disproportions and inflationary processes.

Equally impermissible is the practice whereby credit, as noted in the report, creates fictitious resources—the inflationary component of the money supply. The solution to this problem is seen in granting banks the right to differentiate interest rates both on loans and on accumulation, orienting themselves at the same time toward state interest rate policy.

Of course, stabilization of the circulation of money is inconceivable given the present status of the banks; that status is in need of a serious updating and expansion. It is proposed that the banks be given a more mobile structure and flexible functions, that they be formed not on the sector principle, but depending on the demand for money services and investment services. The banks must not only concentrate accumulation, they must also take a share in investment. There is a radical sound in the institute's recommendations to grant to the USSR State Bank prerogatives in working out credit-money policy, in drafting and presenting to the USSR Supreme Soviet for approval a program for stabilizing the monetary system, and that the issue be decided of taking the bank itself out of the system of the executive branch of government.

The third line of financial recovery is overcoming inflationary phenomena in the consumer sector of the economy. These proposals are not new; they have been vigorously discussed in the press, and they come down, strictly speaking, to encouraging the investment activity of individuals, to measures to weaken the pressure of effective demand on the market for goods and services. One of the forms of this activity is for individuals to share with their savings, for example, in the construction of boarding homes for family vacations. According to the calculations of specialists, this could draw 20-30 billion rubles from the consumer market.

As for the reform of prices and pricing as measures for financial recovery, in the opinion of the Economics Institute, doing this independently will not solve the problem, but will have serious adverse consequences. Until general balance is achieved on the market, L.I. Abalkin emphasized, a price reform could give a boost to a new inflationary spiral. The present situation should postpone the general price reform for 2-3 years. It is not possible to do without a price reform, but the timing must depend on creation of the necessary conditions. The most important of them are, first, restoration of a healthy economic situation in the country; second, development of wholesale trade in the means of production; third, the transition to differentiated prices of products with the same designation or related products manufactured by different enterprises, but distinguished by their performance characteristics, and fourth, overcoming the state monopoly of pricing, democratization of its mechanism; fifth, the drafting and implementation of a specific anti-inflation policy.

During the discussion of the question of the reform of retail prices, A.G. Aganbegyan made a proposal to remove this item altogether until the market is saturated with commodities. Rumors about this reform have to be refuted, the circulation of money and effective personal demand have to be led into normal channels, people have to be given confidence that if they cannot buy something today, they will be able to do it tomorrow.

The recommendations of the Economics Institute on financial recovery were carefully examined by the participants in the meeting. They were not all supported, there were objections, sometimes controversial, turning that program upside down and stating it in specific terms to one degree or another.

To be specific, A.G. Aganbegyan called attention to the need not for separate measures, but for a system of rigidly regulated measures to saturate the market. Among the measures he proposed were changing the mechanism for regulating the wage fund by means of progressive taxation, shutting off sources of uncontrolled growth of personal income, holding it at the level of 4-percent annual growth.

The second major step is to meet the demands of the public for housing it would finance itself on a voluntary basis. It is a question of loosening up the bottlenecks in housing construction, of expanding its scale, and selling approximately 50 million m² of housing per year to those who have been waiting in line for cooperative apartments.

The third measure proposed is to speed up production of durables. Doubling and tripling the output of automobiles, up-to-date television sets, refrigerators, and furniture. A certification loan might be issued for these purposes, entitling the holder to purchase a particular item at a particular time.

The fourth measure is to create advantages for the production of consumer goods. This production must be realistically advantageous for all enterprises. To be specific, many proposals have been repeated which have been expressed time and again in the press early on, for example, about how wholesale trade in the means of production should begin with guaranteeing the output of consumer goods, about creating other advantages in this sphere, about increasing earnings, and revising the rates of transfers from profit.

It was also proposed that imports of consumer goods be doubled, above all industrially produced consumer goods, at least over the next 3 years. In view of the extraordinary situation on the market, a special-purpose credit should be taken, and the gold reserves should be touched, as proposed by G.A. Arbatov. So that these imported goods do not once again fall into the hands of speculators and the corrupt system, A.G. Aganbegyan argued that their sale should be organized by mail order through the system of Posyltorg. Proposals were also made for introducing progressive taxation of earnings and the tax on excess housing space, on development of commercial trade in goods of higher quality, for transforming a portion of unused land into a market stock and selling it for weekend cottages and orchard and garden plots. At the same time, it was emphasized that the measures which have been worked out must by no means worsen the lives of people and infringe upon their interests.

Not everyone supported the proposal for using credits to expand imports of consumer goods. The position was defined on this issue: if we do in fact take credits, then emphasis should be put on purchasing equipment and technologies for speeding up development of domestic production of consumer goods. We must be taught by the experience of other countries, O.T. Bogomolov said, who have been drawn into the debt trap and today are unable to get out of it. Credits are very expensive right now, and they should be taken with caution. In this regard, the course toward joint enterprises is the most attractive one, the whole question is learning to work effectively with foreign capital.

It is clear, N.I. Ryzhkov noted, that it is easier that way—to buy the goods and immediately saturate the market. But how long can that go on? We could take credits as long as is necessary, they trust us. But Vneshekonombank and USSR Minfin have made calculations which show that if we take large loans now, several billion rubles to acquire goods and equipment, then in 2 years we will be working just to pay off the debts. Living only 1 day at a time, that approach would seem to be justified. But if we are concerned about the future, then we cannot allow ourselves to cross the “red line.”

Proposals on tighter wage control were also fiercely discussed. Of course, S.A. Sitaryan said in his speech, to some extent this control has been allowed to slip away. The sum total of actual wages exceeded the planned amount. But this measure lay in the very conception of the reform of remuneration. After all, we told enterprises: work and earn your own profit. And they earned more than 12 billion rubles over and above the plan. Perhaps this measure was forced, but we did adopt it and did so correctly. It has served as an incentive. We gave enterprises the right to manufacture goods over and above the state order and we gave them an incredibly great incentive to do so. This was also done deliberately, in order to support the economic reform. Now, we are granting considerable benefits for the production of consumer goods. This is also a supplemental wage fund which was not envisaged by the plan.

The debate of these questions showed that today science is expected to provide a more thorough analysis of the economic processes of the course of the reform, a sounder correlation of its specific manifestations to the conception, and more fundamental conceptions of where they have been constructive and where they have been unfavorable, and why. This analysis must be objective, not emotional.

If the correct measures for the near future are to be proposed, S.A. Sitaryan observed, we need to correctly evaluate the situation and causes of the difficulties that have arisen. For example, it is assumed that up until 1975 there was nothing wrong with our state budget, and then everything went wrong. That prosperity was apparent, profound disproportions were hidden behind it. Everything went downhill beginning in 1970. In essence,

we have been getting by exclusively because of favorable short-term factors. But until the reform, USSR Minfin took possession of all remainders of funds in enterprises, to the last kopeck. Today, they hold nearly 39 billion rubles in these funds. And no encroachment was made on that money, once again to protect the reform. For the same reason, in the 12th FYP for the first time none of the items of the social program was carried over, and what is more, additional funds were allocated for it that put a substantial burden on the state budget.

Indeed, in supporting the ideology of the reform it is as though we are twisting our own arm. Which accounts for the difficulties, for the slow development of the reform, and for the crisis phenomena in the economy. An astute analysis of the problems together with their interconnections, all taken together, showed that they are manageable. It is all a question of not allowing shying from one side to the other.

New Organizational Structures of Management and Antimonopoly Policy

In the course of the discussion, the issue was brought up of **restructuring the organizational structure of management**. Here, the theoretical premise that was the point of departure, L.I. Abalkin noted, is what we call the process of real socialization. A structural unit of management makes sense only insofar as it facilitates the efficient operation of enterprises. At the same time, it is dangerous to take a one-sided approach here, there are branches that differ in their level of socialization, so that linear solutions are not possible when it comes to shaping qualitatively new units in the management structure. The Economics Institute proposed the following model for consideration:

- vertical hierarchical structures of management are being reoriented toward predominantly horizontal connections and relations;
- the functions of state management of the economy are being made separate from the functions of direct conduct of economic activity and are being confined to working out the strategic lines of development of the national economy;
- powers are being optimally distributed among union, republic, and local soviet authorities, between central and regional executive bodies.

As for enterprises and their organizational structure, here the question has come down to methods of overcoming monopolism. The authors of the report, on the one hand opposing existing forms of concentration and centralization of production, have proposed new and more flexible, diversified forms that bring enterprises together into associations (assotsiatsii), partnerships, concerns, and consortiums. Every cost-accounting enterprise, in the conception of the report's authors, must have the right to freely join or withdraw from an association of enterprises, guided only by economic expediency, its own need for the organization of management,

supply and sale of products, foreign economic activity, scientific-technical progress, and the solving of social problems. The associations, constructed on an associative basis, must not figure as entities superior to the enterprises, which precludes the possibility of administrative-command management and the financing of the managerial apparatus out of the state budget.

In the final analysis, this kind of organizational restructuring is conceived as an important instrument for demonopolization of the market. What in practical terms did the Economics Institute propose in the pursuit of these goals? First, optimum deconsolidation of enterprises to offset excessive concentration. Second, create conditions for diversification of enterprises instead of their excessive specialization by product for the purpose of interproduct siphoning of capital investments, mobile transfer of manpower from one sphere to another. Third, promote the formation of small and medium-sized enterprises, including private and cooperative enterprises and joint enterprises with foreign firms.

In the institute's conception, the central place in the new organizational structure of management should be occupied by intersector state associations—"soviet concerns." Their share could be as much as 45 percent of the total volume of output. The share of independent enterprises would be 20 percent, and that of production cooperatives 5 percent. In all, there could be approximately 400 large "soviet concerns," which would be oriented toward the consumer and which would have economic ties with banks, central planning authorities, and republic and local authorities.

In and of itself, the proposal to work out an antimonopoly policy is correct; as a matter of fact, monopolism is smothering the economy and the planning system. The whole question, it was noted during the discussion, is which strategies are the most acceptable in combating this phenomenon? If as much as half of the national economy is concentrated in the hands of the new concerns, does this not compound the situation?

In the opinion of S.A. Sitaryan, the problem of antimonopoly policy does not come down to deconsolidation of production at all or by any means. Everything depends on the mechanism in which these enterprises operate, be they large or small. It is not a matter of the quantitative structure and size, it is a question of the mechanism, and there is a need to seek out that antimonopoly mechanism.

This is an opinion, N.A. Ryzhkov suggested, that needs to be heeded. It would be possible for a monopolism to take shape in the intersector state associations whereby they could dictate everything to everyone. Some of the associations of this kind that are already in operation are beginning to twist consumers "around their little finger."

These tendencies can be countered, in the opinion of the Economics Institute, for example, by depriving an association which has turned out to be a monopolist of the right to independently set prices on the domestic market. Another possible way is to create parallel and competing structures. A third way is to expand opportunities for the consumer to go to world markets as a counterbalance, for instance, to monopolization of the domestic market by some association.

Each case, of course, has its own underwater reefs. They have to be spotted and taken into account in economic policy. Perhaps it is worth making some sacrifices in view of the fact that the main objective of such concerns must be a technological breakthrough and penetration of the foreign market.

There are no doubts that these are multipath proposals calculated for the long run. Haste and uniformity are not permissible in conceptualizing them, much less in their realization. The revamping of the organizational structure of management, it is true, is a key element of the economic reform, and it must be introduced into economic practice only as experience is gained, as what is gained is consolidated, as progress is made stage by stage, so that the innovations do not deform the nature of the economic system of socialism. Its principles must be the main reference points; otherwise, the question might arise at any moment: And what is this economy to be called—socialist or capitalist?

It is altogether likely that none of the members of the Presidium of the USSR Council of Ministers expected from the scientists of the Economics Institute universal prescriptions suitable for all cases in practice. None of the participants in the meeting supposed that the proposals presented were capable of suddenly changing the course of the reform and opening up before it distant prospects that could not be clearer and whose time of achievement would be beyond dispute. Yet the first such discussion of the view of socioeconomic problems from the bowels of the leading center of economic science is in its way useful from both the intellectual and the practical standpoint. It is evident that we can be so bold as to say that the "attack of brain power" of the government and major economic scientists on the unusual problems of restructuring the economy was on the whole successful.

N.I. Ryzhkov noted in conclusion that great benefit had come from the discussion. This discussion is equally worthwhile for the agencies of our state carrying out economic policy and the institutes of our academy and leading scientists. It is certain that this kind of meeting should have been held earlier.

We see the mistakes and we see those processes which to some extent have gotten out of control. As for the necessary steps, the government is now fully concerned with them, and appropriate decisions will be made. But the main thing is to stick to the strategic line, not to depart from it. In taking tactical steps, we must not

depart from the general line. Should we diverge from it, then we will do harm to the economic reform. Who at that point is going to pry up the entire layer which we have lifted today? We have to look ahead to what will be achieved in a year, 2 years, 5 years.

I think, N.I. Ryzhkov emphasized, that we would have fewer shortcomings and half-baked efforts if we actually had the scientific studies on time, studies which we have a great lack of. We have to welcome the presentation of this report today. It reflects a definite conception, science's view of particular issues. We do not always need detailed reports, it is important to work out the fundamental conception. The virtue of this report is that it offers a definite conception of restructuring (one might agree or not agree with its individual propositions). Academy science must launch more proposals and do more specific jobs. We are to blame that we have not been giving science specific commissions. We need to draw definite conclusions, then there will be no talk about conducting business in private. The time has come when it is necessary as never before to consolidate the energies of the administrative agencies of the state and economic science. The meeting of the Presidium of the USSR Council of Ministers provides the necessary thrust in that regard.

On the basis of the results of the discussion of the report of the Economics Institute of the USSR Academy of Sciences, the Presidium of the USSR Council of Ministers adopted a decision in which it noted that the exchange of opinions that took place in the meeting was worthwhile and fruitful. It made it possible to objectively analyze the processes taking place in the national economy, to grasp more profoundly the constructive results of the economic reform and the difficulties that have arisen in the process of implementing it, to outline approaches to overcoming them in view of the situation that has come about at the present time and the prospects for further transformations in the economy in accordance with the strategic course the party has worked out.

While on the whole it looked favorably on the work of the Economics Institute to shape a conception for a further deepening of the economic reform, the Presidium of the USSR Council of Ministers did not agree with a number of conclusions the report contained, especially those pertaining to the course of the reform and the reasons for the occurrence of certain negative phenomena that were traced in the country's socioeconomic development. It was also noted that certain of the institute's proposals had not been sufficiently well-argued and did not fully take into account the actual state of affairs in the economy.

It was emphasized that basic economic science has not been devoting the attention it should to the problems of supporting the economic reform. Central economic authorities and USSR ministries and departments have for their part not been relying fully enough on the

potential of economic science which the country possesses and has not always been receptive to its proposals and recommendations by any means. The absence of the necessary interaction between science and practice is having an adverse effect on the effectiveness of the effort to carry out the economic reform.

It was deemed necessary to achieve broader participation of economic science in the radical restructuring of management of the economy and improvement of the economic mechanism in close contact with central economic authorities and USSR ministries and departments and to engage the Economics Institute and other economics institutions of the USSR Academy of Sciences more actively to work on the overall problems of the country's social and economic development, commissioning them to prepare specific draft decisions on the relevant issues.

The USSR Academy of Sciences is ordered to take steps to strengthen the effort of its subordinate scientific institutions on the problems of the economic reform and to improve coordination of their activity in this area so that basic science can make a greater contribution to the cause of restructuring.

In their practical activity related to implementing and deepening the economic reform, the commissions for improving the economic mechanism of the USSR Council of Ministers should take into account the conception of its further development proposed by the Economics Institute of the USSR Academy of Sciences.

USSR Goskomstat was ordered to examine the observations made by the economic scientists in the meeting concerning the insufficiency of statistical information supplied to them for profound and comprehensive analysis of the socioeconomic processes taking place in the economy, and jointly with the Economics Department of the USSR Academy of Sciences and with top officials of academy institutes in the economics field to analyze the existing disagreements as to methods of keeping records and evaluating certain indicators of the economy's development.

It was recommended that in drafting measures to restore the financial situation in the country to health, USSR Gosplan, USSR Minfin, USSR Goskomtrud, USSR Gosbank, and other central economic authorities examine the arguments expressed in the meeting by economic scientists concerning the ways and means of solving this problem.

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Study Gauges Practical Application Of Economic Instruction

18001230z Leningrad *LENINGRADSKAYA PRAVDA*
in Russian 23 May 89 p 2

[Article by V. Krylov, instructor at the Leningrad Higher Party School, and T. Zagruzina and O. Sukhanov, associates of the USSR Academy of Sciences Institute of Social and Economic Problems: "Cost Accounting On Command? Findings Of A Sociological Study—How Students Themselves Assess The Restructuring Of Economic Instruction"]

[Text] Before discussing the sociological study's direct findings, we think it not out of place to ask the following question: What is the place of economic instruction in ideological work today?

The question is not accidental. Economic instruction, in our view, is a means of economic education. Nevertheless, in recent years—in both scholarship and the work of primary party organizations—it has ceased to be singled out as an independent area of ideological work. It has wrongly come to be identified with labor education. This is the case even in the party Program, in which economic education is lacking among the areas of ideological-education work.

But, you will agree, just as it is impossible to build a state based on the rule of law without providing legal education for the masses, so is it impossible to shape new economic thinking without economic education.

There is another important circumstance. If we speak today about the need to realize the Leninist concept of ideological work, we must doubtless not forget that the problem of economic education—as a practical task!—was posed by V. I. Lenin immediately following the October Revolution.

It would seem that today, given our radical economic reform, a return to the Leninist ideas of economic education of the masses is highly relevant.

At first glance, the accomplishment of this task is promoted by enterprises' transition per se to full cost-accounting and self-financing. When the results of a collective's performance have a direct impact on an employee's personal income and his ability to improve his living conditions and to solve other social problems, people begin to take an interest in questions that used to be of little interest to them: How are contractual commitments being met? What are unit output costs? Who is to blame for the paying of fines from enterprise profits? One would think that everyone is beginning to realize just how important a knowledge of economics is.

One would think... But now let us turn to the sociological study's concrete findings. The study was conducted by associates of the USSR Academy of Sciences' Institute of Social and Economic Problems at a number of major Leningrad industrial enterprises, among them the Kirovskiy Zavod [Kirov Plant] Association, the Leningrad Lenin Optical Mechanics Association, the Pozitron Association, and the Soyuz Association. The aim of the study was to determine the effectiveness of mass economic instruction and the expediency of combining it with production instruction.

Here are the figures. In the workers' opinion, only one-third of them have a grasp of basic economic principles. Among factors impeding the introduction of cost-accounting, two-thirds of those questioned ranked first "people's lack of conviction that cost-accounting will improve their living conditions." Yet how could they have such a conviction when the same percentage of workers have only a vague perception of the essence of cost-accounting?

All this stems from the fact that the introduction of in-house cost-accounting work methods on workers' own initiative (in brigades, for example) began long before the economic reform. The process proceeded slowly, however, something that was attributed to the lack of cost-accounting arrangements at the enterprise level. But how, then, is one to explain the present situation, in which all industrial enterprises and associations are operating under the new managerial arrangements, but elements of cost-accounting are being used by only about one-third of all brigades, and the most effective contractual methods are being employed by fewer than 10% of all workers?

Of course, shifting enterprises to the new managerial arrangements by directive is a lot easier than introducing in-house cost-accounting and establishing cost-accounting relations among employees. However, only when the transition of enterprises to self-financing and the introduction of intra-production cost-accounting proceed as a single process will the new managerial methods start working at full force.

For very many propagandists, the requirement that the connection between theory and students' vocational activity be strengthened ultimately takes the form of an effort to reduce all instruction solely to practical advice and recommendations and to emasculate it of theoretical content and its world-outlook function.

Allow us to draw the following historical analogy. When V. I. Lenin proposed the shift to the New Economic Policy, many, even his closest comrades, failing to grasp its essence and need, simply panicked. And not without reason. Four years after the October Socialist Revolution, the introduction of NEP—which, in Lenin's words, marked a "shift toward the restoration of capitalism to a considerable degree"—was viewed by many as a mistake at the very least.

By the same token, many questions of economic reform at the present, essentially revolutionary stage of our society's development—such as the development of commodity-money relations, cooperatives, and individual labor activity, for example—trigger disputes and occasional contradictory assessments. And it is by means easy for either the propagandist or his students to sort out the conflicting views that are often heard in the wide-ranging discussion of socialist economic management experience and the new conceptualization of the practice of the War Communism, NEP, and collectivization periods. Under these circumstances, a knowledge of the theoretical foundations and creative heritage of the Marxist-Leninist classics—and especially of Lenin's works of the post-October period—assumes paramount importance. Meanwhile, more than half of all economic-instruction students virtually never consult them!

Why do propagandists so rarely use active methods of conducting lessons?

Let's be frank: Apparently, they are simply ill-prepared for such methods of conducting lessons. And in general, the problem of the quality of the "propagandist corps" in the economic education system is a rather acute one. A radical way of solving it would be to effect a gradual transition from volunteer propagandists to staff instructors or specialists paid by the hour.

Such a transition would seem both essential and possible. Especially given the present policy of combining economic instruction with vocational instruction. And 63 percent of all students readily support just such a course of action.

We think the study's findings need no detailed commentary. We must move from the oft-repeated words to the effect that we are now "learning how to manage" to concrete deeds, and as quickly as possible.

INDUSTRIAL DEVELOPMENT, PERFORMANCE

Outdated Prices Threaten SUMY Foundries With Bankruptcy

18200419 Moscow SOTSIALISTICHESKAYA
INDUSTRIYA in Russian 18 Jul 89 p 2

[Article by V. Dunayev, director of the "Tsentrilit" Plant: "On the Verge of Bankruptcy"]

[Text] SUMY—More than 20 specialized "Tsentrilit" foundries have been in operation in the country for almost a quarter of a century. And all of this time they have been working either at a loss under the plan or are barely making ends meet. In the period of the preparation of industry for the transition to cost accounting and self-financing, the USSR Ministry of Finances entrusted Gosplan with ascertaining the reasons for their

extremely poor efficiency. Gosplan presented its conclusion: those enterprises that are not subsidized are so unprofitable that they are incapable of paying for funds even at the lowest level.

One of the top-priority measures proposed for a fundamental improvement of the work of foundries was that they be reequipped technically. Gosplan specialists, however, immediately acknowledged that the foundries themselves cannot cope with this for the reason that the foundry equipment proposed by the Ministry of the Machine Tool and Tool Building Industry to replace old equipment at the same productivity requires more space for installation and is 25 to 30 times more expensive than what is now in operation.

What is the source of this skyrocketing of prices? The answer is extremely simple. In recent years, many monopoly enterprises that specialize in the output of equipment for the country's foundry workers utilized all of their energy and inventiveness not to improve its characteristics but to inflate prices. As for the prices for foundry output, they have remained essentially stable over a long period of time.

Throughout all of last year, the institutes of the Ministry of the Machine Tool and Machine Tool Industry as well as the leading "tsentrality," including the one in Sumy, pursued an intensified search for ways to raise profitability. One of them was the development of a new version of the price handbook, which was supposed to give foundry workers a profound interest in the improvement of the quality of output. They proceeded from the fact that simple casting ought to cost less, whereas complex, precise and hardened casting that requires greater outlays is understandably more expensive.

Imagine our indignation when in December of last year we received the final version of the price handbook affirmed by the USSR State Committee for Statistics and we did not find in it a single one of our proposals. It is the profound conviction of specialists that the new price handbook will aggravate the situation at foundries even more.

To accelerate technical reequipment, we established a department for long-term development. In a short time it planned and, in cooperation with other enterprises, produced, tested and introduced core lines and automatic machines. And the profitability increased by up to 23 percent!

If we do not want the "tsentrality" to go bankrupt, it is necessary, in addition to the efforts of the collectives themselves to strengthen their financial position, to undertake such urgent measures as the objective assessment at the branch or interbranch level of the physical and labor inputs for the production of a ton of different kinds of castings. We are also convinced of the necessity of such a step by the fact, for example, that a ton of casting abroad costs two or three times more in comparable prices than here.

Perhaps we can sell our casting abroad? The companies will not refuse it. Only we do not have enough of it here either. Why then, as has happened repeatedly, create additional difficulties for ourselves, so that we can overcome them together later?

Votkinsk's Defense Conversion Progress Noted
18010851z Moscow SOVETSKAYA ROSSIYA
in Russian 21 Jul 89 First Edition p 1

[Article by SOVETSKAYA ROSSIYA correspondent Yu. Shatalov: "The 'Feya' Conquered the Missiles"]

[Text] **A defense plant has switched to producing goods for the people.**

Not long ago, few people knew about the existence of the Votkinsk Plant Production Association. In a situation of deep secrecy, formidable SS-20 missiles went into "service" from here. Now, the whole world has heard about the enterprise, and a group of American specialists located at Votkinsk is observing how our country is implementing the treaty on ending the production of medium- and shorter-range missiles.

In the shops there are more and more often conversations about conversion. In January of last year, the collective of the Votkinsk Plant Association began converting part of the production capacities to production of peaceful products.

"We didn't forget about them before either, but now there is an opportunity to produce more of them," says the association's chief engineer Yu. Chertkov. "To do this, we had to bolster our design and engineering services working on the national economy, using the specialists who were freed; open a new design bureau, which is now developing automatic lines for processing sectors; and change the nature of some of the shops."

Quite a number of problems have come up, and not all of them have been resolved yet. For instance, the designers who came to the new divisions from basic production encountered a shortage of materials for completing the civilian products. Before, everything needed was readily available.

"My job today has turned out to be just as interesting as it was before," says V. Vinikurov, a former missile assemblies engineer.

Now he heads the new division for developing various machinery for processing sectors of the agro-industrial complex. The designers began from scratch, so to speak, since the previous technical documentation was hopelessly outdated. But despite this, they have already managed to develop a powerful pasteurization and refrigerating plant for the dairy industry, unlike any in our country. It was put into series production just recently, but it has already been exhibited at the USSR VDNKh [Exhibition of USSR National Economic Achievements] and has received high marks from specialists.

The shops for producing consumer goods are also gaining momentum. Now the Votkinsk workers will send 420,000 "Feya" washing machines to the trade network, many more than in 1987. Next year, they will bring the number produced to 600,000. The popularity of the small-size household machines indicates their high quality.

As far as baby carriages are concerned, there is a great demand for them. This year trade has requested at least 300,000 carriages, 50,000 more than last year. In order to fill this order, the association management has decided to convert another machine shop to producing a new model of baby carriage.

REGIONAL DEVELOPMENT

Listing USSR Enterprises To Be Built or Modified 1991-95

18200414 Tashkent PRAVDA VOSTOKA in Russian
27 Jun 89 pp 1-3

[List of enterprises to be built and activated in UzSSR over the period 1991-1995 according to the program for accelerating socioeconomic development]

[Text] Universal discussion of the draft of the republic Program for Accelerating the Socioeconomic Development of UzSSR and Raising the Prosperity of the Republic's Population Over the Period 1991-1995 on the basis of major structural shifts, increased output from the production potential and application of new methods of management and economic operation has been completed.

It must be noted that the published draft of the Program encountered broad favorable response from the workers of Uzbekistan. A total of more than 150 proposals, corrections, and observations have come in from regional authorities, ministries, and departments, and individual citizens. These proposals mainly concern ways of strengthening social development, of correcting the environmental situation, and of solving the food problem and other problems.

Taking them into account, republic planning, economic, and soviet authorities have made a substantial effort to revise the parameters of the Program. Particular attention has been paid to the creation of new jobs by developing labor-intensive branches of industry. We are publishing below a list of enterprises whose construction and activation will give a strong impetus to further development of the productive forces of the republic's various regions and will furnish the basis for guaranteeing effective employment of the able-bodied population.

The first column gives the project's name, the second the type of construction, and the third the place where it is located. Projects marked with an asterisk (*) are those whose construction was envisaged by decrees of policy-making bodies adopted earlier.

Kara-Kalpak ASSR

UzSSR Minlegprom:

Footwear Factory	New	Kungrad
Sewn and Knitted Garment Factory*	New	Nukus
Dyeing and Finishing Factory*	New	Nukus

UzSSR Gosagroprom*:

Cement Plant	New	Nukus
Oil Extraction Mill	New	Beruni
Brewery	Expansion	Nukus
Nonalcoholic Beverages Plant	New	Beruni
Meat Combine	New	Nukus
Milk Processing Plant	New	Beruni
Milk Processing Plant	Reconstruction	Nukus

Kara-Kalpak ASSR

Milk Processing Plant	Expansion	Khodzheyli
Milk Processing Plant	New	Kungrad
Brick Plant	New	Chimbayskiy Rayon
Brick Plant	New	Turtkul'skiy Rayon
Brick Plant	Expansion	Mangit
Housing Construction Combine	Reconstruction	Nukus
Keramzit-Concrete Block Plant	New	In the oblast
Crushing and Grading Plant	New	Karatau
Keramzit Gravel Plant	Expansion	Nukus
Lime Shop of the Trust "Karakalpakagropromstroy"	New	In the oblast
Builder's Gypsum Shop	New	In the oblast
Builder's Gypsum Shop	New	In the oblast

UzSSR Gosstroy*:

Aktau Quarry	Expansion	Aktau
Lime Plant	Expansion	Nukus

UzSSR Minmestprom:

Brick Plant	New	In the oblast
Children's Knitwear Factory	New	Khodzheyli

Uzbekbriyashu:

Canning Plant	New	In the oblast
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TPO [Industrial Park] "Uzbekmebel"*:

Furniture Factory	Expansion	Nukus
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Kara-Kalpak ASSR Council of Ministers:

Brick Plant	New	Nukus
Plant for processing residential waste	New	Nukus

Andizhan Oblast

USSR Minelektrotekhprom:

Andizhan "Elektrodvigatel" Plant	Expansion	Andizhan
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USSR Minavtoselkhoz mash:

GPZ-27	Expansion	Akhunbabayev
Trailer Plant*	Expansion	Leninsk

USSR Gosstandart:

Branch of the "Etalon" Plant	Expansion	Andizhan
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USSR MPS:

Andizhan Oblast

Foundry and Machine Shop	New	Pakhtaabad
USSR Gosagroprom:		
Plant for manufacturing special pipeline fittings for processing branches	New	Shakhrikhan
UzSSR Gosagroprom*:		
Canning Plant	New	Kurgantepa
Plant for packaging tea	New	Shakhrikhan
Nonalcoholic Beverages Plant	New	Sovetabad
Meat Combine	New	Andizhan
Milk Processing Plant	Expansion and reconstruction	Shakhrikhan
Brick Plant*	New	Pakhtaabadskiy Rayon
Quarry for rock products used in construction	New	Pakhtaabad
Quarry for rock products used in construction	New	Khodzhaabad
Lime Shop at the Brick Plant	New	Khakent
Yard for cast-in-place housing construction	New	In the oblast
UzSSR Minlegeprom:		
Worsted Spinning Factory	New	Chuama
Footwear Factory	New	Andizhan
Sewn Garments Factory	New	Izbaskan
Sewn Garments Factory	New	Leninsk
Sewn Garments Factory	New	In the oblast
Sewn Garments Factory	New	Yarkishlak
Branch of the PTO	Reconstruction	Pakhtaabad
Association for production of tanning extracts (Tarandubitel)	Reconstruction	Sovetabad
Andizhan PShO	Expansion and reconstruction	Andizhan
Branch of the PShO	Reconstruction	Lugumbek
Sewn Garments Factory*	New	Shakhrikhan
Knitted Outerwear Factory	New	Markhamet
Sewn and Knitted Garments Factory	New	Kharabek
Knitted Fabric Factory*	Expansion	Altynkul
UzSSR Gosstroy:		
KPD-2 Plant	New	Andizhan
Yard for cast-in-place housing construction	New	In the oblast
KPD Plant	New	Leninsk
Andizhan KZU No 13	Reconstruction	Andizhan
Housing Construction Combine	Reconstruction	Andizhan
Uzbekbrlyashu:		
Canning Plant	New	In the oblast
Plant for processing meat products	New	In the oblast
UzSSR Minmestprom:		
Plant for production of children's toys	New	Andizhan
Factory for production of plush	New	Shakhrikhan

Andizhan Oblast

Down and Feather Products Factory (Italian production line)	New	Leninsk
Plant for production of microelectric motors	New	Andizhan
TNP Factory (production of furs and fur coats)	Expansion	Altynkul
Art Supplies Factory	Expansion	Andizhan
UzSSR Mindortrans:		
Consumer Goods Shop	New	In the oblast
UzSSR Goskomnefteprodukt:		
Enterprise for product deliveries	Reconstruction	Akhtachi
Oblispolkom:		
Trash Processing Plant	New	Andizhan

Bukhara Oblast

USSR Minneftekhimprom:		
Plant for production of children's footwear from polymer materials	New	In the oblast
USSR Minmedbioprom:		
Bukhara Feed Protein Plant—complex for production of microbiological feed protein	New	In the oblast
USSR Minudobreniy:		
Electrochemical Plant, TNP Shop	Expansion	Navoi
Dzheroy-Sardarinskiy Phosphate Mine	New	
USSR Minkhimprom:		
PO "Navoiazot"	Expansion	Navoi
USSR Minchermet:		
Scrap Processing Shop	New	Navoi
USSR Minstroyaterialov:		
Cement Plant	Expansion	Navoi
USSR Minavtoselkhoz mash*:		
Specialized Pilot Plant	Expansion	Bukhara
USSR Minstankoprom*:		
Mining and Ore-Dressing Combine	New	In the oblast

Bukhara Oblast

UzSSR Gosagroprom*:

Bukhara Winery	New	Bukhara
Oil Extraction Mill	New	Navoi
Oil Extraction Mill	Retooling	Bukhara
Meat Combine	Expansion	Bukhara
Small slaughterhouse with refrigeration	Reconstruction	Navoi
Milk Processing Combine	Expansion	Bukhara
Milk Processing Plant	Reconstruction	Gizhduvan
Crushing and Grading Installation	New	Kuyumazar
Shop for production of gypsum partitionboard	New	In the oblast
Plant for ceramic facing tiles	New	In the oblast
KPD Plant	New	Bukhara
Brick Plant	New	Navbakhor

UzSSR Minkhleboprodukt*:

Baked Products Combine	New	Proletarabad
Bread Combine	Expansion	Kagan

UzSSR Goskomvodkhoz*:

Brick Plant	New	Bukhara
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UzSSR Gosstroy*:

Keramzit Plant	Reconstruction	Bukhara
Bukhara Graphite-Gypsum Combine	Expansion	Kagan
KPD Plant	New	In the oblast
Yard for cast-in-place housing construction	New	Bukhara
Metal Fabrication Plant	New	Bukhara
Woodworking Plant	New	Bukhara

UzSSR Minlegprom:

Knitwear Fabric	New	Bukhara
Footwear Factory	New	Bukhara
Sewn Garments Factory	New	Gazli
Bukhara PShO imeni 60-Letiye SSSR	Reconstruction	Bukhara
Knitted Outerwear Factory*	New	Navoi
Branch of the Bukhara PShO imeni 60-Letiye SSSR*	Reconstruction	Zarafshan
Knitwear Factory*	New	Navoi

UzSSR Minmestprom:

Plant for production of rubber goods (ethnic galoshes)	New	Kagan
Plant for processing secondary plastics (Polish production lines)	New	Bukhara
Plant for production of facing tiles	New	Bukhara
Plant for production of linoleum	New	Navoi
Brick Plant	New	Navoi
Factory for production of sheepskin coats (Yugoslav production line)	New	Zarafshan

Bukhara Oblast

TPO "Uzbekmebel":

Furniture Factory	New	Navoi
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Oblispolkom*:

Brick Plant	New	Navoi
Lime Plant	New	Navoi
Trash Processing Plant	New	Bukhara

Kashka-Darya Oblast

USSR Minenergo:

Talimardzhanskaya GRES	New	
Gissarskaya GES	New	

USSR Mingasprom:

Gas Chemical Complex (jointly with a foreign firm)	New	Shurtan
Gas Refining Plant	Expansion and reconstruction	Mubarek
Large-Panel Housing Construction Yard	Expansion	In the oblast

USSR Minchermet:

Scrap Processing Shop	New	Shakhrisabz
Scrap Processing Plant	New	Karshi
Radio Plant	New	Karshi

USSR Minstankoprom*:

Machine Tool Assemblies Plant	New	In the oblast
Small machine tool plant	New	In the oblast

UzSSR Gosagroprom*:

Winery	New	Shakhrisabz
Nonalcoholic Beverages Plant	New	Karshi
Meat Combine	New	Shakhrisabz
Meat Combine	Expansion	Karshi
Milk Processing Plant	New	Guzar
Brick Plant	New	Kamashinskiy Rayon
Crushing and Grading Installation	New	Tankhoz
SSK-15 Quarry	Reconstruction	Kamashi
Lime Shop	New	Kasan
Builder's Gypsum Shop	New	In the oblast
KPD Plant	New	Karshi
Prefabricated Reinforced-Concrete Products Plant	New	Karshi
KPD Plant for social, cultural, and consumer service facilities	New	In the oblast

UzSSR Minkhleboprodukt*:

Baked Products Combine	New	Shakhrisabz
Baked Products Combine	New	Guzar

UzSSR Gosstroy*:

Housing Construction Combine	Reconstruction	Karshi
Yard for cast-in-place housing construction	New	In the oblast
Housing Construction Combine	New	Kitab

UzSSR Goskomvodka*:

Chiyalinskiy Sand Pit	New	In the oblast
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UzSSR Minlegprom:

Worsted Spinning Factory	New	Kitab
Combine for decorative worsted silk fabrics consisting of the following:	New	Shakhrisabz
Silk spinning factory		
Weaving factory		
Sewn Garments Factory	New	In the oblast
Sewn Garments Factory	New	Shakhrisabz
Sewn Garments Production Association	Reconstruction	Karshi
Branch of the Karshi PShO	Reconstruction	Kitab

UzSSR Minmestprom:

Plant for production of consumer goods from scrap glass	New	Kitab
Lime Shop*	New	Shakhrisabz
Factory for production of terry cloth (GDR production line)	New	Karshi

Uzbekbriyashu:

Canning Plant	New	In the oblast
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TPO "Uzbekmebel":

Furniture Factory	New	Karshi
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Trust "Uzbekgidroenergostroy":

Gravel Grading Plant	New	Guzar
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Oblispolkom:

Brick Plant	New	Shakhrisabz
Gravel Grading Plant	New	Yakkabag
Quarry and Housing Construction Installation (crushing and grading installation)	New	In the oblast

Namangan Oblast

USSR Minkhimprom:

Chemical Plant	Expansion	Namangan
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USSR Minneftekhimprom:

Rubber Footwear Plant	New	Chust
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Namangan Oblast

USSR Minelektrotekhprom:

PO "Elektroterm"	Expansion	Namangan
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USSR Minkhimmash:

Machinebuilding Plant	Expansion	Namangan
Mechanization and Automation Equipment Plant	Expansion	Namangan
Plant for specialized manufacturing equipment, replacement parts, and assemblies for it, including specialized design office	New	Namangan

USSR Gosagroprom:

Perfume and Cosmetics Factory	New	In the oblast
Color Television Set Plant	New	In the oblast

USSR Minpribor:

Scientific-Production Complex for Computer Equipment (NPK SVT)	New	In the oblast
Scientific-Production Complex for Instruments and Systems of the Agroindustrial Complex	New	In the oblast

UzSSR Gosagroprom*:

Canning Plant	New	Kasansay
Winery	New	Namangan
Canning Plant	New	s/z imeni Beruni
Yeast Plant	New	Chust
Beer and Alcoholic Beverages Combine	Reconstruction	Namangan
Machinery Plant	Reconstruction	Turakurgan
Meat Combine	Reconstruction	Namangan
Milk Processing Plant	Expansion	Namangan
Milk Processing Plant	New	Uchkurgan
Machinery Plant	Reconstruction	Turakurgan

UzSSR Minkhleboprodukt:

Bread Combine	Expansion	Namangan
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UzSSR Minlegprom:

Spinning and weaving factory for production of unbleached blended fabrics for shirts and raincoats	New	Namangan
Knitwear Factory	New	Turakurgan
Garment Factory	New	In the oblast
Garment Factory	New	Kayki, Uchkurganskiy Rayon
Garment Factory	New	Varzik
PO "For Avrovoye Fabric," including:		
Silk Spinning Factory	New	Namangan
Finishing factory in which foreign firms are involved	New	Namangan
Weaving Factory	New	Namangan
Namangan Silk Fabric Combine imeni 50-Letiye UzSSR	Retooling	Namangan
Branches of the combine	Retooling	Uychi
Branches of the combine	Retooling	Khakkulabad
Branches of the combine	Retooling	Uchkurgan

Namangan Oblast

Production Association for Nonwoven Materials (reorientation)	Reconstruction and retooling	Namangan
Finishing Factory*	New	Namangan
Knitted Outerwear Factory	New	Shakhand
Knitted Outerwear Factory	New	Chartak
Sewn and Knitted Garments Factory*	New	Yangikurgan
Sewn Garments Production Association*	Expansion	Namangan
UzSSR Minmestprom:		
Plant for production of household fans	New	In the oblast
Brick Plant	New	Namangan
Silk Spinning Factory	New	Uychi
Plant for production of facing tiles	New	Namangan
Silk Weaving Factory (production of Jacquard terry fabrics)	Expansion	Kasansay
TPO "Uzbekmebel"*:		
Furniture Factory	Expansion	Namangan
Oblispolkom*:		
Rock Products Quarry	Reconstruction	Namangan
Lime Plant	New	Kasansay
UzSSR Gosstroy*:		
Combine "Uzbekkrovlya"	Expansion	Pap
Metal Fabrication Plant	New	Namangan
DSK	Retooling	Namangan

Samarkand Oblast

USSR Minavtoselkhoz mash:

Plant for rebuilding parts, assemblies, and units of VAZ motor vehicles	New	Samarkand
"Krasnyy Dvigatel" Plant*	Reconstruction	Samarkand

USSR Glavalmazoloto:

Zarmitan Mine	New
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USSR Minudobreniy:

Chemical Plant	Expansion	Samarkand
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USSR MPS:

Gravel Plant	New	Dzham
Instrument Plant	New	Samarkand
Plant for production of household refrigerators and freezers	New	In the oblast

USSR Gosstandart:

Samarkand Oblast

Branch of the "Etalon" Plant	New	In the oblast
USSR Goskomsport:		
Racing Boat Plant (phase III)	Expansion	Samarkand
USSR Minlesprom:		
Wallpaper Factory	New	Samarkand
USSR Gosagroprom*:		
Pilot Plant	New	Samarkand
UzSSR Gosagroprom*:		
Vegetable Drying Plant	New	In the oblast
Container Plant	New	Krasnogvardeysk
Wine Combine	New	Krasnogvardeysk
Hard Liquor Plant	New	Samarkand
Canning Plant	New	In the oblast
Confectionery Factory	New	Samarkand
Plant for production of glucose-fructose syrup	New	Samarkand
Brewery	Reconstruction	Samarkand
Nonalcoholic Beverages Plant	New	Kattakurgan
Milk Processing Plant	New	Aktash
Brick Plant	New	Khatyrchinskiy Rayon
Gypsum-Concrete Block Plant	New	In the oblast
Keramzit Gravel Plant	New	In the oblast
Lime Plant	New	Nurata
Builder's Gypsum Shop	New	In the oblast
Phase II of the KPD Plant	Expansion	In the oblast
Parts of a KPD for social, cultural, and consumer service facilities	New	In the oblast
UzSSR Minlegprom:		
Worsted Fabric Combine	New	In the oblast
Sewn Garments Factory	Expansion	Dzhuma
Branch of the PShO imeni 8 Mart	Reconstruction	Kattakurgan
Silk Spinning Factory*	Relocation	Samarkand
Silk Weaving Factory*	Expansion	Samarkand
Leather Plant imeni Akhunbabayev*	Expansion	Samarkand
Porcelain Plant*	Expansion	Samarkand
UzSSR Gosstroy*:		
Dzhuma Quarry	New	
Keramzit Plant	Expansion	Dzhuma
KPD Plant	Expansion	Kattakurgan
Phase II of the DSK	Expansion	Samarkand
Yard for cast-in-place housing construction	New	Samarkand
ZhBI Plant	New	Samarkand

Samarkand Oblast

UzSSR Goskomvodkhoz:

Lime Plant	New	Samarkand
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UzSSR Minkhleboprodukt:

Bread Depot No 105	Expansion	Dzhuma
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UzSSR Minmestprom:

Plant for production of metal accessories (Czechoslovak production line)	New	Dzhuma
Foundry for production of cookware and other household articles	New	Dzhuma
Housewares Plant	Expansion	Samarkand
Brick Plant*	New	I

Uzbekbriyashu:

Yeast Plant	New	In the oblast
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Oblispolkom:

Trash Processing Plant	New	Samarkand
Plant for production of lightweight blocks from fogizol	New	Samarkand
Brick Plant	New	Yangikent
Gravel Grading Plant	New	Ishtykhan

Surkhan-Darya Oblast

USSR Minchermet:

Scrap Processing Shop	New	Denau
Scrap Processing Shop	New	Termez

USSR Minneftekhimprom:

Plant for production of rubber products for medical purposes	New	In the oblast
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USSR Minmedbioprom:

Biological Preparation Plant (complex for production of microbiological preparations for plant pest and disease control)	New	In the oblast
Plant for ready-to-use medical preparations	New	In the oblast

USSR Minavtoselkhoz mash*:

Specialized Experimental Plant	Expansion	Sariasiya
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UzSSR Gosagroprom*:

Canning Plant	New	In the oblast
Small slaughterhouse with refrigeration	New	Denau

Surkhan-Darya Oblast

Milk Processing Plant	New	Denau
Meat Combine	Reconstruction	Termez
Cement Plant*	New	In the oblast
UzSSR Gosstroy*:		
KPD Plant	New	In the oblast
UzSSR Minkhleboprodukt*:		
Baked Goods Combine	New	Dzharkurgan
Baked Goods Combine	New	Denau
UzSSR Minlegprom:		
Worsted Fabric Combine	New	In the oblast
Textile Clothing Accessories Factory (ribbon weaving)	New	In the oblast
Footwear Factory	New	In the oblast
Sewn Garments Factory	New	Termez
UzSSR Minmestprom:		
Plant for production of cast and blown products (GDR production line)	New	In the oblast
Brick Plant*	New	s/z "Sherabad"
Oblispolkom*:		
Brick Plant	New	Termez
Brick Plant	New	Kumkurgan
Quarry producing rock products for construction	New	Termez

Syr-Darya Oblast

USSR Minsvetmet:		
Lead-Zinc Mine	Expansion	Uchkulach
USSR Glavalmazoloto:		
Gold Mine	Reconstruction	Mardzhanbulak
USSR Minkhimprom:		
Plant for production of capron filament (phase I)	New	Yangiyer
Plastics Plant	Expansion	Dzhizak

Syr-Darya Oblast

USSR Minelektrotekhprom:

Electrical Equipment Plant	Expansion	Dzhizak
Storage Battery Plant	Expansion	Dzhizak

USSR Minstankoprom:

Branch of the Tashkent Abrasives Combine	New	Dzhizak
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USSR Minavtoselkhoz mash:

Automobile filter plant	New	Yangiyer
Component Plant* (wheel hubs, brake sets)	New	In the oblast

USSR MPS:

Car wheel shops for refrigeration sections	New	Syr-Darya
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USSR Gosagroprom:

Experimental Machine Repair Shop	Expansion	Gulistan
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UzSSR Gosagroprom:

Primary Wine-Making Plant	New	Dustlik
Primary Wine-Making Plant	New	Bakhtmal
Canning Plant	New	Gulistan
Food Concentrates Plant	New	Dzhizak
Milk Processing Plant	New	Yangiyer
Milk Processing Plant	New	Syr-Darya
Milk Processing Plant	New	Dzhizak
Meat Combine	Reconstruction	Dzhizak
Crushing and Grading Installation	New	In the oblast
Builder's Gypsum Shop	New	In the oblast
KPD Plant for social, cultural, and consumer service facilities	New	In the oblast
Brick Plant	New	Zaaminskiy Rayon
Brick Plant	New	Dustlikskiy Rayon
Gypsum-Concrete Block Plant	New	In the oblast

UzSSR Gosstroy*:

Novyy Dzhizak Lime Plant	New	Farish
KPD Plant	New	In the oblast
Brick Plant	New	Syr-Darya
Building Materials Combine	Reconstruction	Yangiyer
Brick Plant	New	Saykhan

UzSSR Minlegprom:

Garment Factory	New	Pakhtaabad
Garment Factory	New	Syr-Darya
Garment Factory	New	Khavast
PTO (knitting and dyeing operation)	Expansion	Dzhizak
Branch of the Garment Factory imeni 50-Letiye Komsomola Uzbekistana	Expansion	Balanchakir

Syr-Darya Oblast

UzSSR Minmestprom:

Brick Plant	New	Dzhizak
Brick Plant	New	Syr-Darya
Plant for production of goods for tourists, athletics, and recreation (GDR production line)	New	Gulistan
Syr-Darya Pilot Plant for school athletic equipment	Expansion	Syr-Darya

UzSSR Goskomnefteprodukt:

Enterprise for product deliveries	New	Akaltyn
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TPO "Uzbekmebel":

Factory for children's and school furniture	New	Dzhizak
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Oblispolkom*:

Novyy Dzhizak Lime Plant	New	Farish
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Tashkent Oblast

USSR Minenergo:

Novoangrenskaya GRES, phase II, 6-8 power generating units	New	Nurabad
Lightweight Slag Block Plant	New	Nurabad

USSR Minugleprom:

"Apartak" Section of the "Angrenskiy" Mine	Expansion	Angren
Angren Mine No 9	Expansion	Angren
Crushing and grading factory for unbeneficiated kaolin	New	Angren
Installation for extraction and recovery of waste from coal enrichment at the "Angrenskiy" Mine	Expansion	Angren

USSR Mintsvetmet:

Altyn-Topkan Lead-Zinc Mine	Expansion	Almalyk
Sary-Cheku, Kalmakyr	Expansion	
Brick Plant	Expansion	Almalyk
UzKTZhM—Consumer Goods Shop	Reconstruction	Chirchik

USSR Minchermet:

Uzbek Metallurgical Plant	Reconstruction	Bekabad
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USSR Glavalmazoloto:

Gold Separation Factory	New	Angren
Kyzyl-Alma Mine	New	Angren
Consumer Goods Shop	New	Mine
		Urtasaray
		Burchmulla

Tashkent Oblast

USSR Minkhimprom:

Machinebuilding Plant	New	Almalyk
Household Chemical Products Plant	Reconstruction	Almalyk

USSR Minudobreniy:

PO "Elektrokhimprom"	Reconstruction	Chirchik
Chemical Plant, Consumer Goods Shop	Reconstruction	Almalyk

Minneftekhimprom:

PO "Uzbekrezinotekhnika," shop for production of rubber spare parts for motor vehicles and plumbing equipment	New	Angren
Athletic Footwear Plant	New	In the oblast
"Rezinotekhnika" Plant	Expansion	Angren

USSR Minmedbioprom:

Biochemical Plant	New	Chinaz
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USSR Minelektrotekhprom:

Transformer Plant	Expansion	Chirchik
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USSR Minkhimmash:

Uzbek Chemical Machinebuilding Plant	Expansion	Chirchik
Machinebuilding Plant	New	Chinaz

USSR Minavtoselkhoz mash*:

Verkhnyy Chirchik "Selkhoz mash" Plant	Reconstruction	Yangibazar
"Chirchiksel mash" Plant	Expansion	Chirchik

USSR Ministroy materialov:

NPO "Alinit"—cement production	New	Akhangaran
Cement Combine	Expansion	Bekabad
PO "Akhangarantsement"	Expansion	Akhangaran
Asbestos-cement pipe production	New	Akhangaran
Low-grade binder—cement production	New	In the oblast

UzSSR Gosagroprom*:

Printing Combine	New	Yangiyul
Plant for production of pectin	New	In the oblast
Meat Combine	New	Angren
Plant for production of polyethylene packaging	New	In the oblast
Winery		Yangiyul
Brewery	Reconstruction	Almalyk
Meat Processing Plant	New	In the oblast
Milk Processing Plant	New	Bekabad
Milk Processing Plant	Reconstruction	Almalyk
Brick Plant	New	Parkent
Brick Plant	New	Angren
Crushing and Grading Installation	New	Pskent

Tashkent Oblast

Quarry producing rock products for construction	New	Kommunisticheskiy Rayon
Keramzit Plant	New	Keles
Plant for production of ceramic facing tile	New	In the oblast
Plants for manufacturing panel forms	New	In the oblast
Plants making lightweight metal fabrications	New	In the oblast
Plant for manufacturing nonstandardized equipment	New	In the oblast

UzSSR Minkhleboprodukt*:

Baked Products Combine	New	Binokor
Baked Products Combine	New	In the oblast
Breadbaking Plant	Expansion	Chirchik

UzSSR Gosstroy:

Almalyk KZU No 6	Reconstruction	Almalyk
Yangiyul KZU No 8 (Plants Nos 1, 2)	Reconstruction	Yangiyul
Keles KZU No 7	Reconstruction	Keles
Plant producing rock-product building materials	Expansion	Bekabad
Sand and Gravel Quarry	Expansion	Chinaz
Combine "Spetszhelezobeton"	Expansion	Eyvalek
Rock-Product Building Materials Plant	Reconstruction	Chirchik
Rock-Product Building Materials Quarry	Expansion	Ablyk
Rock-Product Building Materials Quarry	New	Kalininskiy Rayon
Rock-Product Building Materials Plant	New	Almazar
Ceramics Combine	Expansion	Angren
Plastic Building Materials Combine	Expansion	Akhangaran
"Santekhlit" Plant	Expansion	Akhangaran
Large-Panel Housing Construction Plant	New	Bekabad
Large-Panel Housing Construction Plant	New	Yangiyul
Housing Construction Combine	Expansion	Chirchik
Plant for repairing construction and road machines	New	In the oblast

UzSSR Minlegprom:

Combine for production of upholstery fabrics	New	In the oblast
Toy Factory (branch)*		Gulbakhor
Worsted Spinning Factory*	New	Keles
Silk Spinning Factory*	New	Parkent
Knitted Outerwear Factory*	New	Yangiyul
Knitted Outerwear Factory	New	Akhangaran
Sewn and Knitted Garment Factory*	New	Akkurgan
Hosiery Factory*	New	Chirchik
Knitted Outerwear Factory*	New	Yangibazar
Knitted Underwear Factory	New	Almazar
Factory for production of leather and artificial leather sporting goods	New	In the oblast
Sewn Garment Factory	New	Angren
Sewn Garment Factory	New	Saylyk
Branch of the "Guncha" Garment Factory	Expansion	Parkent
Branch of the "Guncha" Garment Factory	Expansion	Mayskoye

Tashkent Oblast

UzSSR Minmestprom:

Plant for production of enamels and paints and varnishes (GDR production line)	New	Tavaksay
Plant for production of wall materials and slag-concrete products	New	In the oblast
Ceramics Plant	New	In the oblast
Cardboard Container Factory (Austrian production line)	New	Gazalkent
Corsetry Factory* (GDR production line)	New	In the oblast
"Metallist" Plant	Expansion	Bekabad
Branch of the "Tashigrushka" Factory	Expansion	Gulbakhor
Leather Plant	Expansion	In the oblast
Carpet Factory	Expansion	Almalyk

Uzbekbriyashu:

Canning Plant	New	In the oblast
Plant for production of container equipment, cardboard packaging material, including a lithograph shop	New	Barazh

UzSSR Mindortrans:

Shop for production of consumer goods	New	In the oblast
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TPO "Uzbekmebel"*:

Furniture Factory	Expansion	Yangiyul
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PO "Uzbekryba"*:

Fish Canning Plant	New	In the oblast
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Fergana Oblast

USSR Minenergo:

Sokhs kaya GES	New	
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USSR Minkhimprom:

Chemical Fiber Plant	New	Fergana
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USSR Minavtoselkhoz mash:

Plant for production of bicycles	New	In the oblast
"Yakkatutselmash" Plant*	Expansion	Yakkatut

USSR Minudobreniy:

Novyy Kokand Chemical Plant	Reorientation	Kokand
Superphosphate Plant, conversion to mining and metallurgical plant	Reorientation	Kokand
"Azot" Production Association	Reconstruction, expansion	Fergana

Fergana Oblast

USSR Minneftekhimprom:

PO "Fergananefteorgsintez"	Expansion	Fergana
Color Television Picture Tube Plant	New	In the oblast

USSR Minpribor:

Medical Equipment Scientific-Production Complex	New	Kokand
Special Technical Equipment Plant*	New	Kokand
Sewing Machine Plant	New	In the oblast
Plant for production of radio navigation equipment and consumer goods	New	Kokand

USSR Minstroyaterialov*:

Cement Combine	Retooling	Kuvasay
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USSR Gosagroprom:

Plant for manufacturing truck cranes (AVSh-6)	New	Kokand
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UzSSR Gosagroprom*:

Canning Plant	New	Kuva
PO "Ferganapivo"	Reconstruction	Fergana
Nonalcoholic Beverages Plant	New	Kokand
No 2 Milk Processing Plant	New	Fergana
Brick Plant*	Expansion	Shorsu
Brick Plant	New	Rishtan
Brick Plant	New	Akhunbabayevskiy Rayon
Crushing and Grading Installation	Expansion	Kokand

UzSSR Gosstroy*:

Rock-Product Building Materials Quarry	Reconstruction	Fergana
Keramzit Plant	New	Fergana
Fergana DSK	Expansion	Fergana
KPD Plant	New	Kokand
ZhBI Plant	New	Fergana
Yard for cast-in-place housing construction	New	Kokand
Yard for cast-in-place housing construction	New	Fergana
KPD Plant in the oblast	New	Fergana
Yard for cast-in-place housing construction	New	Fergana

UzSSR Minkhleboprodukt:

Baked Goods Combine	Reconstruction	Kokand
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UzSSR Minlegprom:

Leather Clothing Accessory Factory	New	Fergana
Garment Factory	New	Margilan
Garment Factory Branch	New	Dangara

Fergana Oblast

Finishing Factory at the Textile Combine	Expansion	Fergana
Footwear Production Association	Expansion	Fergana
Garment Factory	Reconstruction	Kokand
Carpet Combine*	New	Kokand
Sewn and Knitted Garment Factory*	New	Yangikurgan
Knitted Fabric Factory*	New	Khamza
Hosiery Factory*	New	Kuva
Cotton Batting Factory*	Expansion	Kirova
Silk Weaving Factory*	Expansion	Kokand
Silk Combine*	Expansion	Margilan
Chrome Leather Plant*	Expansion	Kokand
Porcelain Factory*	Expansion	Kuvasay

UzSSR Minmestprom:

Bicycle Factory (joint production with India)	New	Kuva
Factory making ethnic confectionery products	New	Yaypan
Household Chemical Products Plant	Expansion	Kuvasay
Margilan ChLZ	Expansion	Margilan
Wool Spinning Factory*	Expansion	Altyaryk

Uzbek Society of the Deaf:

Production Teaching Enterprise*	New	Fergana
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Uzbekbriyashu:

Confectionery Factory	New	Kuva
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TPO "Uzbekmebel":

Fergana Furniture Part Combine	New	Fergana
Furniture Factory	New	Kokand
Furniture Factory	Expansion	Fergana

Oblispolkom*:

Trash Processing Plant	New	Fergana
Lightweight Block Plant*	New	Kokand
Lime Plant	New	Shorsu
Gypsum Plant	New	Shorsu

Khorezm Oblast

USSR Minneftekhimprom:

Special Workshoe Plant	New	In the oblast
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USSR Minavtoselkhoz mash:

Plant for production of automobile wire clusters	New	Shavat
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Khorezm Oblast

USSR Minelektrotekhprom*:

Small-Capacity Electric Motor Plant	New	Urgench
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USSR Minstankoprom*:

Plant for production of household appliances	New	In the oblast
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UzSSR Gosagroprom*:

Canning Plant	New	In the oblast
Nonalcoholic Beverages Plant	New	Urgench
Milk Processing Plant	New	Khiva
Brick Plant*	Expansion	Koshkupyrskiy Rayon

UzSSR Gosstroy*:

Silicate brick production	Reconstruction	Urgench
Keramzit Plant	New	In the oblast
Urgench DSK	Reconstruction	Urgench
ZhBI Plant	Reconstruction	Urgench

UzSSR Minkhleboprodukt*:

Baked Products Combine	New	Urgench
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UzSSR Goskomvodka*:

Keramzit Plant	New	Druzhba
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UzSSR Minlegprom:

Factory for decorative Jacquard fabrics	New	In the oblast
Sewn and Knitted Garment Factory	New	In the oblast
Garment Factory	New	Khanka
Branch of the PShO	Expansion	Yangiaryk
Khorezm PShO	Reconstruction	Urgench
Carpet Combine	New	Khiva
Knitted Outerwear Factory*	New	Druzhba
Porcelain Plant*	New	Bagat
Khorezm PShO*	Expansion	Urgench
Spinning and Weaving Factory*	Reorientation	Bagat

UzSSR Minmestprom:

Ribbon Weaving Factory (GDR production line)	New	Gurlen
Knitwear Factory	Expansion	Urgench

Uzbek Society of the Blind:

Branch of the Production Combine	New	Khiva
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UzSSR Goskomnefteprodukt:

Plant for production of container-packaged filling stations and equipment	New	Urgench
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Khorezm Oblast

TPO "Uzbekmebel":

Furniture Factory	Expansion	Urgench
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City of Tashkent

USSR Mingazprom:

"Sredazgazavtomatika" Plant	Expansion	
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USSR Mintsvetmet:

Shop for shapes stamped from secondary aluminum	Expansion	
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USSR Minchermet:

Scrap Processing Shops	Reconstruction	
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USSR Glavalmazoloto:

Shop for assembling and processing waste containing silver Jewelry Plant	New Reconstruction	
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USSR Minkhimprom:

Joint Enterprise "Sovplastital"	Expansion	
Paint and Varnish Plant—Consumer Goods Shop	Expansion	
Experimental design office for packaging and wrapping equipment	Expansion	
Synthetic Detergent Plant	Reconstruction	

USSR Minelektrotekhprom:

"Tashelektromash" Plant	Expansion	
PO "Sredazelektroapparat"	Expansion	
Branch of the Tashkent Electrical Equipment Plant	Expansion	

USSR Minstankoprom:

Tool Plant	Expansion	
Abrasives Combine	Reconstruction	

USSR Minkhim mash:

Compressor Plant	Expansion	
PO "Elektrobyt mash"	Expansion	
"Tashavtomatika" Plant	Expansion	
NPO "Vostok"—production facility	Expansion	
"Algoritm" Plant, production of personal computers	Retooling	
Fast-Freezing Equipment		
"Zenit" Plant	Reconstruction	
PO "Foton"	Reconstruction and expansion	

City of Tashkent

USSR MPS:

Diesel Locomotive Repair Plant	Reconstruction
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USSR Mintyazhmash:

PO "Podemnik"	Expansion
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USSR Minlesprom:

Plant for production of wood particleboard	New
Paper Factory	Reconstruction

USSR Minavtoselkhoz mash*:

PO "Tashkentskiy Traktorny Zavod"	Expansion
Foundry Complex	Expansion
"Uzbekselmash" Plant	Reconstruction
Experimental Machinery Plant	Expansion
Motor Plant	

UzSSR Gosagroprom*:

Potato products plant of the "Kolos" type	New
Confectionery Factory	New
Nonalcoholic Beverages Factory	New
No 2 Milk Processing Combine	Expansion

UzSSR Minkhleboprodukt*:

Breadbaking plant for producing rye breads	New
Rolls and Confectionery Combine	New

UzSSR Gosstroy*:

Keramzit Plants	Expansion
Plant for production of special reinforced concrete and small architectural forms	New
Yard for cast-in-place housing construction	New
Plant to make parts for large-panel housing construction for 16-story apartment buildings	New
Reinforced-Concrete Products Plant	New
Particleboard Construction Parts Plant	New
Plant for production of parquet flooring	New
Plant for plastic mill products	New

UzSSR Minlegprom:

Offset Printing Factory	New
Specialized production in the manufacture of press forms	New
Spinning and weaving factory reoriented as a textile combine to produce wide fabrics	Expansion
No 1 Spinning and Weaving Factory (involving Indian firms)	Retooling
Fur and Leather Plant (relocation)	Reconstruction
Experimental silk spinning factory for the conditioning of cocoons and raw silk	Reconstruction

City of Tashkent

"Uchkun" Textile Clothing Accessories Production Association	Reconstruction
Pilot Plastic Fixtures Plant	Reconstruction
Porcelain Plant*	Expansion
UzSSR Minmestprom:	
Plant for production of household thermos bottles (Chinese production line)	New
Garment factory for manufacturing children's clothing	New
Plastic Products Plant	Expansion
Housewares Plant	Expansion
Household Electrical Devices Plant (lighting fixtures)	Expansion
Tashkent OZMZ Plant (production of mirrors and bulbs)	Expansion
Kitchen Furniture Plant (West German manufacturing equipment)	Expansion
Uzbek Society of the Blind:	
Tashkent Production Combine	Reconstruction and retooling
Uzbek Society of the Deaf:	
Leather Clothing Accessory Association	New
UzSSR Minzhilkomkhov:	
Plant for repairing trolleybuses	New
Gorispolkom:	
Reconstruction of VARZ	Reconstruction
Trash Processing Plant	New
TPO "Uzbekmebel":	
Furniture Factory	Expansion

'Self-Managing Estonia' Concept Not Viable, Political Progress Needed 18150079

[Editorial Report] Tallinn RAHVA HAAL in Estonian on 11 May 1989, publishes on page 2 a 2,300-word article entitled "Let's Forget About the IME Concept, and Keep Thinking" by economist Mati Tamm. He criticizes the Overall Concept of the IME [Self-Managing Estonia] program for being watered down from its original draft and for its failure to establish a new currency requirement as the basis for an economic turnaround, saying: "In fact, the whole IME concept is utopic, since it is based on the illusion that rubles are money.... Actually, we wouldn't need any IME or its Overall Concept if we had money that would indeed be MONEY. And this would have to be money that circulates to serve an economy that is free of command, subject to rational

regulation by the state, and defined by state boundaries. Let's stop the pretense: what we really need is a sovereign state."

The article goes on to say that there's no point taking any of the IME proposals to Moscow, where they'll be denuded further to match the officially sanctioned Maslyukov plan designed to appease the people rather than solve the problem. It continues:

"The delegates did not confirm the government of the Soviet Union so that it could issue orders to the republics, but for performing these tasks that the union republics choose to delegate to the central government. (?)

"Starting from this premise, we need to plan for such, and only for such tasks that the Estonian SSR Supreme Soviet, based on its resolution of November 16, 1988,

delegates [leaves] to the jurisdiction of the USSR. All that has been done on IME so far will, in this case, still be usable. Now we know what should not be included in this new plan. And these are all matters on which we'll have to start making decisions on our own.

"Details of the Overall Concept that are not yet clear to us would be very difficult to explain in Moscow. And, more importantly, matters that should remain in the jurisdiction of the republic far outnumber those left to the central government. Besides, why should the economy of the republic be run and regulated by men who messed up the affairs of a superstate?"

The article also makes the point that it would be hard to motivate large numbers of people who are used to the state being the provider. This is being brought home with comments such as these:

"Why should they want to trade at world market prices if the present pricing is more favorable?" ... "Besides, one cannot trade with rubles on the world market. However, funds are available just the same. They have been there for the shoe factory, the output of which has a reputation of being shunned by the consumer...." Other examples are also cited.

As for industries that now report to Moscow ministries, Tamm writes:

"The Estonian economy does not need industry that lacks local supplies of raw materials, labor, and consumers. Even when IME is activated, the collectives for such firms will get into great difficulties compounded, in turn, by excessive size and incompetent management. We can

be sure that the consequences of such difficulties will be blamed on the separatism of Estonians. Such intensification of the political situation, however, is the last thing we need.

"Why should the republic be saddled with industries created to colonize Estonia? Let them be the responsibility of the central government, and leave the say-so to the RSFSR, where the labor comes from, and at whose expense they are, in fact, maintained. Because they burden the infrastructure of the Estonian SSR and pollute the environment, they should be taxed, and not simply in rubles, but in barter."

The article also points out that the proposed transition to a real market economy has a down side for the general population:

"What has not been spelled out is that this would mean, first off, either the raising of prices or the freezing of salaries, along with a reduction or elimination of savings (currency reform), so as to balance the supply and demand based on buying power, i.e., the volume of money and goods."

The article recognizes that by discussing economic matters, "we have winnowed out those political problems that need to be resolved before anything can be changed in the economy."

In conclusion, the author states: "There's no point crying because IME isn't where we'd like it to be. Instead, we should rejoice in the real miracle that from a nation of order-takers we have emerged to form a self-thinking Estonia."

AGRO-ECONOMICS, POLICY, ORGANIZATION

Farm Administration Resistance to Leaseholding Arrangements

18240185 Moscow *SELSKAYA ZHIZN* in Russian
17 Jun 89 p 5

[Article by V. Virkunen: "The Peasant-Master of the Land Has Lost His Way in the Labyrinth of the Law"]

[Text] The accelerated development of the new forms of economic management, based on the widespread introduction of leaseholding arrangements, was one of the principal topics of the speeches delivered at the recently held First Congress of People's Deputies. It was noted that leaseholding is still not proceeding as we would like. In practically every region of our country agronomic administrators, who have hardly lost their own unlimited capacities for ordering the peasants about, are actively putting up obstacles on the path to the new forms of labor organization. It was not by chance, therefore, that the agrarian-deputies in the Appeal to the Congress demanded that an end be put to the slowdown of the leasing movement.

The numerous instances which are being reported by leaseholders to the editors attest to the fact that the new form of economic management is constantly encountering indifference, non-acceptance, and open hostility. Leasing is spinning its wheels, running up against administrative-bureaucratic barriers every day. It is as if the local leaders in various places had heard nothing about the most important, it can be said, historic decisions made by the March Plenum of the CPSU Central Committee, decisions which proclaimed the diversity of forms of socialist property ownership and types of economic management, along with the creation of equal economic conditions for them.

And, notwithstanding this, the negative attitude toward leaseholders has continued. Farm administrations have refused flat out to fulfill the conditions of contract agreements. The motives operating here can be interpreted in just one way: these leaseholders are earning too much. Just what is to be done if people earn so much by honest labor, and do not steal, play tricks, or deceive others...?

Here is a typical example of such a situation; it was described in a letter to the editors by Alla Nikolayevna Galushka, brigade leader of a vegetable-growing brigade of the Rossiya Sovkhoz, located in the Kingisepskiy Rayon, Leningrad Oblast. Her brigade concluded a contract agreement with the administration. Both V. Balbysh, the sovkhoz director, and N. Khimich, the chief economist, speaking as if with one voice, assured the workers that their cost-accounting income would consist

of the difference between the value of the products produced and the expenditures involved, whereas all the money earned by the leaseholders would be distributed independently.

At the end of the year this unit had fulfilled its contractual obligations. Naturally, good work requires an appropriate reward. But that was the spark which set the forest on fire: the unit had earned too much in the opinion of the directors. And these chiefs began to seek out possibilities for reducing the earnings. Everything was set afoot: an examination of the "fine print" in the contract, an arbitrary "twisting" of the product values, and even downright, open pressure. As a result of all manner of possible manipulations, the total amount of the earnings was reduced by at least a factor of four.

"A new agricultural year has begun, but one senses a certain coolness in the collective. The people do not believe that they will not be deceived," Alla Nikolayevna writes bitterly.

Another instance of the same type of conflict is the following. The welder Viktor Antonovich Papakul, who lives in the settlement of Kamyshevakh, Popasnyanskiy Rayon, Voroshilovgrad Oblast, decided to go to work on the Zaboyschik Sovkhoz and lease a pig farm. He bought a house and moved his family there. He signed a contract with the sovkhoz administration to maintain 50 brood sows. The administration gave him an old pigsty and promised to help him repair it. But basically he had to do everything by himself, even including the purchase of building materials with his own money.

And then the piglets began to arrive. And his indicators were incomparably higher than those of the sovkhoz. His piglets looked like they had been selected; they were all alive and healthy. And the earnings promised to be appropriate. Viktor Antonovich together with his wife did as much work as six workers on the sovkhoz livestock farm. But these sovkhoz members were jealous that everything was going so well with a leaseholder. And so they began to create all sorts of obstacles. The supply of animal feeds began to be interrupted.

And just what did the directors do? Listen to Viktor Antonovh's mild complaints or that, by fulfilling his contractual obligations, he had "gilded someone's fountain-pen.?"

Obviously, they did not wait for any "well-wishers" because soon something amazing happened: the suckling piglets began to fall ill and die from several of the brood sows. The sows themselves did not seem to become ill, but their milk turned out to be poisonous for their young. The acts which transpired confirmed this supposition.

The sovkhoz directors used this disease as an excuse to take the pigs away from the leaseholder. This story is not yet finished, and it is too early to sum up the resulting

conclusions. But one thing is clear: on this sovkhos with this administration leasing is not going anywhere. What leaseholder would want to have anything to do with dishonorable directors?

And so, without even managing to get born, the sense of being a master will perish.

A leaseholder is still without rights even if a contract has been concluded. Without a trace of doubt, the administration is proceeding to violate such contracts, obviously confident of their own immunity from punishment. The administrators and party apparatus are afraid to lose their absolute power over the commodity producers. Because, of course, an independent master who owns his own producer goods and leases the land will not put up with ignorant interference in his affairs, and he will demand an equitable distribution of the added products which he has produced.

Therefore, what we are observing are attempts to torpedo these extremely important decisions on the executive level. A graphic example of this is the Ukase of the USSR Supreme Soviet Presidium entitled "On Leasing and Leasing Arrangements in the USSR," which was subjected to criticism from the rostrum of the Congress of People's Deputies. This document is, undoubtedly, a major step forward along the path of dismantling the administrative-command system. Nevertheless, it bears on itself a significant imprint of bureaucratism.

Thus, Paragraphs 2 and 7 give one clearly to understand that the role of leaseholder is, primarily, to be played by state organs empowered for this purpose by the USSR Council of Ministers or the Councils of Ministers of the Union republics, as well as kolkhozes and sovkhoses. In the long list of those who are given permission to hold leases the Soviets of People's Deputies occupy a extremely modest place. Even though the Soviet should function as the sole leaseholder.

Just as was the case before, leaseholders, agricultural cooperatives, and individual peasant farms are considered to be second-class land-users. The ukase dated 7 April dealing with leasing has in no way given them equal rights with kolkhozes and sovkhoses, despite the political decision of the March Plenum of the CPSU Central Committee. This means that leaseholders will have to continue to go "cap in hand" to the primary land-user—the director of a kolkhoz or sovkhos.

Inequality in rights engenders conflicts. It is clear that not the local "prince," but rather the Soviet authority should grant land to an energetic, intelligent, and zealous master. A person who produces more and cares for the land should take precedence over a land-user who lets arable fields go to waste, who mismanages things to the point where his water meadows are overgrown his bushes and his irrigated areas are covered with salt-marshes.

Unfortunately, the ukase entitled "On Leases and Leasing Arrangements in the USSR" does not in any way restrict the articles of the presently valid Principles of Land Legislation. To this very day, leasing is categorized as a criminally punishable activity. It turns out that these legislative acts—the Principles of Land Legislation and the Ukase on Leasing—are mutually exclusive.

Is this not why we observe such timidity among leaseholders and such obstinacy among the representatives of the administrative apparatus? Because, after all, the actual lack of rights among the former allow the latter to act arbitrarily without any fear of punishment. The law has not yet taken the leaseholder under its protection. The working man who wanted to become a master is still wandering about, lost in the labyrinth of legislation.

The guiding thread which will lead the leaseholder out of this ambiguous position is the legal solution of property-ownership relations and, in the first place, questions of land use. Until such time as the peasant receives from the Soviet regime land for use, along with the right to pass it along to his heirs, we cannot talk seriously about leasing. The future law on land must provide such a guarantee.

Factors Inhibiting Private Farming in RSFSR Noted

*18240188 Moscow SELSKAYA ZHIZN in Russian
25 Jun 89 p 3*

[Article by K. Kopach, Candidate of Economic Sciences and senior scientific worker at the All-Russian Scientific Research Institute of Economics, Labor and Administration in Agriculture: "New Trends and Old Mistakes"]

[Text] The time when the private economy of the rural population remained in the dark zone of our socioeconomic life and was viewed suspiciously against a background consisting of an optimistic picture of socialist construction has receded into the past. Since the second half of the 1970's, one after another of our party-governmental decrees has been abolishing the prohibitions and restrictions aimed at paralyzing the economic initiative of a rural family. If we make a judgment based upon these decrees or upon the reports by oblast and republic leaders, then it would appear that farm production must increase in tempo, develop further and become stronger. At times, it appears that this is the case and yet at other times...

In 1984, three years following publication of the decree of the CPSU Central Committee and the USSR Council of Ministers entitled "Additional Measures for Increasing the Production of Agricultural Products on the Private Plots of Citizens," success was achieved in restoring the number of cattle among the population to the 1980 level. Meat production during this period increased by 13.6 percent and the kolkhozes and

sovkhozes began purchasing more milk and meat from private plots on a contractual basis. All of this serves to underscore the strong reserves still available in the private economy.

But one's joy was short-lived. Decisions were handed down in some areas indicating that the campaign was coming to a close and less pressure was brought to bear from on high. Once again the numbers of farm livestock are declining and falling below the 1980 level and decreases are being noted in the production and sales of milk and meat. Obviously, with the aid of administrative instructions and even supported by newspaper campaigns, it is difficult to achieve radical changes in such a complicated socio-economic sphere as a family peasant farm.

I am revealing no secret if I state that the chief factor for normal development of farmstead animal husbandry operations is that of ensuring the availability of feed. A study carried out in Gorkiy and Orel oblasts has shown that this problem varies depending upon the location of the villages, the communications with the rayon centers and the extent to which the land is worked.

In villages located at some distances from cities, a rural farmstead obtains one half of its feed by means of its own resources and the other—from extended use natural haying lands of a public farm. Here we have plots ranging in size from 30 to 35 hundredths of a hectare that have been reclaimed from forests, stubbed out and sown with grasses and which serve as a source for a guaranteed supply of coarse feed for cattle.

More than 15 percent of the overall requirement for feed at suburban settlements and settlements located at considerable distances from cities is met by means of baked grain. It is consumed at the rate of 875 kilograms per family annually at suburban settlements and at remote ones—755 kilograms. On the whole, a family farmstead is capable of supplying 12-18 percent of its feed using its own resources; from public resources but on the order of self-procurements—40-50 percent; by means of purchased sources (mixed feed and grain)—by 30-40 percent. Thus it was by no means an accident that the kolkhoz and sovkhoz leaders and specialists who were questioned listed among the measures for solving these problems the advisability of payments in kind in the form of feed and grain and the allocation of low fertility lands and haying areas for private use. One can only agree with such recommendations.

Second place in the hierarchy of factors restraining the development of the private economy is its labor intensiveness and the physical complexities involved in its management.

According to data obtained from our study, the private plots presently have at their disposal an average of 3,000 rubles worth of all possible means of labor. Is this a large or small amount? I believe that it is very small when we

consider that a family spends roughly 22.5 hours per week during the winter and 56 hours during the summer in managing its farm. This amounts to more than 2,000 hours annually, or 31 percent of all labor expenditures in agricultural production. Of this amount, from 35 to 39 percent is accounted for by people who are not working at kolkhozes or sovkhozes and the remainder—by the second shift of workers at a public farm.

The time is obviously at hand for devoting some thought to real measures for lowering the labor intensiveness of the private economy. Here an important role can be played by supplying the livestock with prepared feed and by more efficient and free assistance for the private plots from kolkhozes and sovkhozes in the form of all-possible services and, finally, by greater accessibility of mechanized equipment.

When the discussion turns to this type of equipment, an intelligent approach must be employed with regard to making such equipment available to the private plots. Actually, can efficient use be made of a motorized unit with a set of attachable implements costing more than 2,000 rubles on just one private plot? Would it not be better to use the equipment required for a private plot on an incident to incident basis (motorized unit, small tractor, mowing machine), using a kolkhoz's resources or a sovkhoz rental point?

It can generally be stated that the relationships between public production and family production in the majority of villages studied are limited to assistance in the working of a private plot, transport operations, the sale of young livestock and poultry stock and the allocation of grazing and pasture areas. All of this is carried out on an incidental basis depending upon the existing circumstances. It is believed that the work must be carried out in a different way, that it must be established on a stable, planned and contractual basis, that this work must be included in the production plans, that the required resources must be made available and that control must be exercised over observance of the technological and other requirements of an economic nature.

Importance is attached to distributing the zones of influence upon the farmstead economy among the kolkhozes, sovkhozes and consumer cooperation. In those areas where a discussion is taking place over marketable output for social production—meat, milk, potatoes—the supply and marketing functions can be carried out to a greater degree by a kolkhoz-sovkhoz. In the case of other products such as onions, garlic, other vegetables, berries and fruit, the role played by a cooperator as a procurement specialist, a supplier and even to a certain degree as a production organizer.

All of these conclusions and studies were made 3 years ago, but unfortunately they were subsequently pigeonholed. The campaign was carried out! An article written using the same materials was returned from the scientific journals owing to the fact that the theme was not timely

enough. Nor could any defense be made for retaining this theme in the VNIETUSKh plan. It was literally removed one year prior to its completion. And the recent assignment by the institute's board of directors—to furnish at least some material concerning the private economy—was for the leadership.

Such a question involving the merging of many socioeconomic interests of society must not be handled in a spasmodic or hasty manner if a further aggravation of the food difficulties is to be avoided. A need exists here for thoroughly taking into account all of the factors and interests and not just the short-term or long-term ones.

Meanwhile, a series of recently held zonal conferences, conducted at the highest level in Omsk, Brest, Stavropol and Kaluga, has revealed that the same barriers which existed many years ago are blocking the path of the private economy. Considerable importance is being attached to ensuring that the next discussion is devoted to specific actions to be taken.

A unique aspect in agricultural development has to do with the formation of new relationships based upon lease type arrangements in the establishment of farms. A new development has appeared in this regard in the attitude towards the private economy—to refrain from linking it together with the farms of leaseholders. A theoretical union between these two forms of production is possible. Indeed the private economy is based upon private labor and private ownership, whereas in the case of a lease everything, with the exception of land, seemingly belongs to the leaseholder. It is here that the terminological exercises begin: let us refer to the raising of livestock on a private plot on a contractual basis with a kolkhoz as a lease. Let us not refer to a private plot as subsidiary in nature, but rather we will consider it as a peasant work farm. It would appear that everything is according to Chayanov. And the result is very good—we have 30 million peasant work farms, 30 million leaseholders! Let us allow them to integrate with the kolkhozes and sovkhozes and we will solve all of the food problems! Yes, only how can we make this possibility available to them? During the second dozen years we will issue everything, hand down decrees and the number of livestock among the population will decline: in some oblasts in the non-chernozem zone—about 5 cows for every 10 plots.

At the present time, the same trends are being seen in the case of leaseholders. Actually, following the newspaper articles which discussed the delights of farming, the lines waiting to obtain vacant lots, semi-destroyed buildings and equipment that had been written off were quite long. Why was this? It would appear that everything becomes one's property once it has been purchased.

But a leaseholder understands quite well that he will not be a complete owner so long as he is surrounded by many other owners who are more rich and better equipped. He is only guaranteed loans and then not in all instances. Is

he confident that these loans will not make him a life-long farm laborer? A common factor in his status with the owner of a private plot is first of all the fact that their interests continue to be at variance with the kolkhoz and sovkhoz interests. The kolkhozes and sovkhozes are actually owners of the land, equipment and other resources. And for them just as for the entire pyramid of authority standing over them, any non-collectivized forms of production will still be at the cutting edge of the economy.

Let us consider one fact. The output of a private plot is purchased by the state at state purchase prices. The mark-ups for them, obtained by the kolkhozes and sovkhozes, do not apply to a farmstead. Thus it turns out that the labor expenditures for a quintal of milk on the private plots quite often exceed the corresponding expenditures in public production by more than three-fold, while the sales (purchase) price for the milk is lower. This explains the lack of desire to maintain a cow and to turn over excess output to the state.

Different prices and different equipment levels for production do not favor the private plots. SELSKAYA ZHIZN published articles 15 years ago on the need for accelerating the technical re-equipping of family farmsteads. During these years, many complexes and large-scale farms were created and tractors for working the land produced. However, just as in the past, small-scale tractors continued to be the object of desire by peasant families.

It was not enough to merely abolish the restrictions on the number of livestock per private plot. It was not realistic to think that a peasant could maintain 100 cows. Indeed, he would enter his cow shed only after having worked a shift in public production. Thus steps had to be taken to provide not 100 but just one cow to a private plot. And a peasant would view this cow not as a reserve for solving the food problem, but merely as a part of the rural routine where it is impossible to proceed in the absence of milk and meat. Perhaps we should advance from words to action and provide land not only to peasants, as was mentioned quite fairly during the USSR Congress of People's Deputies, but also to city-dwellers? And not on the basis of six hundredths of a hectare after many years of trying experiences, but rather at the level of summer tracts and to equalize finally summer-cooperative and horticultural-gardening construction, after abolishing this difference as a red caste legacy of stagnant times.

Perhaps the time is at hand for putting an end to eyewash—"a kolkhoz furnished so much milk and meat," but a third of this amount was at the expense of a farmstead. Let a kolkhoz report its successes and a peasant sell his products in the absence of a plan but under more suitable conditions. Let each individual answer for his successes. Cost accounting is cost accounting.

And what about combining a private plot with a lease? How is this possibility viewed? How can the private economy be converted over to farming? In such a case, this is not just an illusion but even the direct path for discrediting both sides. Nobody is preventing a peasant from departing a kolkhoz and starting up his own work on a lease basis or on farming land. However, this would not longer be the private economy. Those who wish to work in public production must have real conditions for farmstead farming and animal husbandry operations. A lease will be a lease in any of its forms and a private plot will be continued in the usual concept of such a plot. And there is no need for new decrees pertaining to private plots, but rather the operating conditions already adopted need only be ensured. And laws are needed for leases and for farming. It is hoped that they will soon appear.

MAJOR CROP PROGRESS, WEATHER REPORTS

Steps Outlined To Overcome Adverse Agricultural Conditions in Uzbekistan

Water Shortage Situation in Uzbekistan

18240193 Tashkent SELSKAYA PRAVDA in Russian
28 May 89 p 2

[Article by P.A. Polad-Zade, USSR First Deputy Minister of Land Reclamation and Water Resources: "Conserve Every Drop of Water...."]

[Text] The May cold spell, which dealt a heavy blow to this republic's agriculture and livestock raising, has, unfortunately, not yet exhausted all of nature's unpleasant surprises with which those persons working in will have to contend this year. The water-supply situation, which has evolved by the beginning of the vegetable-growing season, is particularly dangerous. UzTAG correspondent Yu. Bonfarenko asked P.A. Polad-Zade, USSR First Deputy Minister of Land Reclamation and Water Resources, about this situation.

In this regard the present year is diametrically opposite to last year, which was extremely favorable as to the water supply. This enabled us not only to raise a large harvest. The rigid limit which we placed on water to be used for irrigation enabled us for the first time in 14 years to completely fill the Toktogulsk Reservoir, and, furthermore, to "dump" more than 23 cubic kilometers of water into the Aral Sea.

After the crops were harvested the water specialists successfully prepared the irrigation systems for the next growing season, i.e., the period of their greatest load, and they leached out the lands. Moreover, and I want to emphasize this particularly, the measures which we adopted allowed us to save 600 million cubic meters of water from the Syr-Darya and 617 meters from the

Amu-darya, as compared to the established limits. As a result, just during the first quarter of the present year, the Aral Sea and the region around it received 2.5 cubic kilometers of water.

This past winter, however, there was little precipitation, and, because of that, there is only half as much snow on the mountains as there was last year. Specialists from the USSR Goskomgidromet [State Committee for Hydrometeorology] consider that most of the rivers of Central Asia and Southern Kazakhstan will have 15-20 percent less water than the average multiyear norm.

Unpleasantnesses for agriculturalists began literally from the first few days of the present cycle. The dry and chilly April required additional irrigation in order to obtain seedlings and sprouts. But this led to an unforeseen expenditure of an entire cubic kilometer of water. In very early May it turned sharply colder. In Uzbekistan alone frosts ruined 450,000 hectares of cotton and approximately 300,000 hectares of other crops.

Reseeding again requires us to plan for unforeseen expenditures of water. According to key estimates, Uzbekistan alone will need an additional two cubic kilometers of water for this purpose. The reserve supplies of water which have been accumulated for many years in the Toktogulsk Reservoir will allow us to fully provide for agriculture in the Syr-Darya Basin. It should be borne in mind, however, that this unforeseen draw-down of the reservoir reduces the calculated guarantee of water consumption and could lead to negative results in case of a prolonged (3-4 years) low-water period. Because, of course, the present volume of water discharge from the Toktogulsk would have to be doubled—to 4-4.5 cubic kilometers.

The situation in the Amu-Darya Basin is considerably more complicated. The Tuyamuyunsk Reservoir was "drunk up" virtually completely for the leaching irrigations. In order not to leave the areas sown in cotton and rice without moisture, we had to increase the expenditure of water from the Nurek Reservoir. But, you know, the latter also received significantly less moisture in April than during any other previous year. At present the Tuyamuyunsk most frequently has one cubic kilometer. This is 2.5 time less than last year. Now the intensive irrigation of rice has begun. In order to provide for it, the water discharge through the hydro-complex has been increased to 1,100 cubic meters per second. But, of course, water enters the reservoir at the rate of only 400 cubic meters a second. And so it turns out that, by the end of May, this reservoir's reserve supplies will be completely exhausted.

According to the forecast by the hydrometeorologists, the low-water period on the Amu-Darya will remain in effect during May. For the growing season as a whole 38-44 cubic kilometers of water will flow along the Amu-Darya; this is less than the norm by almost four cubic kilometers.

A complicated situation is evolving for the Nurek "Sea." Its complete fullness is the principal condition for the successful leaching of lands. In a year with a normal water cycle this takes place in the summer during the flood time. But as things stand at present, we will not be able to fill up the reservoir until the middle of September.

This, moreover, will require us to lower the limits on water furnished to all oblasts which "drink" from the Amu-Darya. In connection with this, agriculturalists even now must think their way through the problems of substituting some rice sowings, particularly those in the lower reaches of the river, for other crops which require less moisture.

At present the USSR Ministry of Land Reclamation and Water Resources is attentively following the water-supply situation on the Central Asia rivers and taking the necessary measures with regard to providing water for irrigational agriculture and other sectors of the national economy. But agriculturalists, industrial enterprises, and the entire population must understand that there is not enough water nowadays, and it is necessary to conserve every drop of it.

Extra Crop Care Required To Make Up for Adverse Conditions in Uzbekistan

18240193 Tashkent SELSKAYA PRAVDA in Russian
7 Jun 89 p 2

[Article by A. Bakiyev and R. Abdullayev, scientific associates, Uzbek Scientific Research Institutes on Vegetable, Cucurbit, and Potato Crops: "Care, Care, and Still More Care: Only Thus Can We Restore the Sowings of Vegetables and Potatoes Damaged by the Frosts"]

[Text] Sudden cold spells, snowfalls, rains, and frosts have inflicted enormous damage to the agriculture of many regions in this republic. Sowings of tomatoes, eggplants, Bulgarian pepper, cucumbers, and potatoes were harmed.

The principal task which confronted the agriculturalists was to immediately eliminate the consequences of these natural disasters. Within a brief period of time they had to ensure the full value of the affected hectares. Nor must they forget that, if the map shows that 60-70 percent of the sowings have been damaged, even in the event of complete restoration of the damaged places, the intended harvest would not be obtained. Because a portion of the remaining 30-35 percent of the plants also suffered, to a certain extent, from the frosts. At the same time, until the just recently set-out plants have taken root and become acclimatized, the fields are being overgrown with weeds; and, as a result of the damage to the soil structure due to frequent irrigation, various diseases have become widespread.

All this has been taken into account in the practical work being done. At the same time, we must figure out how many seedlings must be planted in each field and quickly plant the seeds in hothouses so that the requisite number of them may sprout. The effect has been better where the seeds have been soaked in warm water for 1-2 days and treated with the Ivin bio-stimulator. One flask, or 10 milligrams of this stimulator, is dissolved in 10 liters of water. From 5 to 6 kilograms of tomato seeds are immersed in this solution for 12-24 hours. On farms which do not have hothouses you can sow the seeds of tomatoes, peppers, and eggplants in open ground in Chernozem-meadow-type soil. These plantings must be sufficiently moistened; moreover, each "hill" or seed-bed must have 5-6 seeds, and they must be covered up with bran siftings, rice hulls, or other mulch. It is recommended that this method be used on those farms which have already had practical experience in its use. But on those farms which have hothouses at their disposal it is best to cultivate the seedlings in a centralized procedure under the observation of experienced agriculturalists. Moreover, it is feasible to utilize all reserves—the corridors and aisles of the hothouses and any in-between spaces.

Seeds of the following species of tomatoes should be sown: Talalikhin, Progressive, Peremoga, and Vostok. In order to obtain healthy seedlings in the hothouse, you need to maintain the temperature at 30-32 degrees C during the daytime, and 20-26 degrees at night. The seedlings need to be water frequently. Each square meter of hothouse space must use 20-25 kilograms of nitrogen, 30-40 kilograms of phosphorus, and 10-12 kilograms of potassium.

A good effect may be achieved by putting rotted manure between the rows, or a mixture of organic and mineral fertilizers, followed by a good watering.

It is useful to check out the area where cucumber and tomato seeds have not sprouted before because, due to insufficient moisture in the soil, the seeds may not sprout. In that case, you must immediately water them.

Even sowings covered by a film [plastic sheet] were partially damaged. Moreover, because of the very chilly spring, the development of the sown areas is now lagging behind by 15-20 days. Therefore, we must now make effective use of each fine hour and conduct intensive care of the gardens and orchards.

In order to obtain a high yield and good-quality harvest of carrots, they must be thinned out. In this process, one plant should be left every 5-6 centimeters, and weeding should be done at the same time.

In the potato fields it was primarily the above-ground, vegetative mass-haulms [the tops of the plants] which suffered from the frosts; a considerable portion of the underground portion of these plants remained undamaged. Therefore, in order to restore the potato sowings, it

is necessary to feed them with a mixture of mineral and organic fertilizers, as well as to water them. Thereby the development of the tubers is ensured.

Under the present-day weather conditions, it is feasible, as much as possible, to conduct all the processes of treating the plants simultaneously, that is, on the initial pass of the equipment. Otherwise, the soil will become compacted, and its structure will be spoiled. At the time of cultivation you must take into consideration the fact that the amount of precipitation this year will be 30-50 percent less than usual, and garden crops are developing slowly. Therefore, if we set up a timely and exemplary care of the small plants, we can ensure their normal growth and the accumulation of a fine harvest.

At present we anticipate an intensification of agricultural pests and agricultural crop diseases. Specialists must monitor each plot, and, in case the sowings are infested with agricultural pests or diseases, they must immediately organize a struggle against them.

In short, in the struggle to overcome the consequences of natural disasters, of great importance is care for the sowings at a high level of agricultural engineering. For this purpose, we need to mobilize all manpower, equipment, and make optimal use of internal possibilities. This is the only way that we can ensure a high and good-quality harvest of vegetable crops and potatoes.

Early May UzSSR Crop Damage Worse Than Originally Estimated

Losses Considerable

*18240176 Tashkent SELSKAYA PRAVDA in Russian
16 May 89 p 1*

[Article by R. Nazarov, Director of the Administration for the Organization and Development of Production of Cotton and Other Agricultural Crops of UzSSR Gosagroprom [State Agroindustrial Association]: "In a Business-Like Manner, Without Any Fuss..."]

[Excerpts] The losses brought about by the past frost turned out to be more significant than assessed during the first days after the cold spell. Especially great losses were suffered by cotton, corn, vegetables, feed crops, orchards and vineyards and mulberry trees for silkworm farming in the enterprises of Samarkand, Syr-Darya and Kashka-Darya oblasts. Here cotton was damaged on an area of over half a million hectares, which is about half of the total damage in the republic. The resowing of cotton in these three oblasts alone was almost double the resowing area of last year in the republic as a whole and comprises over 400,000 hectares.

Vineyards, mulberry trees for silkworm farming, orchards and vegetable and feed crops suffered most in Bulungurskiy, Urgutskiy, Samarkandskiy, Kalininskiy, Ordzhonikidzevskiy, Voroshilovskiy, Shakhrisabzskiy, Karshinskiy, Termezskiy and other rayons. There were

significant losses of crops of cotton, corn, and alfalfa this year that require resowing in the enterprises of Akdarinskiy, Dzhambayskiy, Payarykskiy, Pastdargomskiy, Pskentskiy, Usman-Yusupovskiy, Mubarekskiy, Kasanskiy, Nishanskiy, Guzarskiy, Gizhduvanskiy, Angorskiy, Turtkulskiy, Ellikkalinskiy and many other rayons.

The rains in the first 10 days that are just over added to the farmers' problems. Especially urgent measures are required for fields that have been resown in the last 3-4 days on which shoots have not yet formed. Right now we must complete resowing at a rapid pace, transfer some of the equipment for breaking up roots; otherwise we will have to sow a third time, and in some places a fourth time because the first resowing on an area of about 100,000 hectares was carried out after precipitation and cooling during the second 10 days of April.

In essence exactly one month after the beginning of sowing the second sowing campaign began. It is being carried out at a rapid pace, with the resowing of 12,000-20,000 hectares daily in the enterprises of Samarkand, Kashka-Darya and Syr-Darya oblasts.

For the successful completion of repeat sowing and for decreasing losses enterprises today are in need, in addition to fuel, of seed of rapidly-maturing varieties, fertilizer and water. As concerns seed, these problems are being dealt with effectively. The same varieties are being used for resowing as used in the basic sowing operation, and in Kashka-Darya and Samarkand oblasts a rapidly-maturing variety with a fifth type of fiber popular with textile workers, S-4727, is being sown. Problems related to the additional allocation of fertilizer and water require immediate solutions.

[passage omitted]

As calculations show, as a result of late resowing and the expected lags in the development of cotton, its productivity in Samarkand Oblast alone may decrease by 5 and more quintals per hectare, which will result in the underproduction of raw cotton equalling no less than 100,000 tons.

A similar situation exists in other oblasts of the republic as well. The expected loss from harvest underproduction may exceed 170 million rubles in Samarkand Oblast alone.

The consequences of the bad weather will affect lease collectives especially greatly. Here we are still very much in the habit of the stereotype, "The plan is law," and nowhere has there been a resolution about the possibility of adjusting the plan (state orders), even in the case of natural disasters. It is absolutely clear to everyone—to the leaser and to the leasee—that there are objective reasons why the plan cannot be carried out no matter what. In this case the entire material loss is placed on the

shoulders of the leasee, which today, with the generation of this form of economic relations, may undermine it. In our opinion, planning organs should expedite a solution to this problem.

This year precision in the timely and quality fulfillment of all agrotechnical methods for cultivating cotton and other crops is required as never before from all specialists, brigade leaders, machine operators and irrigation workers. Our harvest will depend on how we use the fuel, fertilizer and water. Despite the late resowing schedule on large areas, the supporters of late top dressing in the quest for the accumulation of one more boll, which in the final analysis remains on the plant unopened, must this year turn away from this practice. This refers especially to the enterprises of Fergana Valley, where late top-dressing and many days of irrigation with an adequately-high total of effective temperatures mitigated the effect of negative factors somewhat. This year, when over 200 degrees of effective temperature have already been lost and when according to the predictions of weather forecasters, an underproduction of the same amount is expected, harvest losses may be very large. Only the skill of farmers, balanced and early top dressing, light and medium irrigation on heavy soils instead of heavy irrigation can secure an earlier opening of bolls and somehow decrease losses resulting from spring frost.

Resowing Emphasized

18240176 Tashkent SELSKAYA PRAVDA in Russian
16 May 89 p 2

[Article by G. Ibragimov and A. Ligay, candidates of agricultural sciences and R. Isayev and G. Sprintsson, agronomists of UzSSR Gosagrprom: "Optimal Density for Each Map"]

[Excerpts] This spring's weather conditions have created many extra worries for cotton farmers. Continuing low temperatures in April severely slowed down the appearance of shoots and the development of young plants. On large areas crops suffered from downpours. Frost in early May incurred especially great losses. For this reason alone it will be necessary to resow up to 600,000 hectares of cotton.

Today grain farmers are carrying out intensive work to eliminate the consequences of the natural disaster. Agrotechnical measures are being carried out in a differentiated manner depending on the condition of the crops. Extensive work has been done to break up the soil crust. In places where the soil contains little moisture stimulation watering is being carried out along short channels through interrows. The resowing of cotton is proceeding at an accelerated pace. Under today's conditions the cultivation of interrows is especially important because due to the low temperatures young cotton shoots are in no condition to withstand root rot and other diseases. For this reason we need to aerate the soil and to top dress.

However, all of these agrotechnical measures will not provide the desired result if supplementary sowing is not carried out in sparse fields or thinning in dense fields in order to create the optimal crop stand for cotton for each specific field. This operation is one of the most important at the beginning of the vegetative period.

Under the weather conditions that have developed, in many fields and even in rows shoots are quite non-uniform. For this reason it is very important to determine the sparse sections on each map and, without waiting for the optimal period for thinning, i.e., the development of 2-3 real leaves, to begin additional sowing. Since there are many such spots this year, with wide-row crops we should use two belt sowers—next to the rows where the shoots are. In places where sparseness is not great auxiliary sowing is performed manually. Often this work is carried out incorrectly—holes are made too close together at 15-20 centimeters, repeating the accepted scheme for sowing using a sower. This makes supplementary sowing much more complicated and most important, prolongs it, as a result of which it is often not completed. We need a distance between holes of no less than 40-45 centimeters in the row. Five to six seed should be placed in a hole with the subsequent retention of 2-3 plants, which is completely adequate for producing a large harvest. Let us remember the times when the square-nest sowing method was used with a scheme of 60x60 and large yields were nevertheless produced.

Accelerating the development of cotton during the first period of its life depends to a significant degree on the time of thinning. If uniform, dense shoots are not thinned in a timely manner the plants oppress each other, become lanky and weak and suffer more from disease and pests.

[passage omitted]

The "Scientifically-Based System of Agriculture" has been developed for each zone of the republic and has been published in a large printing. It details the information on crop density. Unfortunately, not all local specialists know about and adhere to these recommendations, and as a result extensive deviations from the optimum norm are tolerated. In a number of zones (Fergana Valley, Kara-Kalpak and Khorezm oblasts) there are fields in which the density of the crop stand does not exceed 70,000 plants whereas in Syr-Darya and Tashkent oblasts there are fields on which by fall the number of plants on 1 hectare reaches 180,000-200,000. Such deviations bring losses to the harvest and to the quality of the fiber and the seed.

POST-PROCUREMENT PROCESSING

Sunflower Production Problems Remain Unresolved

18240182 Moscow SELSKAYA ZHIZN in Russian
25 May 89 p 2

[Article by S. Yevstafyev, head of a sector in the USSR People's Control Committee, V. Dergausov and M. Silvanovich, inspectors, Moscow: "Why Has Sunflower Seed Been Rejected?"]

[Text] Nobody is surprised by the fact that we do not

have sufficient olive oil—indeed we purchase it for currency in countries having a subtropical climate. It is considered to be a luxury.

On the other hand, our country possesses an unlimited potential for producing adequate amounts of other vegetable oils and particularly sunflower oil. But it turns out that there is a "tense situation" here. In order to fill up the counters, it has recently become necessary to increase the volumes of this product being purchased abroad. And in 1988 we produced only 3.1 million tons instead of the planned amount of 3.8 million.

This is hardly enough for tomorrow. In order to have 4,340,000 tons of oil in 1990, as called for in a special decree of the CPSU Central Committee and the USSR Council of Ministers, 11 million tons of seed must be obtained and the level achieved in 1988 was only 7.5 million tons.

The USSR People's Control Committee has checked the situation with regard to the production and processing of oil raw materials in 24 oblasts and krais of the Russian Federation and the Ukrainian SSR, where 80 percent of all of the oil crops are grown and 60 percent of the vegetable oil produced. The picture is not very encouraging.

As a rule, the worst fields are made available for these crops and the agricultural practices are violated. Intensive technologies are introduced into operations on a very slow basis. For example, they were employed last year in the RSFSR on 46 percent of the areas sown in sunflowers and in the Ukrainian SSR—on 69 percent.

And many of the fields are overgrown with weeds. Strange as it may seem, the cost accounting field crop husbandry collectives, in the interest of realizing economies, are very stingy in their allocations of mineral fertilizer and plant protective agents. And the sunflower plantations are the first to suffer in this regard. As a result, this widely used oil-bearing crop is producing low yields: last year, for example, only 14.3 quintals of "seed" were obtained per hectare throughout the country as a whole. Such scanty yields only result in further reductions in the sunflower growing areas. Where will the oil come from?

Of 25 oblasts, krais and autonomous republics in the RSFSR, all of which have tasks for delivering oil-bearing seed, only nine fulfilled their obligations. Krasnodar Kray, for example, fulfilled its delivery plan by only 65 percent, Kuybyshev Oblast—by 68, Saratov Oblast—by 69, Volgograd Oblast—by 79 and the Bashkir ASSR—by less than 50 percent.

And indeed, one would think that governmental measures would have been adopted aimed at raising the interest of the kolkhozes and sovkhozes in producing the raw materials required by the oil mills. It is recalled that in olden times the technical crops were viewed by the

kolkhozes and sovkhozes as a type of "child's play" as they furnished the cash registers with considerable amounts of "live" money. What has changed? Why has sunflower seed been rejected?

During the years that USSR Gosagroprom [State Agro-Industrial Committee] has existed, the question as to which echelon should have the equipment required for the preliminary processing of oil-bearing raw materials has remained unresolved. In any case, the kolkhozes and sovkhozes do not have adequate capabilities for drying and sorting the seed. It was mainly because of this reason that last year the grain receiving enterprises were supplied with 350,000 tons of water-logged seed and 796,000 tons containing oil impurities in excess of the norm. But indeed, preparations had not been made here to accept and protect the raw material in a proper manner.

Quite often the enterprises in the grain products system not only fail to improve but in fact they bring about a deterioration in the quality of the oil-bearing seed. And in order not to make matters worse, they strive to slow down the acceptance of products from the farms. This in turn slows down the harvest rates and increases the losses in the crops already grown.

The oil mills are also resorting to such tricks. The reason is the same: as a rule, they do not have adequate containers or equipment for the storage and processing of the raw materials. As you can see, this important element in the chain—drying, processing, sorting and storage of the seed—continues to be unresolved.

Many examples could be cited illustrating what serious consequences can derive from this. For example, at the Georgiyevsk Oil Extraction Plant in Stavropol Kray, the drying equipment is capable of handling only 30 percent of the raw material being received from the farms. Approximately 18,000 tons of sunflower seed were spoiled here over a period of 2 years. The Nevinomyssk plant is also in an unsatisfactory state. As a result, oil production in Stavropol Kray has declined by one third, with 100,000 tons of raw material being shipped outside the kray for processing.

Compared to 1986, processing operations in Kuybyshev Oblast have declined by 20 percent. Here, at the Bogatovskiy plant, the capacity of the storehouses is less than the amount required by a factor of 10 and no drying or processing of the raw material is carried out. Last year, almost all of the oil produced was suitable only for technical purposes.

The fixed capital at other plants of the branch has also become obsolete. Inspections were carried out at 43 enterprises and it was discovered that the technological requirements are not being met on any one of them. The oil extraction lines are showing an extreme degree of wear and tear and have not been renovated over a period of more than 20 years. In the Russian Federation alone,

of 29 plants which were visited by a USSR KNK committee, 11 were found to be in critical condition and 13 are employing the antiquated dual pressing technology. Compared to 1985, the processing capabilities have decreased by 15 percent. Over the past 2 years, more than 40,000 tons of the 1st class seed was even declared to be unsuitable for use as food oil.

Over a period of 3 years, the increase in capabilities at plants in the Ukraine amounted to one fifth of the task. Use was made of one third of the capital investments made available. A backward technology is being employed at the enterprises. It was by no means an accident that 168,000 tons of inedible oil were obtained from high quality raw material.

Customers are often heard complaining over the fact that the sunflower oil has deteriorated to the point where it is beyond recognition. Indeed, the trade is being supplied with oil that is of extremely low quality and with an acidity level that exceeds the permissible norm by a factor of one and a half. And what about Gosstandart [State Committee for Standards of the USSR Council of Ministers]? This year it approved deliveries to trade and public catering in the amount of 366,000 tons of low quality oil, or one half of the entire market fund.

In addition to the above, it bears mentioning that the system established by the government for providing economic incentives for farms engaged in the production of oil-bearing seed is being violated in many regions. The delivery agreements do not reflect the obligations of the procurement specialists with regard to counter sales of oil-seed meal, mixed feed, oil at favorable prices, equipment or mineral fertilizer. Nor have the conditions for above-plan production been defined in them.

Why is it then that the sunflower plantations are no longer being praised and the oil is not characterized by an amber color and appetizing aroma? I have no fear of repeating myself with the reply: it is the result of disorganization which abounds along the entire path followed by the seed—from the fields to the plants and from the plants to the counters.

MACHINERY, EQUIPMENT

Incomplete Equipment Deliveries Aggravate Parts Shortage

18240210 Moscow SELSKAYA ZHIZN in Russian
18 Jul 89 p 1

[Article by A. Popov, special correspondent: "So Far Merely Statements: Incomplete Sets of Equipment Continue To Arrive in Rural Areas: Shortage of Spare Parts Grows Worse"]

[Text] Yuriy Vasilyevich Ivanov, deputy chairman of the Kolkhoz imeni Gorkiy in the Moloyaroslavetskiy Rayon, recently telephoned our editorial office from Kaluga Oblast.

"We purchased a Don-1500 combine at the rayagrosnab [rayon agricultural supply] center, but the cab has no air conditioner. Why does the plant ship out such machines without complete sets of equipment?!"

Before putting this question to the machine builders, I went to see the people at USSR Gosagroprom.

"So an air conditioner is missing there! Figuratively speaking, that's just a speck of dust in such matters. With other people the situation is even worse. On many farms new combines are lacking harvesters! They have not been shipped out by the manufacturing plants. And approximately 800 Don-1500 combines have been accumulated at the centers—they are complaining there too."

As is known, such an abnormal began to evolve right after these machines first started coming off the assembly line. Last year USSR Gosagroprom informed the USSR Council of Ministers Bureau of Machine Building about this and requested that they see to it that equipment is shipped out to the rural areas only in accordance with the engineering specifications both as to quality and as to the completeness of the sets involved.

"Following this, our departments drew up a protocol which provided a three-month deadline for making up the lag," stated Yu.V. Pankov, chief of administration. "The deadline passed, but the plants have not yet fulfilled their obligations, and the situation has become even worse."

Yes, the Ministry of Automotive and Agricultural Machine Building has not paid attention to solving these long-standing problems. And clumsy, foolish planning has contributed a reshuffling to this situation. Thus, for 1989 the Rostselmash PO was ordered to manufacture about 15,000 threshers, but the production capacities of the Tula enterprise where harvesters are produced were designed to turn out only 10,000-12,000. Just who is doing such planning?

In accordance with the agro-engineering requirements and technical assignments, three types of harvesters were developed for the Don-1500—with working widths of 6.0, 7.0, and 8.6 meters.

They passed their tests and were recommended for production. But the Ministry of Automotive and Agricultural Machine Building has been in no hurry to manufacture them.

A year ago headers were produced with a working width of only 6 meters, although those with 7-meter widths are also needed. At present the situation is no better. Provisions have been made to deliver only 1,000 of the 7-meter harvesters and only 200 with a working width of 8.6 meters. Attachments have also been developed for

the new machine in order to harvest many kinds of crops. But so far these combines have been operating for a few days during a season and only for harvesting grain crops.

Moreover, an analogous situation has evolved with the Niva set of equipment. The gap with regard to harvesters has reached almost 5,000. The reason is the same: the Tula plant has not succeeded in manufacturing them. In Gorkiy Oblast there are 114 combines without harvesters, in Ryazan Oblast—103, in Bryansk Oblast—94, in Smolensk Oblast—64, while in the Chuvash ASSR there are 162. In the Non-Chernozem area as a whole there are 1,337 combines without harvesters. Obviously, the leading officials of the ministry must do some serious thinking about how to set things straight in the production of harvesters at other enterprises, where there are a great many under-loaded capacities.

Upon analyzing this situation, one gets the impression that the leading officials at the Ministry of Automotive and Agricultural Machine Building even now, during the period of perestroika, are not taking into account the interests of the rural areas; they are not heeding the requests coming from there.

In connection with this, we cannot fail to mention the grave situation with regard to providing farms not only with grain-harvesting but also with other machines. Thus, for example, during this five-year plan the plants "owe" the rural areas 118,000 tractors. Over the last two years the country's APK [agro-industrial complex] has seen a shortfall of about 6,000 trucks and an equal number of scrapers. Moreover, during the current year, referring to the decisions of labor collectives, a number of enterprises and associations have refused to take part in the fulfillment of funds allocated by USSR Gosplan and USSR Gosnab, nor have they concluded contract agreements to supply the APK with more than 20,000 trucks, 19,000 tractors, 17,000 trailers, as well as a significant amount of roadbuilding machinery.

Among those who have an irresponsible attitude toward the requests of rural workers, one may cite the following: the Kharkov Tractor Plant PO (V.V. Biblin, general director), the Bolgar GPO (N.M. Budko, general director), the Southern Machine-Building Plant PO (L.D. Kuchma, general director). And the collective of the Gorkiy Plant refused to make 4,400 motor vehicles, the Kuttaiskiy Motor-Vehicle Plant PO—6,200 KAZ trucks, and the KamAZ PO—3,800 vehicles.

The critical situation with regard to food and the delivery of agricultural equipment was spoken about with concern at the Congress of People's Deputies. But the matter has not gotten off dead center. At the recently held session of the All-Union Operating Staff for Material and Technical Support of APK Enterprises and Organizations it was also noted that the procurement of animal feeds is now proceeding on the country's kolkhozes and sovkhoses, and the harvesting of the crops

is beginning to swing into action. But the performance of these operations has been made difficult by the shortage of equipment, spare parts, and repair materials.

By 15 July the collective of the Kharkov Tractor Motor Plant had shipped out only 77,100 of 284,200 filter cartridges, whereas the Pavlodar Tractor Plant PO during the first six months of 1989 had shipped out only 13,200 of 20,000 balance wheels.

A large amount of the deficit spare parts for tractors is the fault of the Melitopol Tractor Hydraulic Units Plant, Volgograd Tractor Plant PO, Alma-Ata Porshen, and other enterprises under the jurisdiction of the USSR Ministry of Automotive and Agricultural Machine Building. The following production associations have not fulfilled the plan for the delivery of belts: Yaroslavrezinstekhnika, Karagandarezinotekhnika, Volzhskorezinotekhnika under the Ministry of Chemical and Petroleum Machine Building. Also far behind where they should be in supplying items to the rural areas are the plants under the Ministry of the Electrical Equipment Industry, the institutions within the system of the USSR Ministry of Internal Affairs, as well as other ministries and departments.

In connection with this, I turned to G.S. Kirichenko, the deputy minister.

"The Ministry of Automotive and Agricultural Machine Building knows about the above-mentioned problems," said Georgiy Sergeyevich. "We are seeking various possible solutions. This year we are making more harvesters than threshers, and the gap will be reduced. We are increasing the capacities of the Tula Plant. In order to help the latter, we have 'switched in' the Krasnodar Combine Plant. It has already manufactured about 2,000 harvesters for the Niva combines."

We have heard quite a few different statements. One can only wish that, this time, they will be the last such statements necessary.

Improvements to Wholesale Trade of Farm Machinery Suggested

18240203 Moscow EKONOMISCHESKAYA GAZETA in Russian No 26, Jun 89 p 12

[Article by Candidate of Economic Sciences V. Putov, Central Institute for Agrochemistry Services, under "New Economic Mechanism" rubric: "What Is Hindering Wholesale Trade?"]

[Text] Ask any lessee, cooperative worker or kolkhoz chairman and he will tell you that practically the main difficulty for the rural areas today is the lack of development of wholesale trade in machinery. As was noted at the Congress of People's Deputies, it is being developed extremely slowly. Why?

The complex of material-technical production of USSR Gossnab (established on the basis of agrosnab [agricultural supply]) deals with wholesale trade in the means of production for the agricultural industry. This is perhaps the largest and most extensive system for the material and technical supply of the branches of the national economy. It is composed of 3,400 enterprises for material and technical supply and procurement, in which 237,100 workers are employed. The total volume of sales in 1987 was 45.7 million rubles.

All-Union, republic, kray and oblast agencies for the material and technical provision of the agro-industrial complex along with the merchandise supply network are now being turned over to the system of USSR Gossnab. In addition, it has been found expedient to implement the material and technical provision of the enterprises and organizations of the agro-industrial complex under the territorial principle.

The main condition for the successful development of wholesale trade, of course, is the saturation of the market with highly efficient kinds of output. Only this will make it possible to make the choice of the means of production real and accordingly to make claims and demands on suppliers.

The transition to wholesale trade under consumer orders on the basis of contracts raised many questions for the managers of supply organizations. Above all there has heretofore not been a reliable mechanism for revealing the real needs of consumers taking into account their financial possibilities. Nor has the problem of linking these needs with the basic directions of resource saving been resolved. The question of the provision of consumers with physical resources in the event that the supplier plants are not prepared to saturate the market with needed agricultural machinery is unclear. The shortage of warehousing space and areas for commodity stocks in seasonal demand is also restraining wholesale trade.

Regional exhibitions and fairs of technical industrial output are a substantial help in determining the demand of consumers for farm machinery and equipment. There they annually sell material and technical resources for 300 to 500 million rubles and farms present complaints against the USSR Ministry of Automotive and Agricultural Machine Building. With the help of exhibitions and fairs, for example, there has been a reduction of 1988 orders from industry by 150 million rubles, in particular for the production of SK-6 "Kolos" silage-harvesting combines, KPG-2.2 cultivators, SKPP-12 sowers, KAZ-608 motor vehicles and others.

In January 1988, a new Model List of machines, equipment, instruments and goods for production sold under wholesale trade was confirmed. It included tractors, motor vehicles, articulated dump trucks, saddle prime movers, agricultural machinery for plant growing,

machines and equipment for animal husbandry and fodder production, industrial repair equipment, instruments, spare parts and other goods for production.

Many farm machines are shipped by supplier plants in a dismantled form. In wholesale trade, however, farms will not want to acquire dismantled and incomplete machines. Their assembly remains a serious problem. In 1988, for example, assembly points for machines were organized in only two-thirds of administrative rayons, where about 60 percent of these machines were assembled, which is clearly inadequate.

What is the conclusion from the existing situation? In my opinion, it is necessary to organize the assembly of farm machines everywhere—at supply bases (or repair enterprises), for example. They could act as mediators between farms and supplier plants. Then there would be no "bargaining" with the USSR Ministry of Automotive and Agricultural Machine Building about who is supposed to assemble farm machinery.

It would also be expedient to segregate production sections for the assembly of farm machinery to an independent balance. And subsequently to shift them to cost accounting or lease them. In those regions where there are not yet such production sections, it would be possible to organize them on a cooperative basis.

Today it is essential to raise the responsibility of supply organizations for the provision of farms with the dependable equipment that they need. Then there will be no idle time of equipment through their fault (because of a lack of spare parts, incomplete equipment, etc.). Cost accounting must link the enterprises of the agro-industrial complex in a unified system with respect to wages as well as the payment of bonuses.

The problem of providing farms with spare parts remains serious.

Although the sale of spare parts for motor vehicles, tractors, agricultural, earth-moving, road-building and other machinery has been "shifted to wholesale trade," the parts needed for farms have been and are lacking. This leads to idle time of equipment at kolkhozes and sovkhozes. In many positions, not enough spare parts are being issued. In 1988, for example, the agrosnab of Tatarskaya ASSR received only 17 percent of the required number of spray nozzles for SMD-72 engines and one-third of those needed for the A-41, A-01 and SMD-60 engines. The provision of individual parts for cultivating, sowing and irrigating machines was inadequate.

This is happening because the supply services at all levels are doing a poor job of defending the interests of kolkhozes and sovkhozes in placing orders for spare parts with industrial enterprises. They are setting limits for consumers (that frequently do not correspond to the needs of farms and repair enterprises) and instruct them

to submit requests only within these limits. This is the reason that there is supposedly no shortage of parts. It is natural that under these conditions the readiness of equipment to work is low.

It appears that the time has come to abolish the limit on orders and the production of spare parts and to produce them in accordance with the actual need.

One of the directions in the further improvement of the organization of the material and technical supply of enterprises and organizations in the agro-industrial complex and of lessees and agricultural cooperatives is the

establishment of local interfarm cooperatives for material and technical supply. In the RSFSR, for example, they have already formed more than 150 such cooperatives with the help of the "Agropromsnab" All-Union Scientific Production Association. Cooperatives are also being established in other union republics. A special feature of this new supply system is the merging of the economic interests of the cooperatives and farms participating in the cooperation. This makes it possible to accelerate the expansion of the volumes of the sale of physical resources needed by farms under the conditions of wholesale trade.

Sale of Industrial Technical Output in Wholesale Trade (millions of rubles)

	1987		1988	
	Total	in percent of warehouse sales	Total	in percent of warehouse sales
USSR	3,100	10	6,409	27
RSFSR	1,500	9	2,026	26
Nonchernozem zone				
RSFSR	—	—	992	24
Ukrainian SSR	700	13	1,268	31
Belorussian SSR	200	12	444	26
Uzbek SSR	180	20	300	35
Kazakh SSR	216	9	523	26
Georgian SSR	10	4	59	24
Azerbaijan SSR	25	7	96	26
Lithuanian SSR	29	6	141	28
Moldavian SSR	100	23	120	25
Latvian SSR	20	7	111	33
Kirghiz SSR	10	4	75	27
Tajik SSR	13	6	44	19
Armenian SSR	12	8	34	20
Turkmen SSR	15	7	85	38
Estonian SSR	70	25	91	32

I would also like to touch on the problem of the setting of prices for farm equipment. Farm machines are a means of production in seasonal demand but the supplier plants work the year round. This is why a unified markup free consumer farm is in operation in the organization of the wholesale trade in the output for technical industrial purposes in the agro-industrial complex. For the farms to be interested in acquiring machinery throughout the year and not just at the beginning of field work, it would be advisable to differentiate this markup according to the period of the sale of the equipment. When it is acquired at the beginning of field work, it is necessary to collect from the farm a maximum markup free consumer farm (according to our estimates, it could amount to 14.3 percent of the value of the machinery).

To exclude "profitable" and "unprofitable" commodities in centralized deliveries, it is also necessary to differentiate the markup free consumer farm with

respect to the cost-intensiveness of the delivery of material and technical resources. For example, it could amount to 4 to 6 percent of the value for self-propelled equipment, 9 to 11 percent for farm machinery and equipment, 13 to 15 percent for spare parts, industrial rubber products and instruments, 11 to 13 percent for building materials and lumber and rolled metal, and 8 to 10 percent for other kinds of goods for production.

Because farm equipment is becoming more expensive all the time, it is necessary to review systematically the size of the markup free consumer farm. Under the same natural volumes, the value volumes are substantially higher and accordingly the size of the markup is greater at the same expenditures of the supply bases. In addition, in connection with the transition to cost accounting at agricultural enterprises and the abolition of preferential prices for agriculture, the absolute size of the markup free consumer farm increased sharply (with the same overhead).

The restructuring of the economic mechanism of the enterprises and organizations of the agro-industrial complex must take place based on the priority of the interests of the consumers of resources and not of producers and mediating organizations. For this purpose, it is necessary to lower wholesale prices for obsolete machines by at least 50 percent. It will then be unprofitable for labor collectives to produce this equipment.

One could also reduce the prices for equipment of low quality.

In our view, it is advisable, especially for machinery of low quality (and preferably for all), to pay 50 percent of the value of a new machine at the time of acquisition and the remaining half after the end of the warranty period, with the deduction of repair expenditures during the warranty period.

More than 50 localities for the hiring of technical means have been established for the improvement of the provision and servicing of the farms of the union republics. Cooperatives are also being established for the sale of surplus and unused output. The existing information and computing centers (there are now 171 of them) mainly equipped with highly productive computers are helping in the development of wholesale trade. Finally, overhauled tractors, engines and machine units valued at more than 1.5 million rubles are sold to farms through technical exchange stations. All of this certainly has a positive effect on the satisfaction of the needs of farms for equipment.

AGROTECHNOLOGY

VASKhNIL Academician: Chemicals A Mixed Blessing in Agriculture

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[Interview with VASKhNIL Academician V. Yagodin by V. Itkin, TASS correspondent for PRAVDA in Moscow. For an earlier warning by Academician Yagodin see UEA-89-12, 13 May 89, pp 39-41]

[Text] Thirty years or so ago, a necessity to be seen on many fields was a wooden stake with arms and a cap that was full of holes. At the time, this was considered to be the only means for combating pests, if in fact birds could be considered as such.

Today we have more serious things available for this purpose. There are those who are terrorized by such words as "mineral fertilizers," "herbicides" and "pesticides." The ecological typhoon that has descended upon the world is prepared to reject all "chemistry" from agricultural practice. Is this truly a vital need or is it simply overcautiousness?

Our discussion with Academician B. Yagodin began with these questions.

[Yagodin] Nowhere else do we find stronger prejudice against scientists by agricultural leaders than here in Russia. This is not my thought. It belongs to agronomist A. Bernshteyn, who lived in the middle of the last century. At that time, he stated that with each step taken we hear the statement being made that the land is being spoiled as we fertilize it with lime.

One and a half centuries have passed and the problem not only continues but in fact it is now extremely aggravated. For the past 10 years it has been ignored. Meanwhile, the wheel of the agrochemical science is moving in such a manner that it has become extremely difficult to halt it, slow it down or move it onto another track. At times, it appears to be useful to recall certain statutes from the rich scientific heritage of the founder of Soviet agronomic chemistry, Academician Dmitriy Nikolayevich Pryanishnikov.

[Itkin] It bears mentioning that Pryanishnikov was at times reproached for his paradoxical statement that Russia should not have exported grain at the end of the last century. It should have done just the opposite—it should have purchased grain. The country is presently importing a portion of its grain.

[Yagodin] The vegetarian ration for peasants of that period is generally well known. Instead of feeding 4-5 poods of grain to the livestock and obtaining a pood of meat, the grain was sold. Today's food ration is more rich and the population has increased "in all" by 130 million individuals.

[Itkin] Quite often we hear: "We are tormenting ourselves with fertilizers." And there are those who are appealing for a rejection of "chemistry."

[Yagodin] Let us look at the statistics. There are approximately 0.8 hectares of arable land for each inhabitant of the country. The population is increasing. And by the year 2000, according to estimates, it will reach 300 million. In the absence of agricultural intensification, the food problem will become even more aggravated. In the absence of fertilizers—mineral and organic—we will not be able to manage.

[Itkin] Boris Alekseyevich, at the market, the kolkhoz members and cooperators, when presenting their goods, placed a sign in front of them: "Grown without mineral fertilizer but using farmyard manure." And do you know, the goods, notwithstanding the high prices, sold like hotcakes.

[Yagodin] This was the result of ignorance on the part of both the salesmen and the customers. One cannot be placed in opposition to the other. In discussing this subject, Academician Pryanishnikov indicated to the contrary that they supplement one another. Those who

advocate the use of only organic materials must be aware that a real ecological threat is posed by the farmyard manure run-off of large-scale livestock husbandry complexes.

For some reason the population and some specialists reached the firm but completely erroneous opinion that output quality is lowered when the harvest is increased by means of mineral fertilizers. Our scientist-agronomists have other data at their disposal. With the aid of nitrogen, the protein content in wheat can be increased. Phosphorus and potassium are capable of increasing the amount of starch in potatoes and sugar in beets. A real opportunity exists for obtaining products with the desired structure in terms of elements. At the same time, we must not ignore data which underscores a reduction in output quality when use is made, for example, of chlorine-containing fertilizers.

[Itkin] Does this mean then that those who oppose nitrates are correct?

[Yagodin] It is true that nitrogen fertilizers contribute to the nitrate problem. Nitrates accumulate in vegetables even when use is made of average or low dosages of mineral fertilizer and also at times when no fertilizer whatsoever is applied.

What is this associated with? Quite often with warm and damp growing conditions for the plants, with a disruption in the light regime or with damage or improper storage of the finished products. It is here that high dosages of farmyard manure have an effect.

[Itkin] We are somehow caught in a "metal press"—a polluted atmosphere. Organic compounds enter our food and water against our will. But why has the nitrate problem become aggravated? Is it not because they can be easily detected at the present time?

[Yagodin] Certainly! Costly instruments are needed in order to determine the content of heavy metals in products. Compared to nitrates, the problem of contamination of the biosphere by heavy metals is considerably more critical. Some phosphorus fertilizers contain cadmium, strontium, fluorine and even uranium. Here a decisive role is played by the initial raw material. Our country is fortunate in this regard. The apatite of the Kola Peninsula is of the "purest" type. The cadmium contained in it is 20-30 times less than that found in phosphates in the U.S.A.

But here is the paradox: on the one hand, we purchase grain from abroad and, on the other, we are exporting very pure phosphate fertilizers. We are selling millions of tons of these phosphates for currency which we thereafter spend for grain. But in the process we procure almost five times less grain than could be obtained if we used this fertilizer ourselves.

[Itkin] A decline in output quality is associated with an excess of fertilizer. Thus, does the problem have to do with our employing excessive dosages?

[Yagodin] It makes no sense to discuss excessive dosages. One fourth of the grain fields and one tenth of the vegetable plantations are receiving no fertilizer whatsoever, while the corresponding dosages in developed countries are higher by several times than those in our country. There an equal amount of concern is displayed for both output quality and for growth in the harvests. Quite often there is not even space for the usual advertising on the labels or product packaging—such space is taken over by information on the chemical composition of the product.

[Itkin] And what is preventing us from doing this?

[Yagodin] I can give you a simple answer: a shortage of knowledge and culture on the part of both our specialists and the population. Certainly, some guilt rests here with those who train agronomists and agricultural-chemists for the rural areas. It is difficult to explain why the agrochemistry and soil science faculties at the Leningrad and Perm agricultural institutes and the Belorussian Agricultural Academy have been closed down. Moreover, where can the knowledge be obtained if agricultural chemistry for all practical purposes is not being taught at the technical schools? But let us look at the assortment of fertilizers being produced. It is extremely limited. Technological discipline is also low. It is easier to report to a leader regarding the amount of fertilizer applied than to bother oneself with the development of a scientifically sound system for the use of chemical processes on each specific field. Indeed almost no control is being exercised over output quality.

Despite the results of fires, nobody has attempted to forbid mankind from using fire. The same sense should be applied in the case of chemical processes.

[Itkin] In the published draft USSR Law on Output Quality and Protecting the Rights of Consumers, the notion that an increase in the production of food goods must not be achieved through a reduction in the quality of these goods is clearly apparent.

[Yagodin] This opinion is shared by agricultural specialists, hygienists, dieticians and ecologists—by practically the entire population. I believe that the chief responsibility of an agronomist-agricultural chemist is that of displaying concern for output quality.

[Itkin] What role is played by agricultural chemistry? Is there a possibility of programming the content of elements in plants?

[Yagodin] Tremendous opportunities are available in our modern agricultural chemistry. From the standpoint of science—it will be out of ignorance and from the

standpoint of economics it will be the result of a lack of responsibility if intelligent use is not made of the rich natural fund that is available.

The chief task of agricultural chemistry—to control the rotation and balance of elements in the “soil - plant” system by programming the fertility of the land and output quality.

[Itkin] Boris Alekseyevich, materials appear from time to time in the press indicating that a particular farm has rejected entirely the use of “chemistry.”

[Yagodin] What will happen to the soil after several years of such use of it? Once again I repeat that our misfortune rests not with the fertilizers themselves but rather with the ignorant use of them.

POLICY, ORGANIZATION

Restructuring of Capital Construction Viewed

18210019 Moscow *PLANOVOYE KHOZYAYSTVO* in Russian No 2, Feb 89 pp 29-38

[Article by N. Fomichev, chief of a section at USSR Gosplan: "Effectiveness of Management and a State Order in Capital Construction"]

[Text] During the 19th All-Union Party Conference, emphasis was placed upon the fact that capital construction is continuing to restrain economic growth and quality structural changes in the economy. In examining fulfillment of the state plan for economic and social development in the USSR during the first 6 months of 1988, the USSR Council of Ministers noted that: "The status of affairs in capital construction continues to remain tense, many tasks concerned with the placing in operation of productive capabilities and projects in the socio-cultural sphere have not been carried out and increases have taken place in the volumes of unfinished construction. In this most important sphere of the national economy, an economic mechanism has not been worked out which would ensure an improvement in the effectiveness of capital construction."¹ The mentioned problems were analyzed thoroughly and completely in the preparatory committees and during a session of the USSR Supreme Soviet (October 1988). They are arousing concern at all administrative levels.

In recent years, a conflict has developed between the tasks concerned with the timely and high quality satisfaction of social requirements and the effect of the economic mechanism on the final results of capital construction. A requirement exists at the present time for ensuring that the work of builders is planned and evaluated according to their principal contribution towards the placing in operation of the totality of productive capabilities and projects within the normative (planned) periods, their high technical level and quality and on this basis realizing an increase in the growth in national income. Such goals can be achieved by raising the effectiveness of the entire investment process. This will promote the dynamic and planned-proportional development of the national economy. However, the economic mechanism in the principal echelon of construction production is associated to a greater degree with the gross expenditure approach rather than with the final result—the placing in operation of capabilities and projects.

Operational Results. Expenditures and Final Results.

What have we learned from almost 3 years of operational experience by builders under the new managerial conditions? No radical changes were noted in the investment process during 1986, the dispersion of capital investments was not overcome and the plans for the placing in operation of fixed capital and production capabilities were not fulfilled. Of the 1,939 units of capabilities and

projects called for, approximately 1,300 or 67 percent of their overall number were introduced into operations. At the same time, the volume of contractual work increased by 6 percent and labor productivity (output) computed on this basis—by 4.3 against a plan which called for 3.5 percent; in the construction complex the figures were 6 and 4.6 percent respectively. The fulfillment of the plan for the placing in operation of fixed capital was as follows: in the fuel-energy complex—87 percent, metallurgical—83, machine building—77, chemical-forestry—78 and construction—87 percent.

In 1987, the tasks for the placing in operation of fixed capital and for the use of capital investments were fulfilled by 92 and 97 percent respectively. A considerable portion of the capabilities "accumulated" in the inventory. Roughly 1,044 units of capability and projects of the state plan nomenclature were turned over for operation, or 71 percent of the task. Just as in 1986, the placing in operation of fixed capital ranges from 76 percent in the chemical-forestry complex to 91 percent in the fuel-energy complex. The volume of contractual work increased by 5 percent and labor productivity—by 6 percent; in the construction complex—by 6 and 7.8 percent respectively.

The status of affairs did not improve in 1988. The tasks for the placing in operation of capabilities were not fulfilled. Of 858 project of the state order, only 583 or 68 percent were introduced into operations.

It turns out that a construction organization can exist without having to turn over to the national economy the needed productive capabilities within the planned periods. The non-rhythmic placing in operation of projects is a reflection of the gross approach. As a rule, in the plans of clients and contractors and also actually in accordance with the reports for a number of years, the volume of capabilities and projects introduced into operations during the third and fourth quarters of a year amounts to 60-70 percent and often such a proportion occurs during the fourth quarter. It turns out that their introduction into operations is not required either by the client or the contractor. Expenditure economic manages in the absence of a final result.

When carrying out the tasks for placing productive capabilities and projects in operation to the figure of 71 percent, the volume of contractual operations increased by 6 percent and labor productivity—by 7.9 percent. In the process, the plan for contractual operations was fulfilled by 103 percent and for underway projects—by 97 percent. The process of constant displacement of forces and material resources from underway to transitional (carry-over) construction is defined by the branch's system of economic relationships: cost indicators for the overall volume of capital investments and construction-installation work are being fulfilled and over-fulfilled and the tasks for placing capabilities in operation are being underfulfilled.

In accordance with the volume of contractual operations, the plan for nine months of 1988 was fulfilled by 101 percent, labor productivity—by 7.7, profit—by 11.6 percent and the placing in operation of capabilities (in accordance with a state order) amounted to 64.7 percent, that is, 130 units. During this same period, the plans called for the placing in operation of 181 capabilities of those not introduced into operations in 1987. And even 9 months later only 126 units—or 69.7 percent—had been placed in operation. Thus, 77 percent of the annual plan was held over for the fourth quarter. Such a rhythm precludes the possibility of achieving the desired work quality or effectiveness. Resources become immobilized—above-normative unfinished construction increased by 5 billion rubles and amounted to 133 billion rubles by the end of 1988. The builders received approximately 1 billion rubles in wages for the creation of "unfinished construction projects." This was the result of a trend towards expanding the construction front and dispersing capital investments, a trend which is continuing. The economic mechanism introduced into construction in 1986 is restraining perestroika in this branch.

The former gross approach is being continued: the chief consideration—to maintain the average volume indicators for a construction organization, trust or ministry as a whole at the 100-101 percent level. And that which is needed for the national economy (placing in operation of capabilities and projects) is being carried out on the order of 65-70 percent.

The profit formed on the basis of gross work volume increased from 11.7 billion rubles in 1985 to 17.8 billion in 1987, or by 52 percent. Such an increase could be an important source for overall savings in the national economy if it would simultaneously ensure the placing in operation of the totality of productive capabilities and, in conformity with this, bring about an increase in commodity volume. In the case of non-fulfillment of the plan for placing capabilities in operation, the additional profit becomes a reflection of the branch's gross approach and of the growth in unfinished construction and its cost. The profit turns out not to be supported by finished construction output. The same holds true for an increase in labor productivity in construction, which in 1987 amounted to 7.8 percent against a plan which called for 3.1 percent. The economic situation requires an increase in commodity volume. A condition for achieving this is the introduction into operations of capabilities.

Principal Contradiction in Interaction of a Plan and the Economic Mechanism in Construction.

In 1986-1987, measures were undertaken aimed at improving administration, planning, wages and economic incentives in construction. The present structure of the construction complex, which ensures greater unity in the branch's technical and economic policies, has been functioning since 1986. The functions of USSR Gosstroy have changed. The rights of local organs in

administering construction production in the union republics have been expanded. Construction in large industrial centers has been organized anew. The state requirements with regard to observance of the norms for the duration of construction and the carrying out of programs for technical modernization have been raised. Contractual relationships within the branch have been revised. The rules for contractual agreements define the rights, obligations and responsibilities of the clients for the carrying out of planned tasks concerned with the placing in operation of capabilities, projects, buildings and installations and also dwellings and other installations of a social nature. A contract is concluded for the entire period devoted to the creation of a capability or project. When it is being drawn up, the client and contractor form and agree upon the tasks for the carrying out of construction-installation work for a quarter and by an incremental amount since the beginning of construction. The work is distributed taking into account the normative construction schedules.

Since 1986, contractual prices have been introduced in all areas which serve as the basis for concluding contractual agreements and for determining the volumes of construction-installation work in the title lists, their planning and deliveries of logistical resources. Contractual prices are used in computations between contractors and clients for work carried out. They are determined for a project on the whole for the entire construction period and are stable, even if the contractor added new and effective solutions to the plan. In such situations, the difference between the contractual price and the estimated cost of projects, established on the basis of estimates and working drawings, remains at the disposal of the contractual organizations. Seventy five percent of this amount remains for the builders, with the remainder being added to the income of the state budget. Thus the contractual prices must become an important level for accelerating construction, for placing capabilities in operation and for lowering their cost. However, experience indicates that the physical volumes for construction-installation work, for many types of this work, are declining, while the contractual prices in construction are increasing by roughly 8-10 percent. This process cannot be considered as justified where there is sharp underfulfillment of the plans for placing capabilities and projects in operation.

Contractual organizations spend up to 10 percent of the savings obtained for material incentives and the remaining portion—for carrying out measures aimed at accelerating scientific-technical progress, developing the production base and for the social goals of the labor collectives. In 1986, a new indicator was introduced into the annual plans of construction organizations—the volume of contractual operations subject to carrying out in conformity with the contractual agreements at underway projects for the year planned and also in accordance with the technological stages and operational complexes at projects planned for introduction into operations in

subsequent years. During the establishment of this indicator, the intention was to link it to the work production schedules, to the technology for the construction process and, in the final analysis, to observance of the norms for the duration of construction. In terms of content, the indicator includes two elements: the volume of work at underway projects for a given year and their volume at carry-over construction projects within the limits set for the established technological stages. It was supposed that the link-up of the indicator with the technological stages and the work schedules would eliminate the adverse consequences of the gross approach and reduce the amount of unfinished construction. But this never happened.

In the system for the new economic mechanism, an important role is played by the construction of projects "under key." Here we have in mind the fact that a general contractor is responsible not only for the construction portion of a project (plan), but also for the technological aspects, including the obtaining, installation, testing and turning over to the client the entire complex of equipment. Such economic relationships respond more completely to the tasks for planning and evaluating construction production based upon the final results.

During the 1986-1988 period, the erection of projects "under key" was for the most part limited to the sphere of housing and cultural-domestic construction, where the production cycle was shorter, the specific mass of equipment was relatively lower and where there was a service for a single client. An important factor for improving this system is the availability of large modern forms for organizing construction (house-building combines and others). However, when erecting projects "under key," the planning for production volume, profit, incentive funds and accounting and reporting are continued in the established manner, that is, in accordance with the overall gross volume of work. The funds for the development of production, science and engineering, social development and material incentives are also dependent upon the gross aspects.

Existing financing for construction is also associated with the formation of intermediate and not final results. On the one hand, the rules for its financing and crediting have established the fact that banks promote improvements in the effectiveness of capital construction, the fulfillment of plans for placing productive capabilities, fixed capital and projects in operation, the carrying out of construction work in keeping with the normative schedules, a reduction in the investment process, an acceleration in scientific-technical progress in the interest of achieving the highest final results and a reduction in the cost of construction. On the other hand, these same rules call for continuous financing for construction projects and monthly payments for contractual work carried out, based upon certificates signed by the client and contractor attesting to the volume of such work and the cost of the completed technological stages and work

complexes. Just as it has been in the past, a continuous monthly payment for some of their types is in conflict with the principle of production results. Payments are made for the expenditures but not for the final results of construction production.

The continuous nature of financing must be associated with the continuous "production" of truly finished products (completed capability or project) and not with the volume of expenditures incurred, which tend to increase the amount of unfinished production, including in the form of "completed technological work stages."

Thus, analysis reveals that the economic mechanism accepted for use in construction is contradictory. And although a number of general and methodological solutions are associated with tasks for the timely placing in operation of productive capabilities and projects (contractual agreement, contractual prices and construction of projects "under key"), the economic mechanism nevertheless is on the whole oriented towards expenditure and gross indicators. Just as was the case earlier, the economy and the economic interests of the construction organizations at all levels have turned out to be dependent primarily upon the overall gross volume of work not associated with the delivery or final results following the completion of construction work on projects.

Placing in Operation of Capabilities and New Plan Structure

In the system of new categories and interrelationships, the relationships between a state order and the entire totality of interests of enterprises and organizations, including construction facilities, are extremely vital and complicated. Active restructuring of national economic planning and the structure for the annual plan for economic and social development began in 1988. Centralized planning of the proportions for national economic development is being combined with an expansion in the independence of enterprises and the development by them of annual and five-year plans. The new system of planning is based upon national economic indicators for economic and social development, indicators and balances for the development of national economic complexes, union republics, control figures, state order and limits.

In conformity with the Temporary Statute on the System for the Formation of State Orders for 1989-1990, the latter reflect the state requirements for the deliveries by enterprises of products (carrying out of work and services), for the purpose of satisfying the priority social requirements and for ensuring an acceleration in scientific-technical progress and in the structural restructuring of the economy. State orders are established for the placing in operation of the more important productive capabilities and projects of the social sphere by means of

capital investments and for the introduction into operations of capabilities and projects of the socio-cultural sphere—using the resources of enterprises and ministries.

Thus the placing in operation of productive capabilities is one of the principal components of centralized planning. In essence, it is the same delivery of "products" to all of the production branches and the social sphere. In each planned period, the totality of the capabilities placed in operation expresses the vast complex of technical, economic and social tasks and the results of development. Changes in the system of active and newly introduced capabilities of the national economy, complexes of similar branches and economic regions are the basis for structural changes at any level of planned administration—from an enterprise to the economy as a whole. Timeliness in the creation of a project and a high technical-economic, technological and social level for a project bring about the realization of those tasks concerned with restructuring of the production apparatus and the country's social sphere. Thus the economic mechanism in capital construction must be directed towards first of all ensuring the timely and high quality placing in operation of productive capabilities. This is the basis for balance and structural improvements in the economy, for improving its effectiveness and for the timely satisfaction of the requirements of the population, the state and enterprises and organizations.

Hence, the system of state orders in capital construction, the final result of which is the timely placing in operation of capabilities and projects in the social sphere, is in conflict with the existing methods for economic evaluations and with the interests of the principal element of construction production and the higher administrative levels.

Administration is in one way or another associated with the gross approach and with the expenditure methods for managing the economy. Even with the new plan structure in capital construction, a state order links administration not with commodity production, but rather once again with the overall volume of construction-installation work. Thus the control figures (new element of the new plan structure) call for the establishment of an overall volume for contractual work, with this volume being made available to construction organizations as the basis for concluding agreements. They reflect the social requirements for products produced by an enterprise and the minimal levels of effectiveness. The control figures for all branches include an indicator for the production of products (work, services) in a cost expression (computed) for the drawing up of agreements. The cost volume for output in industry is an adequate reflection of deliveries in kind for such output.

In construction, as indicated above, the cost volume for output (overall volume of contractual work) is not an adequate reflection of deliveries (the placing in operation of productive capabilities and projects). During

each period, this indicator reflects to a greater degree the work volume at carry-over projects, with growth in this volume resulting in an accumulation of unjustified and above-normative unfinished construction. Naturally, a social requirement reflected by control figures cannot consist of creating conditions for growth in unfinished construction. Thus, capabilities in kind that are placed in operation and not gross output conform to the social requirement. Hence, the overall trend of selecting a "folder of orders" of contractual organizations, not in accordance with the optimum number of projects (capabilities) undergoing construction simultaneously, but on the basis of the gross volume of work in rubles per month, quarter or year, is continuing. Such an interrelationship between a state order and control figures is resulting in adverse consequences for the economy as a result of use of the gross approach in construction.

State Order and Restructuring of the Economic Mechanism for Commodity Output

How can unity be achieved between a state order and the system of economic interests for a construction organization? It is our opinion that this is possible based upon the all-round use, in addition to the placing in operation of productive capabilities and projects, of a cost evaluation of them (the full contractual price) for construction-installation work on a project on the whole, that is, commodity construction output.

Experiments conducted in connection with improvements in the planning, economic stimulation and evaluation of the work of construction-installation organizations of Glavmosstroy [Main Administration for Housing and Civil Engineering Construction in Moscow City], Glavleningradstroy [Main Administration for the Housing, Civil Engineering and Industrial Construction of the Leningrad Gorispolkom] and others in 1965-1970 provided convincing proof of the need for a unified system for planning and accounting for a finished capability, project and others. Planning and accounting by stages of construction -installation work were introduced into operations (1-2 stages in housing construction and 3-4 in production construction). Independent planning for the wage fund in Glavmosstroy organizations was abolished.

An experiment in planning and accounting by work stages during the 1969-1972 period confirmed their ineffectiveness. A stage of any size that is not associated with the production of goods remains as unfinished construction for the national economy. Economic indicators (labor productivity, profit and others) which are based upon a work volume by stages do not serve to strengthen the interest of construction organizations in the timely placing in operation of capabilities and projects.

In analyzing this experience, ideas arose with regard to experimenting with a system of indicators for commodity output and the formation based upon this system of

economic indicators in a large construction organization. The experiment, carried out in 1975 in Belorussia, demonstrated that a search for "goods" had commenced instead of a search for volume.

Taking into account the results of this and other experiments, measures were undertaken which called for planning commodity construction output and on this basis a system of computations was introduced between the clients and contractors for enterprises and projects which were fully completed and which had been turned over for operations. This also included completed capital repair work on buildings and installations. The interrelationship of commodity output with the placing in operation of capabilities and projects and their readiness to produce goods expresses the chief requirement of the national economy with regard to capital construction.

Commodity construction output is at the same time the basis for defining the economic results of construction production—the profit, which accordingly became the chief source for the formation of the funds for economic stimulation and material incentives. Thus the essence of this economic mechanism consisted of an interrelationship between the production and economic results of construction organizations and the placing in operation of productive capabilities and projects. The timely placing in operation of the capability of an underway complex was ensured and profit was obtained for the entire period of construction—monetary funds appeared for the current accounts of contractual organizations, budgetary computations are carried out, economic stimulation funds are formed and the builders receive appropriate resources and incentives. If an enterprise, underway complex or project is not placed in operation, there is no commodity construction output, no profit is realized and hence no monetary funds are received from the clients and no funds for economic stimulation are formed.

In 1981-1985, the plan for commodity construction output was developed by USSR Gosplan for the national economy as a whole, the principal contractual ministries, construction-installation organizations and also for clients (administrations, trusts and combines). What did this experience reveal?

First of all, a relative reduction was noted in the overall estimated cost of the construction work being carried out simultaneously. Compared to the 1976-1980 period when the increase amounted to approximately 192 billion rubles, in 1981-1985—91 billion rubles, that is, it decreased by more than twofold. Secondly, an increase took place in the level for the placing in operation of fixed capital with regard to capital expenditures. During the 10th Five-Year Plan, 93 kopecks of fixed capital were placed in operation for every ruble of capital investment and during the 11th—96.8 or 4.1 percent more. As a result, the volume of unfinished construction declined (in 1980, it was 87 percent and in 1985—78 percent) and improvements were noted in some other indicators.

The Ministry of Industrial Construction of the Belorussian SSR operated successfully for the most part during the 11th Five-Year period; this was promoted by the economic mechanism, which was directed towards accelerating the placing in operation of productive capabilities, projects and commodity construction output. During the first 2 years of this current five-year plan, the placing in operation of fixed capital by this ministry was fulfilled by 111 percent. The time periods required for the erection of projects declined by a factor of 1.4. The placing in operation of fixed capital increased by 23 percent and exceeded the increase in capital investments (19 percent). Compared to the 10th Five-Year Plan, the number of projects being built simultaneously declined by 21 percent. In 1986, when the branch changed over to the gross approach, the ministry upheld its operational experience based upon commodity production.

The status of affairs in capital construction improved as a result of use not only of the indicator for commodity output but also other factors. The chief such factor—the commencement of efforts aimed at overcoming the expenditure methods.

The planning for commodity output included a number of shortcomings and difficulties. A need existed for assigning pilot complexes for each large project, complexes which were interrelated with the production of goods. If this were not done, unjustified expenditure planning by work stages would arise once again and a need would exist for preparing relatively complicated records for the commodity construction output. During certain periods there were some construction organizations which, owing to objective reasons, did not turn over any projects or have any commodity output. Hence, at such times there was no profit and either there were no withholdings for the economic incentive funds or the formation of such funds was linked to the gross work volume. A number of construction organizations were confronted by difficult financial situations, they experienced shortages in working capital, at times they were unable to make the required payments and so forth. There were also shortcomings in connection with use of the indicator for commodity construction output, although non-fulfillment of the plans for the placing in operation of projects and prolonged construction schedules were viewed as the principal difficulties. But those construction -installation organizations which turned over their finished capabilities and projects in a timely manner had stable turnover in their financial resources and were stable from the standpoint of being able to make the necessary payments.

Difficulties arose in connection with planning carried out in the central economic organs. In a number of instances, owing to the absence of planning-estimates documentation, complications developed in connection with determining the volume of commodity output, especially for construction projects with favorable financing arrangements. The plans and estimates were

often reviewed, with inevitable corrections being introduced that conflicted with the tasks for ensuring stable and balanced planning. In connection with the arbitrary formation of economic incentive funds (given the absence during certain quarters of the year of goods production and the profit obtained from turning over such goods), a need arose for the planning of unrealized profit.

During the 11th Five-Year Plan, the gross approach was continued in planning in addition to commodity output (in accordance with this approach, labor productivity, the wage fund and other factors were taken into consideration). The ministries and departments made greater use of the gross factor rather than the indicator for goods. It was not simply a reorientation towards commodity production and accounting in capital construction. When determining the places in the socialist competition for construction organizations, the new indicators for their work were also not taken into consideration. Such duplicity in planning and accounting weakened the amount of attention being given to the new managerial method. These and other negative phenomena (which existed prior to use being made of the indicator for commodity output) led to a rejection of commodity production from planning. The construction ministries, supported by USSR Gosstroy, introduced recommendations for the directive organs and since 1986 the planning of commodity output has been abolished. At the same time, the recommendations for continuing and improving it have not been studied thoroughly. As a result, the economic mechanism based upon the gross expenditure principle was restored.

The restructuring of the economic structure, economic and social acceleration and the intensification and effectiveness of social production are all interrelated with capital construction. The rates and quality of economic growth will be higher to the extent that the particular branch operates more reliably and more effectively. The degree of reliability is expressed in a more complete execution of the national economic functions of capital construction. Here we have in mind: timely and high quality placing in operation of fixed capital, productive capabilities and projects in the socio-cultural sphere; systematic improvement in the technical level for newly introduced capabilities and capital; their progressive economic indicators (productivity, material intensiveness, output-capital ratio, profitability); relatively decreasing expenditures for construction production. In turn, such tasks can be realized if all of the national economic branches ensure timely and complete deliveries of highly efficient equipment, progressive construction materials, parts and structures.

At the present time, the interdependency and interconditionality in the development of the national economy and capital construction have become stronger and this has come about owing to the processes of economic

restructuring. For subsequent realization of the principles of unity for a state order, direct agreements and the economic mechanism, at the level for the principal element of construction production, a complex of additional measures is needed.

The volume of commodity construction output should be defined in control figures according to the estimated cost for the annual placing in operation of productive capabilities, for both state centralized capital investments and for the investments of enterprises, organizations and ministries by means of their financing sources. This indicator must serve in the control figures as the basis for concluding agreements for capital construction. Importance is attached to converting over to planning the profit (income) of contractual organizations after a finished capability, project or underway complex has been turned over to a client. The profit must be formed as the difference between the contractual price and the expenditures of a construction-installation organization for the entire period devoted to building the project or capability. The creation of economic incentive funds must be made dependent upon the turning over of commodity output through direct withholdings from profit which, in turn, is formed by means of work carried out on productive capabilities, underway complexes and finished projects turned over to clients. Ideally, measures should be planned for strengthening the role played by the issuing of bonuses to builders for the timely placing in operation of capabilities. The means for accomplishing this can be provided for when establishing the contractual prices for building the projects. Bonus funds that were unused owing to violations of the established conditions must be returned to the appropriate client.

Economic experiments have revealed the effectiveness of a system of accounts between a client and contractor for work carried out. A strengthening of the responsibility of contractual organizations for the placing in operation of productive capabilities requires that the accounts be maintained based upon contractual prices and following the completion of construction for all projects having a normative duration for their erection of up to 2 years. If the duration is more than 2 years, the accounts can be carried out for underway complexes (2-3 payment stages), but within the limit of 50-60 percent of the contractual price and for the remaining portion of the work—only following full completion of the construction and the placing in operation of the enterprise (complex).

It is obvious that the turning over of projects "in kind" and in accordance with the estimated cost of the work for the entire construction period must be reorganized and taken into account based upon commodity output. Ideally, increased control should be exercised over the conformity of the front of construction to its normative schedules and capabilities of the contractual organizations. In this regard, a need exists for developing a balance for the construction projects and work volumes in accordance with the total estimated cost of the latter.

In addition to the accounts with clients, it would be a fine base for the contractual organizations, ministries and central economic departments when selecting a portfolio of orders for the appropriate year, concluding contractual agreements or reorganizing planning for construction production for commodity output.

What are the peculiarities of the measures mentioned above?

First of all, a correlation is ensured between a state order for the creation of productive capabilities and projects and the placing in operation of fixed capital and commodity output in construction on a unified basis: capabilities are placed in operation (projects and underway complexes)—fixed capital is introduced into operations; an adequate volume of commodity output is obtained—profit is realized. The natural-material and cost content of the output coincides with the planned, contractual and operational reporting periods of the construction organization.

Secondly, there will be a single evaluation of the work of clients (placing in operation of capabilities, projects and fixed capital) and contractors at all levels of construction administration (placing in operation of capabilities, projects and full estimated cost—the contractual price for construction-installation work on a finished project).

Thirdly, the turning over of capabilities, projects and commodity output for operation will become the only basis for the formation of a system of economic indicators which reflect the results of the economic activities of construction organizations (profit, budgetary computations, economic incentive funds and others). The conflict between gross and commodity output during particular periods is eliminated.

Fourthly, a solution for the problem of coordinating the goals and tasks of a state order and the economic mechanism in capital construction will improve the moral atmosphere in each labor collective. The dual nature of the psychology involved and man's actions in the construction process between gross and commodity output will not be decisive in nature.

It is our opinion that the second cost accounting model can become more effective in the branch if it is also coordinated with the final production and economic indicators for completed construction and projects turned over for operations. Naturally, a conversion over to planning output and the income of construction organizations, while taking into account the turning over of finished capabilities and projects to clients, must not be a simple repetition of the experience of the 11th Five-Year Plan. The entire totality of new economic relationships must be taken into account: self-financing, complete cost accounting, including intra-production, lease arrangements and others.

The restructuring of the economic mechanism in contractual organizations constitutes only a portion of the problem concerned with accelerating the placing in operation and mastering of newly introduced capabilities and projects. The clients are only weakly interested in solving this problem. Their efforts aimed at removing the limits for centralized capital investments for the preparatory stage for draft plans often become very weak at those times when a capability or project should be placed in operation or when the planned production of goods or the appropriate economic indicators should be achieved. The new economic mechanism in industry, similar to that in the sphere of contractual operations, is not hindering an expansion in the front of construction, growth in unfinished construction or in the volumes of uninstalled equipment. Obviously, the role played by economic indicators (increase in output, profit, output-capital ratio, schedules for the repayment of expenditures and others) should be raised when establishing the centralized limits for capital investments for a five-year period. During the stage devoted to developing a draft annual plan, a validation of the limits requires that the volumes of unfinished construction be taken into account. Importance is attached to coordinating the allocation of funds by means of these sources with the placing in operation of capabilities and expanding the credit relationships between the state and the branch organs of administration. One of the reasons for the continuing expansion in the front of construction—the non-recovery and non-payment for capital investments and non-limit payments throughout the actual periods devoted to the erection of projects.

The enterprises and associations have great opportunities at their disposal for carrying out construction work. The proportion of their resources compared to the overall volume of state capital investments has reached 47 percent. In addition to modernization and technical re-equipping, they have launched new construction work at existing production sites on an extensive scale. There have been frequent instances of funds not having been accumulated for the creation of a project during the normative period and this results in an increase in unfinished construction. The national economic interests in this sphere of economic relationships are decisive: a production collective and contractual organization must take into account the requirement of the USSR Law Governing a State Enterprise (association)—observe in a strict manner the normative periods for construction and for the repayment of capital investments. In order to solve this task, use can be made of contractual prices, a system of accounts with a contractor for finished capabilities and projects and various forms for advancing funds.

Perestroika in capital construction is a complicated process. It touches upon a vast complex of problems and yet we cannot proceed without it. As a result, the branch is becoming an accelerating factor for economic development based upon NTP [scientific-technical progress] and a factor for implementing strong social policies.

Footnote:

1. PRAVDA, 21 July 1988.

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Installation, Special Construction Ministry 1988 Performance, 1989 Tasks Reviewed

18210020 Moscow MONTAZHNYYE I
SPETSIALNYYE RABOTY V STROITELSTVE in
Russian No 4, Apr 89 pp 3-5

[Decision adopted by Council of USSR Ministry of Installation and Special Construction Work: "On Operational Results of the Ministry's Organizations and Enterprises During 1988 and the Tasks for 1989"]

[Text] Within the USSR Minmontazhspestroy [Ministry of Installation and Special Construction Work] system, a ministerial council has been formed, the tasks of which include examining the principal questions concerned with the branch's economic, scientific-technical and social development.

The council's structure includes members of the ministry's Board of Directors, union republic ministers, the chiefs of main administrations and associations, the leaders of individual trusts, plants, institutes and installation administrations and leading workers attached to the ministry's organizations.

The ministry's council held a meeting on 26 January 1989 during which the subject of the operational results of the ministry's organizations and enterprises during 1988 and the tasks for 1989 were examined. In addition to the council's members, this meeting was attended by the chief engineers of the ministry's main administrations and associations, the managers of Moscow trusts, the directors of institutes and by the party and trade union aktiv.

Workers attached to the CPSU Central Committee, USSR Gosstroy and the Central Committee for Workers Assigned To Construction and the Construction Materials Industry participated in the work of this council.

A report was delivered by the USSR Minister for Installation and Special Construction Work B.V. Bakin. After having listened to and discussed this report and the speeches by participants at this meeting, the council adopted the following detailed decision.

On the Operational Results of the Ministry's Organizations and Enterprises During 1988 and the Tasks for 1989.

After having listened to the report by the council's chairman Minister B.V. Bakin, the ministry's council noted that the work of the staff and the ministry's organizations and enterprises during 1988 was directed

towards further strengthening perestroyka and altering the economy in conformity with the aims of the 27th CPSU Congress and the 19th All-Union Party Conference.

A radical restructuring of the ministry's system has been carried out and the administrative staff has been reduced in size. The main production administrations have been eliminated and 15 scientific-production and specialized associations have been created at individual trusts and institutes. All of the organizations and enterprises have been converted over to complete cost accounting and self-financing.

The past year of work under the new conditions revealed that the majority of the organizations and enterprises coped with the carrying out of the principal planned tasks and that they operated on a profitable basis under stable financial conditions.

The application of the statutes of the USSR Law Governing a State Enterprise ensured an increase of 5 percent in the level of budgetary payments from profits compared to 1987 and a threefold increase in withholdings for the economic incentive funds and this represents a reliable base for solving the tasks concerned with technical re-equipping and social development during 1989.

In 1988 the Ministry on the whole fulfilled the plans for contractual and sub-contractual work and industrial production, the tasks for raising labor productivity in construction and industry, for profit and budgetary payments, for deliveries of consumer goods and for providing paid services for the population. The plans for capital investments and for construction-installation work on projects of internal capital construction, including a plan for placing housing units in operation, have also been carried out. Roughly 580,000 square meters of housing space, or .76 square meters per individual, have been introduced into operations and this made it possible to improve the housing conditions for more than 10,000 families of installers.

Roughly 307 state order projects have been placed in operation. The tasks for placing capabilities in operation for the production of aluminum, steel, cold rolled metal, agricultural machines, small automobiles, plastics and chemical fiber, for extracting coal and for other types of products were all fulfilled.

Included among the capabilities placed in operation—aluminum production at the Sayansk Aluminum Plant, steel at the Cherepovets Metallurgical Combine, iron ore and concentrate at the Lebedin, Stoylensk and Mikhaylovskiy GOK's [mining and concentrate combines], finished rolled metal at the Uzbek and Zhdanov metallurgical plants, capabilities for coal extraction at the

Berezovskiy, Vostochnyy and Angren open pit mines and a number of others. Large-scale tasks were solved during 1988 by the collective of the Zagranstroyontazh VPO.

In 1988, the tasks of the state plan for the section concerned with scientific and engineering development were fulfilled. An increase took place in the proportion of construction-installation work carried out using progressive methods.

At the same time, substantial shortcomings and areas of neglect continue to be noted in the work being carried out by the ministry's organizations and enterprises. The chief indicator was not fulfilled—not all of the underway projects called for in the plan were placed in operation. For various reasons 43 state order projects were not placed in operation in 1988. Included among them were such important capabilities for the national economy as coke production at the Gubakha Coke and Chemical Combine, machines for the continuous casting of billets at the Kuznetsk and Cherepovets metallurgical combines, capabilities at the Mazheyskiy, Chimkent and Novo-Bakinskiy petroleum refining plants, construction industry projects and others. The greatest delays in placing capabilities in operation were tolerated by Minmontazhspetsstroy for the Ukrainian SSR, Minmontazhspetsstroy for the Belorussian SSR and by associations of Azmontazhspetsstroy and Metallurgmontazh.

One considerable shortcoming was the reduced amount of attention given by associations and trusts to sub-contracting work. In the face of an increase of 4 percent in the volumes of contractual work on the whole during 1988, the volume of sub-contracting work declined by 1.5 percent. The greatest reductions were tolerated by Minmontazhspetsstroy for the Ukrainian SSR, Minmontazhspetsstroy for the Uzbek SSR, the Siberian Branch of Stalmontazh, the Montazhavtomatika NPO [scientific production association], Teplomontazh and Azmontazhspetsstroy.

Almost 19 percent of all of the enterprises failed to carry out their contractual obligations for product deliveries, including 11 plants of the Stalkonstruktziya NPO, 10 plants of the Soyuzlegkonstruktsiya VPPSO, 8 plants of Minmontazhspetsstroy for the Ukrainian SSR, 4 plants of Minmontazhspetsstroy for the Kazakh SSR and 4 plants of the Siberian Branch of Montazhspetsinstrument.

The plan for deliveries of metal structures was not fulfilled: for construction structures, the degree of fulfillment was 97.1 percent and for light structures—83.7 percent. One construction complex was undersupplied in the amount of more than 90,000 tons of structures. The Stalkonstruktziya NPO, Soyuzlegkonstruktsiya VPPSO, Minmontazhspetsstroy for the Ukrainian SSR and others failed to fulfill their plans.

During fulfillment on the whole of the plan for internal capital investments and construction-installation work, capabilities were not placed in operation at the Khabarovsk Plant for Construction Aluminum Structures, the Kansk and Molodechno plants for light metal structures, the Ufa Experimental Plant for Industrial Pipe Construction or at a specialize plant in Perm.

A substantial shortcoming in the work being carried out by the ministry's organizations continues to be a high level of production injuries. Special attention must be given to the problem of safety equipment in organizations of Minmontazhspetsstroy UkSSR, Minmontazhspetsstroy UzSSR, Minmontazhspetsstroy KazSSR, Promtekhmontazh NPO, Elektromontazh, Siberian Branch of Stalmontazh, Metallurgmontazh and Santekhmontazh, where an increase in the number of fatal production injuries was noted in 1988. Incidents of drunkenness during production operations and violations of labor discipline are arousing considerable alarm.

Analysis of the work being carried out by the ministry's organizations and enterprises under the conditions imposed by the new economic mechanism underscores the fact that some aspects of the new managerial system require further improvements, since they are exerting only a weak influence on the final work results by those participating in construction.

The conversion over to the new wage conditions has brought about a sharp increase in the earnings of leading personnel at organizations and enterprises. In a number of organizations, a considerable gap has formed in the wages for line engineering-technical workers and the staff workers of trusts (the Prodomontazh and Soyuzshakhtoosusheniye trusts). Similar cases are surfacing in some of the ministry's institutes.

In order to raise operational efficiency, a need exists for planned work aimed at improving the economic mechanism, searching for new managerial forms, strengthening cost accounting in all elements of construction production and converting over to the second cost accounting model. In 1988, 40 of the ministry's organizations operated on the basis of this model, including 29 construction-installation organizations. These organizations achieved increases in income and labor productivity of 12.1 and 10.1 percent respectively, compared to the ministry's average indicators of 4 and 6.2 percent. The second model is being employed most extensively by organizations of KazSSR Minmontazhspetsstroy (68 percent), UzSSR Minmontazhspetsstroy (33 percent) and Elektromontazh NPO (33 percent). At the same time, not one organization belonging to the associations of Metallurgmontazh, Khimmontazh, Neftemontazh, Agrosotslegmontazh, Stalmontazh, Santekhmontazh or Promtekhmontazh has converted over to the second model.

Within the ministry's organizations and enterprises, cooperatives are commencing operations and lease type arrangements are being introduced into operations. In 1988, 283 cooperatives were engaged in the sphere of services and in the production of consumer goods. As yet there are still only 23 production cooperatives attached to trusts and construction-installation administrations.

The ministry's organizations and enterprises were assigned considerable tasks for 1989. A requirement existed for placing in operation approximately 300 important state order projects. The most intense tasks with regard to the placing in operation of capabilities in 1989 occurred at Cherepovets, Magnitogorsk, Chelyabinsk, Krasnoyarsk Kray, in Tyumen and Volgograd oblasts, Bashkir ASSR, the Ukraine, Belorussia and Kazakhstan.

Considerable work has been assigned to the ministry in connection with the restoration of industrial projects, housing and socio-cultural and domestic facilities in Armenia. The plan for contractual work by the ministry in 1989 was formed in the amount of 12,114,000,000 rubles. The amount of profit planned—3,780,000,000 rubles. Labor productivity in construction must increase by 4.2 and in industry—by 2.8 percent. The industrial enterprises must produce 2,205,000,000 rubles worth of products. The delivery plan for modular buildings and physical culture and health complexes is 1,996 units. The plan established for the ministry for furnishing services to the population is in the amount of 67 million and for consumer goods—175,900,000 rubles.

In 1989, 671,000,000 rubles, including 320.5 million rubles for construction-installation work, will be used for internal construction based upon state centralized capital investments and the funds of organizations and enterprises. More than 95 million rubles have been allocated for the creation of additional capabilities for the production of light metal structures and heat-insulating products and structures and also for the development of a production base for the Far East.

Taking into account the proportion turned over to executive committees, the plans call for 720,000 square meters of housing space to be placed in operation (an increase of 140,000 square meters compared to 1988) and this will make it possible to solve the housing problems for 15,000 families of installation workers.

Having discussed the operational results achieved by organizations and enterprises during 1988 and the tasks for 1989, the ministry's council handed down the following decision:

1. The leaders of ministries and the main administrations for installation and special construction work of union republics, scientific-production and specialized administrations, trusts and industrial enterprises of the ministry:

—analyze thoroughly the operational results of organizations and enterprises for 1988, develop and implement measures aimed at eliminating existing shortcomings and fulfillment of the plan for 1989, utilize more completely the advantages offered by the new managerial system, while ensuring the further development of initiative and independence in the organizations and enterprises in the selection of new managerial forms and in implementing measures for improving and introducing into operations the new economic mechanism and to be guided in this regard by Decree No. 1-6 of the ministry's Board of Directors dated 18 January 1989;

—in conformity with the decree of the USSR Supreme Soviet on implementation of the recommendations of the permanent committees and the observations expressed by deputies during the 11th Session of the USSR Supreme Soviet on 12 January 1989, to stimulate work directed towards increasing the effectiveness of production and its structural perestroyka, while concentrating attention on mastering to a better degree the economic methods of management and raising responsibility in every possible way for the strict observance of contractual discipline and the timely and high quality carrying out of state tasks;

—review with the clients and general contractors the status of affairs at projects and capabilities that were not introduced into operations in 1988 and to hand down a decision calling for their completion and introduction into operations as quickly as possible;

—to ensure a concentration of logistical and labor resources at state order projects which are underway during 1989 and, jointly with the clients and general contractors, to solve those problems concerned with supplying them with the needed equipment, construction materials and structures. With the participation of the councils of labor collectives and representatives of the client and general contractor, to work out the problems associated with speeding up the schedules for placing capabilities and projects in operation in 1989 and in a manner such that the workload for placing such facilities in operation during the 3d and 4th quarters will be alleviated;

—jointly with the councils of labor collectives, to examine additionally the plans for contractual and sub-contractual work, while bearing in mind the need for completing as rapidly as possible the drawing up of contractual agreements for the state order projects, ensuring the adoption of realistic and tense plans and avoiding a reduction in the work volumes during the initial months and quarters of the year;

—to ensure observance of the approved normative ratios, with distribution by quarters of the rates of growth in average wages and rates of growth in labor productivity and for enterprises and organizations which use a cost accounting form based upon a normative

distribution of income (including with lease type arrangements),—rates of growth for payments from a unified wage fund and rates of growth in income;

—to concentrate efforts on carrying out the tasks for the construction of projects of internal capital construction and particularly projects in the social sphere and also for the construction and placing in operation of projects called for in the decree of the CPSU Central Committee and the USSR Council of Ministers entitled "On the Further Development, Industrialization and Improvements in Labor Productivity in Capital Construction" and others;

—in the interest of retaining the rates of growth in internal capital construction in 1990, to ensure purposeful work aimed at obtaining funds from ministry-clients for the development of production bases and the construction of projects in the social sphere in volumes equal to the amount remaining from the estimated cost for carry-over projects; no less often than once every quarter, the Main Administration for Planning and Capital Construction is to present the ministry's management with data on the proceedings for obtaining funds from ministry-clients;

—when determining the prices for industrial products, price discipline and the requirements with regard to standards and technical conditions must be observed in a strict manner, an unjustified inflating of prices or the obtaining of illegal earnings are not to be tolerated and measures must be undertaken aimed at ensuring the unconditional fulfillment of contractual obligations in connection with the delivery of products;

—to ensure fulfillment of the plan for producing consumer goods, providing services to the population, increasing meat and milk production at subsidiary farms and implementing measures for increasing the production of consumer goods.

2. The leaders of trusts, enterprises and the councils of labor collectives:

—to undertake measures for ensuring the complete use of available social development funds; taking advantage of the experience of some of the ministry's organizations, to increase the volumes of housing construction using their own resources and to develop the practice of cooperative and private construction; the Main Administration for Planning and Capital Construction, jointly with the ministry's associations, is to furnish assistance to the organizations and enterprises in solving those problems associated with carrying out the Zhilye [housing] Program;

—to intensify work in the labor collectives in connection with observance of the rules for equipment safety and strengthening production discipline; to make more

extensive use of economic levers in the campaign against violators of discipline and incidents involving drunkenness during production operations.

3. The ministries, union republic main administrations for installation and special construction work and scientific-production and specialized associations of the ministry:

—complete the conversion of industrial enterprises and scientific-technical organizations over to the collective forms of labor organization during the 1st quarter of 1989; special attention must be given in this area to the leaders of Soyuzlegkonstruktsiya VPPSO, Stalkonstrukt-siya NPO, Stroymekhanizatsiya SO and Montazhs-petsinstrument SO, which account for 66 percent of the enterprises which have not converted over to a collective contract;—to develop and implement measures for ensuring fulfillment of the tasks of the state plan and the section on scientific and engineering development; to achieve an increase in the proportion of construction-installation work carried out using progressive methods; to consider the chief trend in the ministry's technical policies to be that of further industrialization of installation production and particularly the introduction of the complete-unit method of installation; the Main Scientific-Technical Administration and the ministry's main coordination-technical administrations for the appropriate types of work must raise the degree of exactingness being imposed upon the machine builders and clients and particularly in connection with the delivery for installation of large units of equipment;

—to undertake measures for further developing foreign economic activities and to ensure fulfillment of Decree No. 25-4 of the ministry's Board of Directors dated 6 October 1988, which concerns this subject;

—to implement measures for further improving the quality of installation and special construction work and the products being produced and to stimulate preparations for introducing state acceptance into operations. The Main Technological Administration for Industry must ensure control over the carrying out of Decree No. 29-2 of the ministry's Board of Directors dated 8 December 1988, which deals with this question;

—undertake measures for realizing economies in the use of important types of material and fuel-energy resources and introduce resource conserving technologies into operations on a more extensive scale; restore order in the use of production norms for material expenditures and raise the material interest of organization and enterprise workers in achieving the best results in economizing in the use of resources;

—with the assistance of the appropriate institutes, to carry out a one-time accounting of all active capabilities of industrial enterprises and bases of construction-installation organizations; the Main Technological Administration for Industry, assisted by the Gipromontazhindustriya Institute, is to provide methodological guidance

and a summary of the accounting results; a report on the results of the one-time accounting of capabilities must be delivered to the Board of Directors during the 1st quarter of 1990.

4. The Main Administration for Mechanization and Power Engineering of the Siberian Branch of Stroymekh-anizatsiya:

—undertake measures for satisfying the 1989 requirements of the ministry's organizations for units for the shape cutting and bending of pipe using heat or high voltage currents, while bearing in mind that failure to deliver the mentioned units is holding up the industrialization of pipe production operations;

—to accelerate the series production of new installation equipment which will promote an improvement in the level of mechanized operations.

5. The Montazhspeinstrument Association must undertake measures aimed at satisfying more completely the requirements of installation organizations for the equipment needed for the cutting and welding of plastic pipe, polishing machines, instruments for the installation of high strength bolts and other devices for raising the labor productivity of installers.

6. Glavsnabsbyt [Main Administration for Supply and Marketing], the union republic ministries and main administrations and the ministry's associations, trusts and enterprises must intensify the work directed towards supplying the installation organizations and enterprises with the needed logistical resources, while establishing for this purpose direct contacts with the supplier-enterprises.

7. The Main Technological Administration for Industry, the Main Scientific-Technical Administration and the Main Administration for Planning and Capital Construction, with the participation of the ministry's associations, must develop measures for strengthening the base for machine building within the ministry's system and also solve the problems concerned with the series production of progressive welding equipment and materials and the modernization and technical re-equipping of electrode departments.

8. Soyuzlegkonstruktsiya VPPSO, the Main Technological Administration for Industry and the Main Scientific-Technical Administration, within a period of 1 month, must prepare the ministry's recommendations, for

review in the USSR Council of Ministers, for further improving production and the deliveries and use of light metal structures and modular buildings; the following must be reflected in detail in these recommendations: the program for producing technological equipment and materials for developing the production capabilities for light metal structures; questions associated with an increase in funds for foreign purchases of hermetic sealants, paints and packing materials that are not being supplied by domestic industry; the need for supplying the ministry, over and above the state order, with logistical resources for the production of complete buildings made out of light metal structures for export deliveries.

9. Glavsnabsbyt must be supplied with plants—producers of light metal structures and Soyuzlegkonstruktsiya VPPSO modular buildings, UkSSR Minmontazhspeinstrument, KazSSR Minmontazhspeinstrument, AzSSR Minmontazhspeinstrument and associations—producers of engineering equipment for suppliers of logistical resources required for production, while bearing in mind the allocation during the first 6 months of 1989 of 55 percent of the annual requirements for the 1989 plan. The allocation of resources for these purposes takes into account the increase in the weight of structures when prepared on an earthquake proof basis.

10. Union republic ministries and main administrations for installation and special construction work and scientific-production and specialized associations of the ministry:

—to carry out constant work in connection with the training and retention of personnel, with special attention being given to solving social problems as the basis for retaining skilled personnel and for creating stable labor collectives; to develop a personnel reserve in a more intense and thorough manner;

—to continue instructing manual workers, engineering-technical workers and leaders in the economic methods of management.

Using specific examples and cost accounting models, the councils of labor collectives must acquaint workers with the advantages offered by the new managerial mechanism, thus developing the interest of workers in raising labor productivity and in undertaking tense plans on this basis.

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FOOD PROCESSING, DISTRIBUTION

Salmonella Scare Reduces Demand for Eggs

18270127 Moscow SELSKAYA ZHIZN in Russian
19 Jul 89 p 1

[Article by S. Nikolayev: "Chicken Alarm"]

[Text] **This country's poultry plants have piled up stocks of 1.2 billion eggs and 4,000 tons of powdered eggs, while many stores are not offering these products for sale. Why? Are people frightened by the specter of salmonella, or is there some other reason for this?**

Telegrams, telegrams.... They are like an alarm bell or the cry of a soul. The chairman of the labor collective council of the Surovskaya Poultry Plant in Tula Oblast sounds the following alarm: his enterprise's warehouses have piled up 3.5 million eggs and 40 tons of powdered eggs. Where are all these products to be marketed? The plant is on the brink of halting production! The following report comes from Vladivostok: egg sales have fallen off by 70 percent. In Poltava Oblast eggs have been channeled into mixed animal feeds. Anatoliy Petrovich Gavrilish, deputy director of the Yuzhnaya Poultry Plant in the Crimea is alarmed because he has nowhere to put 25 million eggs. And at the same time this irreplaceable dietary product has been removed from the menus of Crimea's rest homes and sanatoriums.

We have received the following information from the Soyuzptitseprom Scientific Production Association: "During the first six months of the current year egg sales for the country as a whole have declined by 770 million as compared with the same period of last year. The situation has become particularly grave in the Ukrainian SSR, where some 500 million eggs remain unsold; moreover, this backlog is increasing by 2 million eggs a day. The warehouses of the RSFSR have piled up 254 million eggs, while those of the Belorussian SSR have accumulated 80 million eggs and 222 tons of powdered eggs."

What is happening? Why has the demand for the products of poultry plants fallen off so sharply? Some people have attempted to explain this complicated situation in the poultry business by the flare-up of salmonellosis, a disease which is transmitted to human beings through eggs and poultry meat. Medical people have sounded the alarm, hurriedly closed down grilles and bars, and have announced through the press to the inhabitants of cities and villages: Don't eat eggs or egg products!

In one recent publication (ARGUMENTY I FAKTY, No 27), A. Kondrusev, the USSR deputy minister of health and the USSR's chief sanitary physician, chose a rather dubious method of "explaining" to his readers the causes of the salmonellosis disease. Evidently to calm his already-overfrightened fellow-countrymen—potential purchasers of eggs and poultry meat—he discussed in detail the growth trends of diseases in the countries of Western Europe and the United States. "According to

data from laboratory studies conducted in Canada, more than 50 percent of poultry carcasses are infected with salmonellosis, as a result of which expenditures on treating this disease have been calculated as amounting to 300 million dollars. The economic losses in our country are only one-tenth of this figure." However, it could be that this is due not at all to the fact that we are lagging behind Canada as to the number of persons with the salmonellosis disease, but rather because of deficiencies in our media. "The spread of infection," the deputy minister asserts, "is facilitated by the fact that the products of many poultry plants are infected with salmonellae."

That is a serious statement.

But here is what A.D. Tretyakov, the country's chief veterinary inspector has to say about this:

"Let me note right away that bacteria of the 'salmonella' type have been known to mankind for more than a century. In nature more than 3,000 populations (variants) of salmonellae have been isolated. They surround human beings literally everywhere: they are contained in the soil and in water, they inhabit fish and worms, amphibians and insects, all species of animals and birds, including human beings themselves, in whom more than 70 species of have been isolated.

"And so our veterinary service already has a good knowledge of what kind of danger the invisible salmonella presents for human beings. Therefore, veterinarians are constantly concerned for taking preventive measures and, what is particularly important, primarily at large agricultural enterprises, including poultry plants. Very careful checks must be run on their entire output. The veterinary service, as they say, has its head on the line when it comes to the responsibility for poor-quality products, including infected items, reaching the retail-store counters. Certain mass media, along with officials of the USSR Ministry of Health and Ministry of Trade, have led customers astray. It must be said that they have managed to undermine confidence in the veterinary service and in the quality of products being turned out by poultry plants. Yes, it is possible that infection has not been eliminated. But, after all, nobody would attempt to ban flame just because of possible accidental fires!"

And here is the opinion of N.K. Sviredenko—the general director of the Glebovskoye Poultry-Raising Association—the largest in the area around Moscow.

"I am profoundly convinced that all the commotion/fuss and bother about salmonellosis from eggs is a cleverly planned action. Its goal is to strike a blow at perestroika, to create a shortage in the products of poultry plants at any price. Because, of course, it's no secret that shortages help to fuel the 'shadow economy' [gray market], facilitating all kinds of machinations and bribes.

"I have been working in the poultry-raising business for more than 20 years. It's a complex and difficult sector. And, it's probably the only one within the agro-industrial complex where effective industrial technology has been introduced. This has allowed us to significantly improve the working conditions of poultry raisers, to sharply increase their labor productivity, and, in the final analysis, to greatly increase the production of eggs and poultry meat. Formerly, about 10-15 years ago, our refrigerator-truck drivers used to be greeted and welcomed in Moscow's food stores as the most desired and dear guests. And, by way of trying to 'domesticate' them, did not stint on 'material incentives,' to put it more precisely, bribes. At present the poultry plants in the area around Moscow are fully satisfying the demand of Muscovites. But it seems that the trade officials and staff members are not pleased with the sufficiency in the output of the local poultry plants. They are shipping in hundreds of millions of eggs from other republics and even from abroad; and they are filling up their refrigerators/cold-storage plants with them. They are storing up enough supplies of these perishable products to last for two or three months or even longer, and only after this are they offering them to the customers. Of course, the quality of the eggs after such a 'delay' declines; they cannot be compared with those which are delivered to the stores still warm, directly from the poultry plants. But such truly nutritious products are not being accepted by trade; the latter is not taking into account the demands of the consumers, people like you and me."

The poultry raisers of the area around Moscow have been trying for more than a year to curtail the shipping of eggs into the capital from outside. And it would seem that they have achieved their goal: such a decision was adopted. But, just as before, railroad cars have continued to come in here loaded with hundreds of millions of eggs from other regions, and, just as before, the refrigerators are loaded up with them for many months ahead of time. I think bitterly: who profits by this? Because, of course, railroad-car runs amounting to thousands of kilometers and a wasteful squandering of electric power in the heavy-duty refrigeration units, as well as a significant lowering of the product quality—all this is quite expensive. Furthermore, why should such mismanagement and a scornful attitude toward the work of our poultry raisers, and the fate of this sector remain unpunished? And this is why the trade officials and their accomplices among the medical people had recourse to the salmonellosis scare, like a drowning man grasping at a straw, just to avoid answering these not-so-simple questions.

Our association services 1500 of the capital's trade centers. We regularly deliver fresh eggs there. It sometimes happens that the trade staff members refuse to accept this extremely valuable food product. And so the refrigerator trucks wander from store to store. And everywhere they are turned away from the gates. They say that there is no demand. But here is what is interesting. In such cases, the refrigerator truck drivers assume the task of salesmen: they park their trucks at certain

large apartment-house complexes and announce by way of a megaphone that they have brought fresh eggs in directly from the poultry plants. And people immediately show up to buy them, quickly going through the contents of the truck—and that amounts to 40,000 eggs.

Yes, we know about the trouble in Poltava. And it also happens here that some batches of eggs, those which have been stored past a certain deadline, have to be processed into animal feeds. But what can we do? We have to pay a steep price for stupid bungling.

Alarm signals and alarming news. The situation is becoming more acute with each passing day. In some oblasts the poultry raisers are curtailing production. Egg collections have been reduced in the Ukraine, Georgia, Azerbaijan, Lithuania, Moldavia, Armenia, and the Karelian ASSR, as well as in Tambov, Vologda, Leningrad, Pskov, Ivanovo, Volgograd, Kemerovo, and many other oblasts of the RSFSR. In the Chechen-Ingush ASSR egg production has been curtailed by such a rate that within a year or two there will be nobody producing them.

"But how is all this regarded by the trade officials and staff members themselves?" I asked S.D. Aleshin, USSR deputy minister of trade.

"I agree that sales of the poultry plants' products have declined in this country, and in several places there have been interruptions in deliveries of eggs and poultry meat to the public; and we are partly to blame for this. But it is hardly fair or correct to blame only retail-trade staff members for this. For more than a year now we have been drawing the attention of this country's Council of Ministers to the question of the need to build an up-to-date center for storing those eggs. And all has been to no avail. Here is the sad result: today our warehouses are literally chock-full of boxes of eggs; they are crammed in here more than twice as much as provided for in the plan. But there is a time-limit on storing such perishable products: if you don't sell them today, you have to ship them off to the dump tomorrow. We have spoken more than once about the necessity of introducing seasonal prices on eggs. But we have not received any support. And without such support, it is difficult to count on any success."

I presented these arguments, made by an important trade official, to V.I. Fisinin—the general director of the Soyuzptitsiprom Scientific Production Association and a USSR people's deputy. Here is what he said in reply:

"In mid-July we visited 176 food stores in Moscow and Moscow Oblast, checking to see whether or not they were selling eggs. It turned out that they were not being sold in 12 stores." And this is in the capital! Not to mention rayon centers and remote rural areas. And at the same

time during last month alone Moscow trade organizations refused to accept more than 46 million eggs from the poultry plants in the area around Moscow. And, of course, these were funded supplies.

Such irresponsibility costs labor collectives dearly and strikes a blow at the sector. Many poultry plants have reduced their egg production. In a number of localities we have restructured poultry farms to producing broilers. In order to reduce their dependence on trade, the poultry plants are opening up their own, company-type stores, and their products are enjoying a steady demand.

Simplest of all would be, by humoring negligent officials, to let flocks of laying hens be slaughtered and artificially reduce the production of eggs and poultry meat. But to proceed in such a manner would mean inflicting irreparable damage to the sector. Who would be responsible for the fact that, as early as tomorrow, a customer could show up and be confronted by an empty counter? And who would guarantee that this story would not be repeated with regard to soap and laundry powder?

Medical officials consider that the principal sources of salmonellae for human beings are meat and meat products, beef broth, cutlets, and other stuffed items, as well as milk, eggs, and egg products, fish and fish products, cottage cheese, jellied products, stewed fruit, beverages, juices, berries, fruits, and vegetables in places where the proper technologies for preparing and cooking food are not observed, where there is a predominance of dirt and unsanitary conditions. And so, should we reject all this, or should we get rid of slovenly cooks and staff members of the food industry who violate the elementary rules of sanitation and hygiene, and, finally, should we reject trade officials who have set up a "chicken alarm" instead of an intelligent operation?

GOODS PRODUCTION, DISTRIBUTION

Lower Production Targets Reduce Output of Consumer, Food Products

18270125 Moscow *EKONOMICHESKAYA GAZETA* in Russian No 28, Jul 89 p 8

[Article by Candidate of Economic Sciences P. Krylov under "We Discuss the Problem" rubric: "Why Are the Enterprises Lowering Their Plans?"]

[Text] Moscow—Enterprises are now formulating their own plans. Did the economic reform create the conditions for the development of their initiative in the formulation of plans that would give sufficient consideration to the needs of the national economy as well as to increasing output, improving its quality and raising the efficiency of production? An analysis of the practice of formulating plans shows that enterprises are still not interested in formulating intensive plans and fully loading their production capacities.

Why are high planning indicators still economically disadvantageous to enterprises under the conditions of self-financing, even though they have become significantly more independent in the formulation of plans? Beginning in 1988, state orders became the basic centrally affirmed planning target. They cover a significant part of produced output only in the fuel industry, the rolling of ferrous metals, and in nonferrous metals, cement and a number of basic consumer goods. The share of the state order in the output of machine building is only 25 percent and 30 percent for the USSR Ministry of Light Industry.

Under the conditions of the transition of all industry to full cost accounting and self-financing in 1989, it was expected that the projections of the annual plan will provide for an acceleration of the rate of development and an increase in the efficiency of production. The fact that the magnitudes of planned wage funds, material resource funds and economic incentive funds depend upon planned increases in output and labor productivity and the reduction of the production cost ensured a certain interest of enterprises in increasing production. As it turned out, however, many enterprises were still striving to reduce their plans. Often the plans of an enterprise even foresee a reduction of the volumes of production of output relative to the achieved level. In 1988, for example, enterprise plans were below the achieved level in 1987 for the extraction of oil (including gas condensate) and coal and the production of cement. The increase in the rolling of ferrous metals was insignificant. In 1989, the picture for these kinds of output was the same. And to stimulate an increase in the projections for the five-year plan, for example an increase in the production of energy resources and basic materials, they introduced supplemental planning targets and centrally stimulated deliveries. Thus, they have been established in heavy industry for the extraction of oil and coal and for the production of rolled ferrous metals, cement and other output.

The practice of low plans and supplemental targets leads to a weakening of the responsibility of enterprises for the satisfaction of the needs of the national economy for the most important kinds of output. It appears that the ultimate objective, the stimulation of the fulfillment and overfulfillment of the five-year plan, could be achieved even without supplemental targets. It is enough to utilize more encouragement in increasing the targets in comparison with the five-year plan and their fulfillment.

The most significant reduction of plans is observed in the quarterly plans of enterprises. The report of the USSR State Committee for Statistics on the results of the first quarter of 1989 pointed out in particular that in industry the plan for many kinds of articles was not intense and did not correspond to the share of the past quarter in the annual total of working time and in a number of cases was below the level achieved in January-March 1988.

As is apparent in the data of the USSR State Committee for Statistics, a substantial reduction of the plans of enterprises was observed in the production of a number

of basic kinds of food and in some cases the level of the corresponding period of the past year was not achieved even in their overfulfillment.

Output	Plan for the first quarter of 1989		Actual first quarter 1989 in percent of first quarter 1988
	Percent of first quarter 1988	Percent fulfilled	
Production of meat*	92.5	107	99
Animal oil	89	108	96
Whole milk products	99	104	103
Fatty cheeses*	95	106	100.7
Fish products for food (including canned food)	87	116	100.9
Margarine output	91	102	93
Granulated sugar	94	106	99.3
Canned food	93	111	103

*from state raw material resources

It is understandable that such reduced plans do not contribute to the successful fulfillment of the Food Program. Nor was there any justification for reducing the plan for the production of food in the fact that procurements of cattle and poultry, milk and eggs in the first quarter of 1989 were at the level of the first quarter of 1988.

The reduced plans for some basic kinds of raw materials for the production of consumer and construction goods have a negative effect on the development of production:

Output	Plan for the first quarter of 1989		Actual first quarter 1989 in percent of first quarter 1988
	Percent of first quarter 1988	Percent fulfilled	
Chemical fibers and filaments	97.5	102	99.4
Paper	98	101	99.1
Cement	99	102	101
Excavators	86	104	90
Medical equipment and related spare parts	97	110	107

With the constantly growing role of quality indicators, it is quite incorrect to ignore the importance of the quantitative increase in production. Under today's conditions, an increase in production is vitally necessary to satisfy the needs of the population and national economy for most of the most important kinds of output of industry and agriculture with the simultaneous improvement of quality. Significant growth is also needed in the production of building materials for the resolution of the housing program.

There is still another aspect of this problem—the financial aspect. The fact is that the low plans of enterprises are characteristic not only for the production of output but also for the increase in the efficiency of production, which is inhibiting the financial normalization of the economy.

As of the second quarter, according to calculations, the annual profit plans of enterprises were 6 billion rubles below the control figures flowing out of the confirmed annual plan. The reduction of plans by enterprises impedes the resolution of the most important social tasks facing the society.

What are the reasons that encourage the elaboration of reduced plans? Above all there is the effect of the striving of enterprises to have a significant quantity of above-plan output that they can dispose of as they wish. This output is often used for commodity exchange operations to obtain needed materials and equipment and even consumer goods for the collective of the enterprise. There is increased interest in above-plan output under the conditions in which enterprises are given the right to

export it and to obtain foreign exchange. But it is especially significant that low plans permit enterprises to limit deliveries under economic agreements and to guarantee their complete fulfillment regardless of the general level of work.

A number of enterprises became interested in above-plan profit because the established magnitude of 70-percent deductions from it to enterprises was generally higher than the standard deductions from planned profit. This made it possible to increase the economic incentive funds and the payment of bonuses to workers from these funds. The total sum of economic incentive funds increased by 20 percent annually in 1987-1988. In the scope of the national economy, the reduced plans led to an increase in monetary income not covered by commodity resources and to a violation of planned proportions. At the same time, the income of the state budget did not, despite its deficit, increase by the proper degree.

The main shortcoming of reduced plans is that the enterprises are not interested in the full utilization of internal reserves. They fulfill and overfulfill plans despite significant losses and deficiencies in their economic work.

To overcome the tendency for enterprises to formulate reduced plans, it is necessary to raise the efficiency of economic incentives and interest in increasing the production of output and improving its quality and the efficiency of production. The broad transition to the second model of cost accounting and to the lease contract and leasing can be very important, for under these forms of cost accounting the wage fund is more closely linked with final results.

Because the five-year plan is becoming the main form of planning, it would be expedient, in our view, to establish higher standards for deductions from profit to enterprises in the overfulfillment of the indicators of the five-year plan foreseen in the plan and actually achieved.

To establish a stable export base, especially for convertible currency, for output in short supply, a maximum share ought to be established for exports (both from planned as well as above-plan output) under the condition of the provision of the proper level of export efficiency.

It is essential, of course, to strengthen planning discipline and control over the quality of plans not only on the part of the ministries but also of local soviets of people's deputies. In the event of the unjustified reduction or low rates of growth of the production of output in short supply, the corresponding soviets must have the right to return the plans to enterprises and organizations for finishing.

The carefully substantiated and progressive plans of enterprises must become an important factor in the resolution of the major social and economic tasks facing the country. Special attention should be paid to the mobilization of the internal reserves of enterprises in the elaboration of the targets of the 13th Five-Year Plan, which is being formulated under the conditions of very strict limits of capitalist investments and higher demands on the increased efficiency of public production.

HOUSING, PERSONAL SERVICES

Difficulties in Housing Distribution Explained

18270106 Moscow ARGUMENTY I FAKTY in Russian
3-9 Jun 89 pp 4-5

[Article by B. Kolotilkin, doctor of technical sciences; "A Separate Apartment For Each Family. Calculations and Miscalculations"]

[Text] Housing is one of the most acute subjects broached in our reader mail. It is typical that a majority of the pre-election programs of the USSR people's deputies stressed this problem. In order to successfully solve it, one must know the real situation that has taken shape in this area. We asked B. Kolotilkin, a doctor of technical sciences, to talk about this.

Unfortunately, one must say that the "Housing-2000" all-union program still does not exist. There are only approximate figures for the amounts of housing construction. In particular, according to USSR Gosplan data, it is assumed that 36 million apartments will be built by the year 2000.

The following question is justified: Are there not miscalculations in these reference points and figures? You see, they can be challenged primarily by the definition of the concept "family," which does not have a single meaning. Do the calculations really embrace all those who fall under the concept of a family? Let us look into it.

The calculations of the planning agencies define the concept of a family as the aggregate of three signs: living together, kinship and the common character of the budget. The key sign in the concept of a family—marital relations—is replaced here by the more easily understood living together. But then, the separate living of spouses whose marriage is registered, which is forced by housing conditions, "deprives" them of the right to consider themselves a family in civilized society. The smaller the estimated number of families, the lesser is the requirement for apartments, naturally.

What Is A Family?

Planning workers distinguish between three population categories: those living in families, those living separately from their families and single persons. According to the 1979 census, of the 262.8 million people in the

country, there were 15.7 million single persons (6 percent) and 232.5 million people (88.7 percent) who lived in families composed of two or more people. These numbered more than 66 million. In addition, 13.9 million people (5.3 percent), who were members of these families, lived apart from them. The total number of families and single persons was approximately 82 million and approximately 87 million at the beginning of 1986.

The "demographic train," which is gathering speed, will deliver by the year 2000 approximately 39 million "persons on a waiting list" from those born during that time, or approximately 12 million "families." At that time, the total number of households (families and single persons) will reach 99 million (when the expected USSR population will be approximately 318 million people according to our estimate).

However, all single persons do not require separate apartments. One million single persons, who are elderly and disabled, need to live in boarding houses. However, the capacity of these is less than half the requirement.

It is also illegal to regard each extended family consisting of 4, 5, 6, and more people, who represent approximately 40 percent of the total number of families and single persons, as one family. Unfortunately, we do not know how many of them would like to live separately. The occupying of multi-room apartments with extended families consisting of several generations is indeed nothing more than the communal occupying of apartments—but only by families consisting of blood relations.

The Line Is Growing....

The ratio of apartments built (2.3 million) and families coming into existence (2.7 million) during the best year—1987—shows that the line for housing is not being shortened but continues to grow. By the beginning of 1989, it reached approximately 14 million families. At the same time, no one knows how many families (including extended ones) there are who have occupied housing composed of barely more than five-seven square meters per individual when the norm is nine square meters. It has not been calculated.

Even in Moscow, they only plan to take stock of all those who are living in communal apartments by 1995.

The trend for parents and children to live separately is now becoming typical for rayons having large extended families since earliest times (the Transcaucasus, Central Asia and Kazakhstan). Nevertheless, the task of finding out how members of extended families prefer to live—either together or separately—was not posed during the conducting of the population and housing census in January 1989. If one makes the dangerous assumption

that only one (!) out of four extended families would like to live separately in two apartments, it would be necessary in this case to build 10 million more apartments by the year 2000.

They Are Not Subject to Stocktaking....

For the present, we have examined the requirement of families and single persons for apartments. However, there is another—a third—population category according to the planners' classification. Although this consists of people who "are living separately from their family," they are nevertheless "not single people" and that is why they are not considered in the planning estimates for constructing separate apartments. According to the 1979 census, there were 13.9 million of them. These are people who are in military service, on protracted business trips abroad, students, those living in boarding house establishments, etc.

In 1979, there were six million people living in communal housing of the live-in type; By the beginning of 1988—approximately 11.5 million. Young people—as a rule, workers 20-30 years of age—are compelled to while away the most creatively active portion of their lives in hostels. You see, this represents 10 percent of the total number of those very workers who create national income. Who has estimated the damage that the humiliating living on a cot in a hostel has inflicted on their health, capacity to work and intellectual and moral level? Is there not a deficit in the defense of young workers' rights to their own housing?

The fate of these millions of young workers, who have plenty of problems and difficulties, is practically connected with the receipt of an apartment. They will have an apartment—they will have a family. According to the planners' calculations, however, they "already have apartments..."—as part of the families from which life's realities have put them on the road of "living separately from their family."

This is how, with the help of strong-willed methods, several tasks are being immediately solved: The requirement for apartments is being "reduced" and the housing problem for this category of the population is being "dismissed"—and a "base" to account for the successful completion of the housing program is being "provided." If this settling apart is not halted, there will be approximately 18 million people living in hostels by the year 2000 but to support each of the families formed from them practically would require no less than another 10 million apartments.

In summing up our strict calculations, we conclude that there will be approximately 119 million households in the country by the year 2000 and not 97 million as Gosplan assumes.

So, How Many Apartments Are Needed

As we have already said, the plans are to build 36 million new apartments during 1986-2000. According to our estimates, no less than 54 million are required, of which 16 million apartments in some case or other will be used to replace urban and especially rural housing that is being taken out of circulation. According to our estimates, USSR housing assets should consist of 125 million apartments (considering a reserve, etc. numbering six million apartments) by the end of the year 2000.

In addition, the frequency and scales of natural disasters and catastrophes, which have grown during recent years (Chernobyl, Arzamas, Bologoye, Sakhalin, Sverdlovsk, Armenia, Georgia, Tajikistan,...); ecological miscalculations; etc., can introduce corrections to the mentioned figures.

Let us look the truth in the eye: By the year 2000, we will have covered only the first stage in solving the task of providing each family with a separate apartment or house. By the 21st century, the communal occupying of a portion of our housing (including occupancy by extended families); hostels of the cot type; a growing requirement to expand the network of boardinghouse establishments for orphans, retirees and invalids; and the equalization of housing support, which is noticeably lower than the norm for some population layers and noticeably higher than the norm for others, will remain.

The results of the All-Union Census of the Population and Housing will permit a concept and an all-union housing construction program out to the year 2000 to be developed—this program should also provide for the solution of questions concerning the modernization (reconstruction) and repair of the built-up housing fund. During 1986-2000, you see, material and other resources, equal to constructing new housing in an amount of no less than one billion square meters in total area, will be required for the repair of housing assets alone—assets which will grow to 6.5 billion square meters of total area.

A very complicated task is at hand—balancing the amounts of new housing construction and the repair and reconstruction of existing housing and the requirement for material and other resources to do this. A very critical shortage of plumbing fixtures (for example, bathtubs), flooring materials, millwork, ... is now being observed. It is necessary to insure outstripping rates in the development of the material and technical base for housing construction and the maintenance of the housing fund.

Less than 12 years remains for all this!

PERSONAL INCOME, SAVINGS

Zaychenko's Comparisons of Consumption Patterns Disputed

18270116 Moscow VESTNIK STATISTIKI in Russian
No 6, Jun 89 pp 63-65

[Article by Candidate of Economic Sciences D. Dumnov under the "Notes and Letters from Readers" rubric: "In the Mirror of Statistics"]

[Text] A. Zaychenko's article, "USA-USSR: Personal Consumption," published in the magazine SShA: EKONOMIKA, POLITIKA, IDEOLOGIYA [USA: Economics, Politics and Ideology] (No 12, 1988), and reprinted in a number of central newspapers, is extremely interesting; but according to a great deal of data, unfortunately, incorrect comparisons were made. I agree with the commentaries from USSR Goskomstat published in Moscow PRAVDA (30 December 1988), and would like to cite certain other sources for comparison.

For example, the author writes that the lower the proportion of expenditures for food, the higher the standard of living.

The following data on the USA and the USSR from research materials on family budgets are cited in statistical handbooks periodically published by the International Labor Organization (ILO):

	USA	USSR
Number of Family Budgets Studied (thousands)	72	62
—Including Laborers and White Collar Workers		36
Average Family Size (Including Singles)	2.9	3.0
Make-Up of Family Expenses (Less Taxes, Collections, and Savings)	100	100
—For Food and Beverages	21	40
—For Non-Food Products	10	38
—Cost of Housing and Municipal Services	29	4
—Transportation Costs	23	3
—Recreation Services	9	6
—Education and Medical Care	5	less than 1
—Other	3	8

In the USA more than half of all family expenditures goes for housing, municipal services and transportation.

According to data from USSR Goskomstat, the average per-capita monetary income in families of blue and white collar workers in 1988 amounted to 149 rubles per month, while the proportion of expenditures for food was 24 percent, and deductions for taxes, collections and savings was 40 percent. But in one instance the author arbitrarily took a family with an average per-capita income of 95 rubles per month, and a proportion of expenditure for food of 59 percent; and in another instance, a family with average per-capita income of 65 rubles a month—and he makes comparisons on the basis of these data. According to official data, two-thirds the population of our country (rural included) has income of over 100 rubles per month per person, including 37 percent with income over 150 rubles.

In our view, the data cited by the author on the proportion of expenditures for alcoholic beverages to general expenditures are incorrect: USSR, 13 percent; USA, 2.0 percent. Here is the official information from the statistical handbook, "Narodnoye khozyaystvo SSSR" [National Economy of the USSR]: 2.0-3.0 percent in families of blue collar, white collar and kolkhoz workers; but in the USA, according to data from the ILO statistical handbook, they amount to 6.2 percent.

Comparing only the portion of expenditures for food without taking into consideration other top-priority expenditures is not altogether proper. You must determine first of all how much of the family's wages remain after paying taxes and paying for housing and municipal services, transportation, and other expenditures. One can cite other comparative data on the costs of medical care and education, and determine how long one must work to pay for these services, housing, municipal and transportation services, and so on.

The author of the article writes that in the USA, "both well-provided-for and poorly-provided-for families consume their 100-120 kg of meat." But here is data from the same ILO handbook: poorly-provided-for families expend eight times less for purchase of meat and fish products than the more well-off families; for dairy products, eggs and fruits they likewise spend 7-8 times less, and so on; that is, the make-up of nourishment in families with varying levels of income is sharply different. The handbook cites similar data on the distribution of the families studied in terms of their level of income and expenditures.

The American Lauren Lockshin, in an article published in the bulletin ARGUMENTY I FAKTY, correctly states: "Today people want to know the whole truth about life in other countries. But articles in the vein of Alice in Wonderland do not reflect the real state of affairs. There is a lot that is good in America. But there are also quite a few serious problems. Why try to fool

people and make them believe that in America everything is always free, open and splendid?" She notes that, "...even Marvin Zindler, head of a local television network, often concludes his evening program with the words, 'It's terrible to be poor.'"

As far as comparisons of the level of consumption with the pre-revolutionary period is concerned, one may cite sources of data valued highly by V.I. Lenin. At the beginning of the present century, zemstvo statisticians carried out various research projects. The data derived on the standard of living of worker and peasant families were then published in a number of works. I shall cite certain of them: A.I. Shingarev, "Vymirayushchaya der-evnya. Opyt sanitarno-ekonomicheskogo issledovaniya dvukh seleniy Voronezhskogo uyezda" [The Dying Countryside. The Experience of Sanitary-Economical Research on Two Settlements in Voronezh Uyezd] (1907, 1909); I.M. Shaposhnikov, "Byudzhety rabochikh odnoy iz fabrik Bogorodskogo uyezda v svyazi s pitaniem i zabolevaemostyu" [The Budget of Workers of One of the Factories in Bogorodskiy Uyezd in Connection with Nourishment and the Rate of Sickness] (1910); and other works which one may read in libraries.

For example, Shingarev writes that two-fifths of 161 peasant households researched in Voronezh Guberniya had no horses; almost an equal amount had no cow; and one-fourth had no cattle. The peasants' diet was extremely meager, and basically consisted of bread and potatoes.

Of the total number of families studied (161), sugar was not used at all in 77 families, veal in 48, mutton in 40, pork in 88, lard in 123, herring in 77, milk in 59, and butter in 74. Average daily food consumption was no more than 2,250 calories per person. That was chronic undernourishment.

Annual per-capita consumption was 13.5 kg of meat, 80.7 liters of milk; 0.3 kg of animal fat, 26 eggs, 0.3 kg of sugar, 2.4 kg of fish, 0.9 kg of vegetable oil, 86 kg of potatoes, and 222 kg of grain products, flour and groats.

Chronic malnourishment, especially for animal products, and unsanitary living conditions were the cause of wide-spread tuberculosis, typhus and other illnesses. "In a place where for five years out of ten the death rate exceeds the birth rate; where the average annual population increase is only three per thousand—that place is only one step away from extinction," Shingarev concluded. Seven years later in the foreword to the second edition of his book he wrote: "The population here stands, as before, at the very brink, after which its inevitable extinction will begin."

According to testimony by I.M. Shaposhnikov, who studied the budget of 324 workers at a cloth factory in Bogorodsk (now Nogilsk) in 1909, the standard of living of workers before the revolution differed little from that of the peasants. Poverty, malnourishment, disease and poor living conditions were the constant companions of the overwhelming majority of working families.

In 1909, per family member consumption was: meat, 12.7 kg; milk and dairy products, 53 kg; 8 eggs; fish, 2 kg; sugar, 4.2 kg; vegetable oil, 10 kg; potatoes, 86 kg; vegetables, 28 kg; and grain products, flour and groats, 136 kg. The extremely meager nourishment of worker families was aggravated by poor housing conditions.

Medical statistics of that time registered ominous figures of illness with tuberculosis, anemia, chronic bronchitis and other severe illnesses (According to data from I.M. Shaposhnikov, of the number of people studied, more than 66 percent were men, and 78 percent women). More than half the children died before reaching the age of five.

A.M. Stopani in his work, "Neftepromyshlennyy rabochiy i ego byudzhety" [The Petroleum Industry Worker and His Budget] (1910), gathered and analyzed materials on the study of budgets of petroleum industry workers in the city of Baku. He selected for study the budgets of workers of 104 enterprises of various kinds, which provided 94 percent of all oil extraction. The wages of those studied were at the average wages for all petroleum industry workers, whose wages were higher than the average wages of workers in Moscow and Petersburg.

The basic item in the families' expenditures was food. Moreover, more than one-third of the expenses were for purchase of grain products; one-fifth of the families' budget went for housing, purchase of fuel and lighting materials; and 17 percent for purchase of clothing, shoes, furniture, dishes and so on.

Average annual per-capita consumption was: meat and meat products, 57 kg; milk and dairy products, 78 kg; 77 eggs; fish and fish products, 6.8 kg; sugar, 12 kg; potatoes, 58 kg; vegetables and melons, 32 kg; and bread, flour and groats, 177 kg.

We have no reason to doubt the accuracy of the data, which were provided on the results of three studies of family budgets, and published in books which were re-issued several times before the revolution.

Therefore the assertions of the author of the article, that "In 1985 city-dwellers in our country consumed almost 50 percent less meat than in 1913," and that "In 1913 per-capita meat consumption in the cities of the Russian Empire amounted to 88 kg; in Moscow—87; in Petersburg—94; in Vladimir and Vologda—107; and in Voronezh—148 kg," are clearly unconvincing.

The author does not recognize the results of the studies of family budgets conducted before the revolution by zemstvo statisticians Stopani, Shingarev, Shaposhnikov and others; nor the official publications of Goskomstat USSR on the fact that per-capita meat and meat product consumption in 1913 amounted to 29 kg for the country

as a whole. Instead of these official data, the author cites his own calculations on average per-capita meat consumption for a number of oblasts in Russia, allegedly based upon statistical materials of the veterinary administration of the Internal Affairs Ministry.

Here, for example, are the data from this estimate for Voronezh Gubernia for 1913:

Population Size—3,559,700 people

Including urban (in cities of over 50,000 population)—79,100

Rural population—3,480,600 people

Meat Production from Local Slaughter—858,899 poods

Poods per capita

In all—0.3

Including Urban—7.2 poods (In the article the author cites data on meat consumption in Voronezh as even 147.7 kg per year per person.)

Rural—0.2

One should bear in mind that the data of the veterinary administration on meat production included live cattle sold at the market, and arbitrarily translated into meat; for example, for 7 poods (112 kg) per hog (evidently live weight, since if this were accepted as slaughter weight, the average live weight of a hog would amount to almost 200 kg). Moreover the arbitrary weight for a single head was accepted as the same for all gubernias. For the veterinary service this had no significance, since it had its own specific tasks.

Thus, if Shingarev, in terms of the results of research on family budgets in Voronezh Gubernia, had written in his books about the chronic malnourishment and the hungry state of the population, then according to Zaychenko's calculations it appears that before the revolution almost three times as much meat was consumed there than at present, and more than is now consumed by very-well-off groups of the population of the USA.

I would like to recommend once again that the author conduct similar comparisons on research data on family budgets, which has been going on in our country for almost 100 years. At the present time such a study is being made on 90,000 families in all republics, krais and oblasts; and data is being derived on the basis of recordings made in the families studied, and additional interrogation of them by statisticians.

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ELECTRIC POWER GENERATION

Ryabev Describes Nuclear Waste Disposal Procedure

18220186 Moscow *KOMSOMOLSKAYA PRAVDA* in
Russian 30 Jul 89 p 3

[Unattributed article: "Where are Radioactive Wastes Buried?"]

[Text] "Rumors about secret burial sites for wastes from the nuclear power industry can be squelched by one method: publish in the specialized and popular media the sites and other information on the indicated facilities and provide a description of the degree of reliable containment of the radioactive wastes." Deputy O. Suleymanov from Kazakhstan addressed this statement to L. Ryabev during his confirmation as USSR Council of Ministers Deputy Chairman.

Answering this question, L. Ryabev said in particular: "Generally speaking, today we do not bury radioactive wastes. I will explain why. Take a nuclear power station. Its discharges and deactivated equipment with minimal radioactivity is softened by steam, encased in concrete, and kept at the AES. The radioactivity is minimal and 99.9 percent of it is located in the spent nuclear fuel. We transport this spent fuel away from the station (at a station with a capacity of approximately 45 million kw this amounts to 1000 tons of fuel a year). We transport more than 1000 tons to a fuel storage facility in Krasnoyarsk Kray where it will remain for a long time. The 300 tons from the VR-400 reactors are sent to a military facility located about 100 kms from Chelyabinsk in Chelyabinsk Oblast. There the fuel is reprocessed, and the uranium and plutonium are extracted for secondary use in the nuclear fuel cycle. We keep the waste and convert it into glass. The glassified waste will be held in surface concrete storage facilities for 30 to 40 years. After this, suitable geological formations will be selected to store these glass blocks forever. Thus the problem of burying wastes from peaceful activity will be resolved in three to four decades."

Lessons Learned from Miners' Strike

18280143 Moscow TRUD in Russian 14 Jun 89 p 2

[Article by N. Mokrishchev, correspondent: "Matters Led to a Strike: What Lessons Were Learned from the Sharp Conflict Between the Leaders of the Ministry of the Coal Mining Industry and Those of the Trade Unions?"]

[Text]

"ChP" ["Extraordinary Event"] in Krasnyy Luch

Shortly after the shift ended, a group of miners entered the office of N. Shakhnazarov, chairman of the Profkom [Trade Union Committee] of the Krasnyy Luch Mine imeni Izvestiya. One of them placed a short page of typewritten text on the desk.

"What's this?" asked Shakhnazarov.

"Read it and figure it out," the miners replied.

The short page set forth the economic demands made by the workers of the three main mining sections on the mine's directors, as well as its labor-union committee. Placed at the end was the following demand: adopt a solution within a 10-day period, and announce it at a general mine meeting.

Within five days a joint meeting of the partkom [party committee], profkom [trade union committee], and the STK [Special Technical Committee?] was held, to which the workers of the section which had put forth demands were invited. The specialists reported their own ideas with regard to all the points involved, but the miners' heads began to spin from the references to and citations from a mass of instructions and decrees. And with regard to the basic problems which had touched off the entire forest fire, the following statement was made unambiguously: it is impossible to solve them.

Such a conclusion did not suit the miners....The administration still had five days left "in reserve," but, as it had done previously in order to put matters on hold, or at least to slow them down, it attempted to get by with promises: let's think about this some more; we'll work something out; let's agree "at the summit."

At the end of the ten-day period a workers' meeting was held. In addition to the apparatus of the mine administration, it was attended by F. Titarenko, the general director of the Donbassantratsit Association; A. Nikol'skiy, second secretary of the Krasnoluchskiy Party Gorkom; and V. Turmanov, chairman of the terkom of the trade union for coal industry workers.

N. Shakhnazarov tells it this way:

"A miner named V. Turchin, serving as chairman of the profkom of the second section, came right out and asked the leading officials in attendance there: 'What message will I give to the shift which is now down in the mine?' Having received an evasive answer, Turchin, obviously, told his people exactly how everything stood, and 78 workers down at the mine face declared that they would not come up to the surface until their demands were satisfied."

Clash with Instructions

Just what were the workers of the Mine imeni Izvestiya striving to achieve? Seven of their complaints—ranging from closing down work details for each day worked separately and reducing unnecessary administrative positions to electing the mine director by secret ballot—are, so to speak, of local importance. But three radical demands stem directly from major and overdue problems in this sector.

Judge for yourselves: 11 strikes have occurred at enterprises of the coal industry during the first three months of this year. Everywhere the miners demanded one and the same thing: change the system of wages, and make Sunday the standard day off for miners as well. The conflict at the Mine imeni Izvestiya is the 12th in this sector. Therefore, we should no longer talk about this strike as if it were merely a random case, but rather a phenomenon.

The Krasnyy Luch miners were the first to set forth the following condition: "establish a firm rate—three rubles per ton of mined coal."

"Why three instead of four or five?" I asked the miners. "Where did you get this figure?"

"According to our estimates, it is a composite of the various existing rates and various bonuses," the crew-leader B. Yatsenko replied.

Simple? Yes, if you mine a ton, you get three rubles; if you mine 100 tons, it amounts to 300 rubles. That's all the arithmetic there is to it. Everyone can understand it. And you do not need any bonus-type makeweights for various indicators.

The miner V. Shkrabov tells it this way:

"If, when the plan is 1350 tons a day, we mine 5 tons more each day, for a month I receive a take-home pay of more than 500 rubles. But if the drift suddenly runs into bad conditions, when neither a coal combine nor timbering sections can get through, equipment is brought to a standstill. We reduce the amount mined to 100 tons a day at most, and our wages are cut in half. Why so sharply, and what am I to blame for? About 7 years ago we used to be paid 700 rubles each for 1,000 tons of mined coal, whereas nowadays for 1500 tons, working with the same type of personnel, we get 300 each, and

even that sometimes with difficulty. That's really quite tangible at the present-day prices for goods and services. And again—why? How did it happen that the monthly amount produced per worker in mining last year was lower by half a ton than it was during the first quarter of this year, whereas the average wage was 17 rubles higher?"

Some of these far-from-childish "why's" could not be answered even by V. Sevryukov, the mine's deputy director for economic matters.

"There was a lot of fuss when we switched over to the new rates," said Yatsenko. "At the ministry they pretend that they are now paying us well, whereas we pretend that we are working well. Under our conditions we should be paid not for participating in the labor process but rather for the results; thereby we would be paid wages instead of a salary...."

Let's recall how many words were spoken about the need to introduce the direct dependence of wages on end results and the independence of collectives in this matter. But, as before, the labor contribution and the amount of incentive are determined by the system of the rate schedule, norm-setting, and awarding of bonuses established from the center. Thus, wages are "partitioned off" from what is actually accomplished on the job. But this contradicts the principles of cost accounting, and, as a result, the most reliable beginnings are being paralyzed.

It was precisely for this reason that the miners put forth their demands that a firm rate be set—for a ton of mined coal, regardless of what kind of ton, planned or above-plan. But the experienced economist V. Sevryukov is greatly troubled by the following question: by what right are these three rubles to be paid if the plan is not fulfilled?

But why should it not be paid, if the ton has been mined...? To be sure, for this purpose, we must look over and possibly revise a bunch of instructions. But, of course, it must be done!

When we were already on the point of saying goodbye, Sevryukov suddenly drew a pamphlet from a folder and, while shaking it, he irritably blurted out:

"I honestly don't understand why and for whom the Law on State Enterprises was written. Judging by everything, it is not liked 'on high,' and we here 'down below' have also stopped adhering to it. One of its articles speaks precisely about the right of labor collectives to examine, revise, and approve plans for socioeconomic development. But the ministry does not intend to take our opinion into account...."

A. Drabik, the mine director, also expressed himself on this score:

"The Scientific Research Institute has determined that this mine's capacity is 600,000 tons of coal a year. The collective has undertaken to achieve 700,000 tons, and the Ministry of the Coal Industry has suddenly, without rhyme or reason, established a plan for us amounting to 775,000 tons, which will be impossible to fulfill. But non-fulfillment will entail a reduction of wages by a factor of 1.5 or even 2, which has happened to us."

"And as if that weren't bad enough," the director continued, "I've even been deprived of the right to break down and fine-tune the annual plan month by month. For example, the mining-geological conditions became worse, and at the end of March the miners requested the plans for April and May be reduced by 5,000 tons each month, which they promised to make up in June and July after the introduction of a new drift. But I could not do this.... I went to the ministry, but they did not even want to listen to me there."

Every Day Except Sunday

When a long, severe winter occurred, and the country needed more fuel, the miners understood the problem, and at that time they uncomplainingly sacrificed their Sundays and even their holidays. But a temporary measure has been transformed into a permanent system. The ministry and the trade union's Central Committee have imposed a continuous work week on the collectives. It has provoked dissatisfaction among many persons. The *Izvestiya's* miners also set forth among their chief demands that a standard day off—Sunday—be established for miners working at the face. Why for this category of miners? Because they are the only ones working on days off and holidays which are common to all.

At one time Sundays used to be taken up with repairing equipment so that work could proceed on weekdays without breakdowns. Now repairs are done in a slapdash, hurried manner during the work shift instead of mining coal during that time. The miners call Sundays the "bad days": they can neither stay with their families on this day, nor can they perform their tasks as they should be done, for only about half of the usual daily norm of fuel is issued. And, indeed, how could more be issued if the warehouses, supply facilities, machine shops, and other auxiliary services have the day off, and there is nowhere to get a part or an assembly unit for a semi-mechanized coal-mining combine, you cannot sign out needed materials or get a timber prop for the face? And on weekdays there are not enough empty rail-cars for shipping out the product, while on Sundays there is an ample supply....

M. Srebnyy, chairman of the Central Committee of the trade union of coal-industry workers, has promised to complete negotiations with the Ministry of the Coal Industry with a view to converting to a discontinuous work schedule... beginning in 1991. The argument for

delay would seem to be convincing—preparations are needed so as not to lose the more than 40 million tons of coal a year which are mined on Sundays.

But are not these 40 million tons going to waste in the coal warehouses, not shipped out due to the chronic shortage of railroad cars? The mines and ore-enriching plants of Krasnyy Luch alone are short by more than 100 cars every day, and by as many as 40,000 a year. That means that there are 2.5 million tons, just figure it out, which are not constantly being shipped out. Perhaps a decision could also be made to eliminate this chronic imbalance? An immediate decision—not one that is postponed for two years.

A Mine Is No Place for Demonstrations

As we have seen, the miners' demands were not unfounded. But was a strike inevitable? Were there other ways to solve these problems, which had come to a head?

Of course, there were.

If the administration, the profkom, and the STK had taken the workers' demands very seriously right away, then the matter would have scarcely reached such a developmental stage of conflict. Because, after all, when the strike began, during the course of 24 hours, those unhoisted 10,000 tons of coal were taken off the plan for April-May, and thus the firm rate of three rubles per ton of coal mined was established, and that signified the repeat election to the position of mine director. The only questions remaining open were those connected with the standardized day off on Sunday and the supplementary payments for working on the night shift.

And so did the miners turn out to be correct in their decision? Can we give an affirmative answer if we recall that the epicenter of events was under the ground?

V. Istomin, an electric-fitter, replied as follows:

"If we had set up pickets on the surface, our step could have been assessed as a loafing action with all the consequences stemming from that. But we honestly and honorably worked our shift and then remained in the mine. I'm sure that, otherwise, nobody would have paid attention to our demands. We wanted our voices to be heard in the ministry, in the Central Committee of the coal-miners trade union, and in the Goskomtrud [State Committee for Labor and Social Problems]. We judged as follows: from underground it would be more audible, all the more so in that our protest action would compel people to think about all miners, and not just about us."

In listening to Istomin, I thought: in solving the problems raised by the miners, too little depends upon the administrators in the localities, and too much—on the ministry, which in no way wants to delegate to the labor

collectives even the rights included in the Law on State Enterprises and, obviously, does not intend to abandon the command-type, willfully arbitrary, methods of administration.

To the places where, during the first few months of the year, sharp conflicts had arisen Minister M. Shchadov, and Trade Union Central Committee Chairman M. Srebnny rushed like firemen to fires. By using the great possibilities and authority at their disposal, they put out these "fires" in the twinkling of an eye. People say that, by allocating the necessary sum from the ministry's purse, they solved the problem of paying for the work done by the striking miners at the Severnyaya Mine. But how do matters stand at the next mine and, indeed, at all the remaining ones?

Neither the minister, nor the Central Committee chairman, nor even their deputies came to talk with the strikers at Krasnyy Luch. Could they be starting to accept conflicts as a matter of course? They did, to be sure, permit the general director of the Donbassantratsit Association to sign a guarantee concerning the labor payment—at the rate of three rubles per mined ton of coal. But what about other mines? Do they also have to go out on strike? It seems to me that the Ministry of the Coal Industry and the trade union Central Committee should heed the opinion of electric-fitter Istomin, who said that by their protest action they were hoping to compel people to think about all miners at the same time.

This is on the one hand. But, on the other hand, by speaking out and demonstrating against the manifestations of arbitrary willfulness, no matter what pressure may have been exerted by the administration, the miners themselves, nevertheless, also had recourse to those same pressure methods.

In this regard, I had a conversation in a miners' brigade of the Zhovtnev Makeyevskiy Mine Administration, where O. Telenkov is the brigade leader.

"A mine is not a place for strikes," the miners said. "It's always dangerous down there. A large accumulation of people in mining excavations is threatened with severe consequences. The arbitrary failure of even one person to come out of a mine must be perceived as an 'extraordinary event.'"

The Krasnyy Luch strikers themselves agree with this: underground demonstrations constitute a very dangerous business. Let's take, for example, this very same Mine imeni Izvestiya. Approximately 80 men occupied the transformer room, where 20 oil-type rectifiers are fed current amounting to 6,000 volts. God forbid that a cable or a clamp should catch fire! Furthermore, the air is bad there and the temperature is high—it's no wonder that one of the strikers began to have heart trouble and had to be brought up to the surface.

Inasmuch as, with the upsurge of activism and self-awareness of the masses, our lives have been entered by a heretofore so unusual phenomenon, it is high time that we required a legal regulation of the conduct of the parties involved in such extreme situations. The initiative should logically be shown by the trade unions. The procedure for conducting "protest actions" and the responsibility of the parties involved should be strictly regulated, especially in places where this is connected with heightened danger. And we must learn how to examine and deal with conflicts at the negotiating table.

We cannot end this article without drawing attention to such issues as the following. When the strike had already begun, the profkom began to act "like a profkom" and organized the underground feeding of the strikers, which they noted with gratitude. But one cannot help but noting that at the general mine meeting which was held on the eve of the strike the profkom did not state its own viewpoint. And, moreover, what we are talking about is a profkom and a chairman who were principally enrolled in Krasnyy Luch.

Such were the lessons taught us by the miners' strike in Krasnyy Luch.

Commentary on Recent Trade Union Draft Law
18280139 Moscow TRUD in Russian 16 May 89 p 2

[Article by V. Vishnyakov, doctor of juridical sciences, department head, VShPD [Higher School of the Trade Union Movement]: "A Link in the Political System"]

[Text] **On 29 April 1989 the USSR Draft Law entitled "On the Rights of USSR Trade Unions" was published in TRUD. This draft has evoked numerous responses from our readers, and today we continue the discussion.**

Perestroika has already been proceeding in Soviet society for four years, and, in my opinion, the heat of criticism directed at the trade unions has not become any weaker. It is becoming more and more obvious that radical changes are needed and that if we continue to merely "adjust" the obsolete mechanism of the already functioning trade union system, the trade unions will not be able to occupy sufficiently independent positions in relation to the state and economic organs....

It is undoubtedly true that adoption of the Law "On the Rights of the USSR Trade Unions" must become an extremely important event in the radical restructuring of the trade unions' activity. I would like to support the idea which was set forth by S.A. Shalayev, a representative of the AUCCTY, as stated in an interview published in TRUD on 3 May, to the effect that during the course of discussing this draft we cannot restrict ourselves to merely amending certain articles in the Law. We must not avoid analyzing ways to improve the forms and methods of trade union activity as well as the norms of internal trade union life. In this connection, to my way of thinking, it is high time that we profoundly discuss the

following fundamental, basic problems: the place and role of Soviet trade unions in the present-day phase of perestroika, the principles and specific forms of interaction among the trade unions, the party, and the Soviets.

At the present time many party, soviet, and trade union staff members have retained, as a whole, the usual ideas on these problems. But the following point is becoming more and more noticeable: the scheme according to which trade unions functioned for a long time as, essentially, a kind of continuation of the party-state structure is breaking down more and more, and revealing its own bureaucratic essence, which has nothing in common with the Leninist concept of trade unions under socialism.

As far back as the 27th party congress it was stated that we must rethink the place and role of the trade unions under the new conditions of this society's development. Where should we begin? First of all with the following question: What exactly are our trade unions?

In the Draft Law, as well as in the existing Trade Union Charter, they are characterized as public, independent, non-party organizations. But, in my opinion, such a general definition already reduces and restricts the role and place of Soviet trade unions.

In fact, they are public but not independent organizations. The USSR Constitution (Art. 48) makes a specific distinction between public organizations and organs which are public and independent. The latter may encompass, for example, house committees, people's guards, comrades' courts, and special-interest clubs (let's say, devotees of ice-skating, Italian opera, etc.); but trade unions have a structure at a different level.

The goals of trade unions as public organizations are connected with the basic tasks confronting the society as a whole. Article 7 of the USSR Constitution proclaims that trade unions shall participate in administering state and public matters, in solving political and economic problems, and in deciding sociocultural questions. Consequently, trade unions are not simply public, but also political, organizations of the working class, peasantry, and the working intelligentsia. But reducing the trade unions to the level of independent organizations also leads, in my opinion, to a restriction and even an emasculation of this quality of theirs.

This is also facilitated, to a certain degree, by the Charter's emphasis on the fact that trade unions are non-party organizations; nor do they claim to be. But it is clear to everybody that the trade unions do not constitute a party. The place of the trade unions and the principles of their interrelations with the party are defined in Article 6 of the USSR Constitution. It states therein that the CPSU, as the guiding and directing force of Soviet society, comprises the core of the public organizations. This fundamental position is given specific form in Articles 60 and 61 of the CPSU Charter. It is being asked whether it was necessary in "correcting"

the constitutional principles of interaction between the party and the trade unions to replace this legal formula in the Charter of the USSR Trade Unions with the following, general-declarative premise: "The USSR trade unions shall operate under the guidance of the CPSU."

It could be retorted that the interrelations between the party and the trade unions are not at issue here if the Draft Law does not treat this problem. But its preamble does contain the following formulation: "The present Law defines the legal foundations of the activity engaged in by the USSR trade unions in deciding questions of state, economic, and sociocultural construction; it established the necessary guarantees for them to successfully carry out their own charter tasks."

But if the Law guarantees the carrying out of the Charter tasks, that means that it—the Charter—must correspond to the times. And, obviously, it could become reasonable to propose, along with a parallel "amendment" to the Law, that the Charter of the USSR Trade Unions be revised.

In characterizing the system of interrelations between the party and the trade unions, V.I. Lenin, in his own time, wrote that the party exercises its dictatorship by means of, "so to speak," a series of "gears," "levers," and "belt drives," thus showing, albeit in an artificial figure of speech, the conventionality of the relationship involved here. According to Lenin's concept, the trade unions are not appendages of the party, but rather occupy their own independent place within the society's political system. The threads of the reciprocal ties between the party and the trade unions are not so simple as they were presented in recent years; they must not be mechanistically reduced to "belt drives" from the party to the trade unions.

Moreover, under the conditions of the present-day reform and democratization, the forms of interaction between them have become more complicated. Nor are the independent actions of the trade unions to be excluded. The "linkage" remains, but its mechanism is changing fundamentally. The trade unions of the USSR must, in fact, become organizationally independent elements of the society's political system. Their principal purpose within this system is to express and defend this basic interests and rights of working people against bureaucratic, technocratic, and other forms of usurpation of power, to consistently facilitate the ensuring of a decisive role to be played by the working class and the peasantry, as well as by all working people in examining issues of nationwide importance, and to assist this process directly, without any intermediaries.

It is possible that we will need to introduce the following definition of Soviet trade unions into the Law's preamble: Trade unions constitute self-governing, independent, sociopolitical organizations of the working class,

peasantry, and the intelligentsia, which actively participate, in accordance with the USSR Constitution, in administering state (rather than production-type, as stated in the preamble of the Draft Law—V. V.) and public matters, as well as in solving political, economic, and sociocultural problems.

Dissolving trade unions in the boundless sea of amateur, do-it-yourself organizations and reducing their role as class-type, political organizations have led to a situation whereby the main factor in the Leninist concept of trade unions under socialism—defending the rights and interests of working people and struggling against bureaucratic distortions in the operation of the state apparatus—has turned out not to be front and center. That is why keying the new law to promulgate a strong social policy for the trade unions and advancing as a top-priority task defending the rights and interests of working people are so important.

In my opinion, however, we must not limit or restrict the defensive activities of the trade unions solely to the sphere connected "with labor in public production or instruction in education institutions," as mentioned in Article 1 of the draft. Practically speaking, the activity of the trade unions is considerably broader than was reflected in the decrees of the recent plenums of the AUCCTU and even in the Draft Law itself.

But a clear vision of the goal still does not guarantee that it will be achieved. There can no longer be any doubt about the fact that radical economic and political reforms answer the basic interests of working people and, above all, those of the working class as the most determined advocate of perestroika. Naturally, these reforms affect, in various ways, the interests of 142 million trade union members. There are among them some conservative persons who do not wish to give up their various kinds of privileges and quite a few who are satisfied with "leveling" in the wage system. But, as M.S. Gorbachev noted at the April (1989) Plenum of the CPSU Central Committee, the overwhelming majority of Soviet persons do not think of the country's future without perestroika, without restoring health and renewing life based on socialist values.

However, among some trade union staff members there are strong conservative, wait-and-see tendencies.

The following question has arisen: Are all the existing trade union personnel capable of fundamentally restructuring their trade union work in accordance with the changes occurring within the society? Can they return to the trade unions the features appropriate to their essence and their class nature? Can they fill their activity with new contents adequate to present-day conditions of the country's development? From my point of view, this is hardly the case. I frequently have occasion to deliver lectures to trade union staff members at the republic or oblast levels. And one often encounters a very cautious, at time even a simply negative reaction to the processes

of democratization taking place in the production sphere. Manifesting itself among other comrades is a strong desire to "put things in order" more rapidly, moreover, by using the old, administrative methods. There are resonant complaints that "anarchy" is increasing on the production line; many workers, these complainers say, are engaging in "demagogy," and are no longer so obedient as before. One even encounters negative opinions as to the necessity of trade unions participating in the struggle against price rises or in monitoring the expenditure of public consumption funds, etc. It would seem that everyone has recognized the importance of the work being done by the trade unions in organizing workers' monitoring controls in the fields of trade and public catering; and it is even more strange that among trade union staff members one encounters those who speak condescendingly about such activity. What is this? Is it simply skepticism or the usual lack of desire to take on an extra load of independence? And certain staff members of the Sumy Oblsovsprof [Oblast Council on Education] (and not just this one) have demonstrated to me with great energy that rank-and-file specialists and workers have not matured enough, they say, to head up councils of labor collectives....

In my opinion, there are still a considerable number of trade union staff members who are incapable of elevating themselves to the interests of the entire working class and those of all working people. Their consciousness is dominated by the schema mentioned at the beginning of this article: a rigid tie-in of the party-state and trade union structures. And, although during the years of perestroika quite a bit has been done to break up this Stalinist model, from our own point of view, it has still remained very influential. The work of the trade union organs is still excessively centralized.

It is undoubtedly true that an important event in trade union life was the taking of the well-known steps to regularize the structure of their working organs. Decisions were adopted to noticeably reduce the paper flow and to considerably expand the rights and opportunities of the trade union committees, as well as the regional councils and committees.

But quite a few decisions continue to be sent down "from above"; staff members in the localities complain, just as before, about the great amount of mandatory office work. The trade union system still frequently departs from those purposes for which it, properly speaking, exists. The series of strikes in various regions of the country have shown that the administrative measures being adopted attest to the lack so far of a strong, genuine, effective representation of the trade unions in reciprocal relations with the state, economic management, and other organs. But it is precisely the effective representation of the trade unions at all levels, ranging from the highest organs of state power to the cooperative organizations which constitute the principal element of their status and the foundation of all their other rights.

Soon 100 USSR People's Deputies from the trade unions will make their contribution to the work of the Congress of People's Deputies. This is a very important factor. But the radical expansion of the trade unions' representative functions will require a fundamentally new basis for regulating their interaction with the administrative organs as a guarantee for performing these functions. Therefore, I consider it necessary to pay more attention in the Law to the legal regulation of ties with the Councils of Ministers, state committees, and other key organs as the most important and active partners, including the right to veto decisions which infringe upon the interests of certain groups of working people. Because, of course, our everyday activity in all spheres of life, in addition to laws and ukases, is still determined by a multiplicity of instructions, dispositions, and orders. And, so long as the latter are being created and exist, their legality must be approved, and they must be agreed to by the trade unions.

Let me suggest, in this connection that it is no longer sufficient to simply improve the trade unions. We must give thought as to how to construct them on a fundamentally different democratic foundation, relying on an active and well-motivated interest of the working people. The leaders of the trade union organs at all levels could be elected by direct voting from among alternative candidacies. The organ's apparatus itself should be formed with the approval of the elected organ as a whole, rather than its presidium or secretariat.

It would be logical to abolish any and all privileges for trade union staff members and to exclude all positions of these staff members from the nomenklatura of the party organs.

Pluralism has been connected with the open discussion of various opinions. The viewpoints of the trade union organs ought to be set forth publicly, and the discussion of diverse opinions should be conducted with the involvement of the mass media. It is important for trade union members to know what kinds of proposals have been introduced by the trade unions, how the state and economic organs have reacted to them, and who will be specifically responsible for violation of trade union rights.

Should we not give some thought as a whole to the federative principle of combining trade unions into associations, as is widely practiced abroad? Another, more "tranquil" variant is also possible: leave the existing territorial-production structure, but with a major restructuring of the entire system of internal ties, with the maximum independence of sectorial unions and primary trade union organizations.

In short, there are many problems and various solutions are possible. The important thing to understand is that active;y seeking them out is simply necessary nowadays, that we cannot get by with merely "improvements." And

it is a good thing that discussion of the Draft Law will allow us to rethink the cardinal problems involved in enhancing the role to be played by Soviet trade unions.

To some persons certain assessments in this article may seem sharp, and certain proposals may "smell too much of the scholar's lamp." But it seems to me that we should not be afraid of having disputes and polemics. We should take note of unrealistic ideas when they first appear. It is important that three months have been allotted for the initial discussion, and that we can conduct it in an unhurried manner. And the more critically, I would even say, the more keenly we conduct the analysis of the draft in accordance with the ideas of perestroika, democracy, and glasnost, the more useful will it be.

Because, after all, the important thing is not to "grade" the work of those persons who have prepared the Law in its preliminary stage, but to obtain, in the final analysis, such a legal document as would provide for Soviet trade unions the possibility of at last occupying their deserved place in our society.

Aging Labor Force Problems, Solutions

18280146 Novosibirsk *EKONOMIKA I ORGANIZATSIYA PROMYSHLENNOGO PROIZVODSTVA (EKO)* in Russian
No 5, May 89 pp 86-91

[Article by V. V. Neugodov, candidate of economic sciences, Leningrad Finance and Economics Institute imeni N. A. Voznesenskiy: "Aging Is Not Yet the End"]

[Text] The introduction of progressive equipment and the mastery of new technologies and output is traditionally associated with youth. And the elderly workers? The gradual aging of the work force is now under way. The proportion of workers 40 years old or older was 30 percent in 1959 and 39 percent in 1980; by the year 2000 they will make up more than half the labor force. How do we take the characteristics of this group into consideration when innovations are introduced?

Innovations are assimilated more slowly at an older age. In the shoe industry, older workers master new operations 0.2 to 6 times more slowly than workers 25 to 35 years old, regardless of their experience and long work service. They achieve the normative indicators in mastering new equipment many months, and even a year, later than their young colleagues. For this reason, the introduction of new equipment leads to the "flight" of older persons. International comparative research has shown that the turnover of older workers increases by one-fourth as much as the average level when there is a shift to automated production, while the turnover is 17 percent lower with traditional technology.¹

The aging of the work force hampers mechanization; after all, 61 percent of those employed in manual labor are over age 40, and more than a half of them would like

to be employed in such work in the future. Some 22 percent of those between 40 and 49 and 42 percent of those between 50 and 59 years of age are categorically opposed to any changes in the nature of the work, and they even avoid changes in operations that are already familiar.

Frequently the older workers cannot perform the new functions to the full extent with high quality.

At the Novosibirsk Road Machinery Plant, machine tools with programmed control had to be installed and put into operation. But not one person in a large group of repairmen was able to perform this work. Basically older persons are employed in this vocation (the average age is 54). This problem exists at many of the "old" enterprises. This is what an economist at the Berdsk Electromechanical Plant says about it: "It is very difficult to work, since those employed are basically veterans of 20 or 30 years or more. But if a new machine tool breaks down, we don't know whom to send to repair it. Although nearly all of them are in the highest job category—the sixth. The young people do not stay too long. We have a time rate wage system, you know; it depends on the job category, and all the high categories are 'occupied.'"

Sometimes it even comes to destruction of the new equipment which is "preventing" such workers from living well and earning. Many of our flexible automated production facilities are behind bars for this reason.

The earnings of older workers are reduced because of a decrease in output. According to our data, such losses would amount to 12 to 63 percent during a period in which new operations are assimilated if these workers were not held up before and after the shift. When new equipment is being put into use, the losses can be even more substantial because of its low level. The wages of operators of machine tools with ChPU [numerical control], for example, are lower than machine tool operators that are wide-range specialists. Although the wage rates have been raised on new equipment, its poor quality and the lack of attachments, tools, and software are leading to downtimes and losses in earnings.

The low output "undermines" the authority of the older workers in a collective. Coming down from the summit of a professional Olympus when one is elderly is bad for morale. In addition, the increased labor inputs by older workers "pull back" the entire collective, particularly on a production line. This leads to tension between workers of different ages, and a negative attitude toward elderly colleagues hastens their aging processes. The difficulty in mastering new labor skills leads to fatigue as well.

Can these problems be solved? Many scientists believe they cannot, and that a production facility can be renovated only after workers in this category are pensioned.

Or when new assignments are given only to the young workers. But one older generation follows another, and there are not enough young persons for all types of work. What is to be done?

The unreceptiveness of older workers toward what is new is not just the result of aging in itself, but of the organizational and economic conditions that have existed for a long time. The low rates at which equipment has been updated (its average age in the national economy is 28 years), the low educational level of this category of workers and the lack of any kind of incentive to raise it, and the absence of scientifically grounded organization and labor incentive during the period of assimilation have taken away any worker interest in what is new. The conservatism can be overcome by establishing the conditions under which workers improve their work capabilities and familiarize themselves with new developments throughout their lives. This is possible by making changes in the technical basis of production which are total in nature, preventing an "overflow" of manpower.

Changes are needed in vocational functions to ensure that a worker is not chained to one form of work. In Japan, for example, a person passes through the entire technological chain during his life, working in different places in different vocations. As a result, he continues to be highly active in production even in old age. In our country, the development of collective forms of labor will help to develop a worker with broad specialization who is accustomed and able to assimilate what is new. In the "block" method of training, a worker becomes familiar with several vocations that are related with each other, increasing the range of his abilities when production is renovated.

Incentives and conditions are needed to reinforce general education knowledge. Unfortunately, it is difficult to reinforce the knowledge acquired previously in general education evening and correspondence schools; they do not take the characteristics of older persons into account. There are no incentives to continue the training. Having studies in the evening, after work when there is increased fatigue, takes away any inclination to learn. The loss of learning skill, the negative attitude of management toward diversion of workers from production, and the stereotype of unneeded training which has taken shape in the working environment add to the problem. As a result, there are very few persons "over 40" in the evening schools.

In order for an older worker who is continuing his education not to be discouraged, but given an incentive, both economically and socially, it is necessary:

—to increase the number of days set aside for training when wages are retained and lessons are conducted on precisely these days;

—to take the social and psychological characteristics of this group of workers into account; and

—to introduce additional incentives for persons who continue their education.

The experience of other countries is of interest. The so-called "sabbatical" system is in use in the United States: employees with 20 or more years of service are granted additional paid leave of absence (up to a year) to update their knowledge and increase skill. In Italy, the trade unions have acquired the right for their members to have 50 hours of study for each year worked. Our procedure for training workers is regulated by obsolete instructions adopted in the 1960's.

In order to reinforce economic incentives, we must change the system of wages and norm setting during the period that new procedures (operations) are put into use, apply correction factors more widely for norms which take their assimilation characteristics into account, and differentiate these factors in accordance with age as well. For the entire period the worker spends as a student and in mastering new equipment, as well as in all cases where retraining is necessary but the worker is not responsible (sickness, a decline in ability to work), he has to be provided with the average wage for his vocation. In order to provide incentive for rapid mastery of new equipment, additional payments are decreased to the extent that output is increased.

At the Novosibirsk "Sibelektrotyazhmash" plant, there have not been enough workers to maintain the machine tools with numerical control for a long time. Inasmuch as the wages are lower here than for machine operators with wide specialization, experienced workers have not been rushing here. In order to interest them, the following incentive system was adopted: a worker is paid most of his wages plus a certain percentage of a bonus "from what was done." Usually these workers are paid by a time rate system, and for this reason they are not interested in efficient work. Introduction of the new system, together with an increase in wage rates, has reduced the shortage of personnel, and the initiative in putting the new machine tools into operation was shown by the experienced workers.

At the Berdsk Electromechanical Plant, a gap developed between the workers' skill and the complexity of the work. All the equipment being maintained by mechanics and repairmen was divided into five groups of complexity. The simplest traditional equipment was put into the first group and the unique and very complex equipment was put into the fifth group. An additional bonus of 5 percent was established for maintaining the first group, and a bonus of 30 percent was set for maintaining the fifth group. For workers who know how to service all the groups of equipment, the bonus was counted as an increasing sum.

It is important for older workers that the development of new labor skills proceeds without interruptions; for this reason, it may be recommended that they be given large groups of items to master, and that they prepare the process of assimilation itself, including detailed study of the technology and proper adjustment of the equipment. "Throwing" them from one operation to another cannot be tolerated. The process of assimilation must be begun with detailed instructions, practical experience in the work method itself, efficient movements and their combination. It is advisable to establish production lines (sections, brigades) with workers whose work capabilities are roughly equal.

Incompatibility in workers' level of education and skill for what is required and the unacceptability of the times assigned for retraining them often come to light from the moment that new equipment is introduced. For this reason, a long-term forecast and coordination of the plans for technical reequipment with plans to improve the vocational and skill structure of the work force are needed.

Orientation toward "the average worker" in designing new equipment often makes work with it too difficult for older persons. Thus, in work with one of the latest models of lathes—the 1286-6 semiautomatic multispindle lathe—the difficulty of the work is increased by 8 percent as much, the physical efforts are increased by 32 percent as much, and the labor intensity is increased by 23 percent as much, compared with a traditional lathe. It is doubtful that a worker will want to change to work that is harder, even if it is more productive.

If retraining is not expedient (just before retirement, let us say), we must seek to maintain the worker's vocational skill as much as possible. For example, this solution is used in the United States when equipment is updated in basic production: the old equipment is transferred to ancillary production together with the personnel to maintain it. If this is not possible, coordinated actions by a number of enterprises are needed at the regional (rayon, city) level.

Footnote

1. "Rabochiy klass v usloviyakh NTR" [The Working Class Under Conditions of the Scientific and Technical Revolution], Moscow 1979, p 177

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Review of Cooperative Trends Since 1983

18280141 Moscow KOMMERCHESKIY VESTNIK in Russian No 9, May 89 pp 4-7

[Article by N. Lupey, deputy chairman of the Central Union of Consumer Societies management board: "On Democratic Principles"]

[Text] Under the conditions of the restructuring that is unfolding, the tasks of substantially improving the population's supplying with food, saturating the market with

high-quality industrial goods and developing the service area in every way possible have become the primary ones. The consumer cooperative system, which is an inseparable part of the country's single national economic complex and an important link in the economic ties between the city and the village, is making a visible contribution to their solution.

The consumer cooperative system approached its 12th congress, which was held in March of this year, with a large economic and personnel potential. The system's own assets had reached 29 billion rubles; and the value of its fixed capital—24 billion rubles. It services approximately 40 percent of the country's population. A total of 27 percent of the retail trade turnover, almost half of the procurement of potatoes, a third of the vegetables, a fifth of the fruits, and more than 30 percent of the breadbaking now fall to its share. Workers and employees in 70 trades and specialties are now working in numerous consumer cooperative enterprises and organizations. All told, 3.5 million people are employed here.

N. Lupey, deputy chairman of the management board of the USSR Central Union of Consumer Societies, tells how restructuring is taking place within the consumer cooperative system at the request of V. Voropayeva, our correspondent.

One can answer this question extremely briefly: Restructuring in the consumer cooperative system is occurring along two avenues simultaneously—the revival of truly cooperative and democratic bases for its activity and the carrying out of a radical economic reform.

The consumer cooperative system represents an integral system whose base consists of consumer societies that unite 60 million member shareholders—kolkhoz members, workers, employees, and the rural intelligentsia. Cooperative unions, which have been called upon to provide every possible assistance to the consumer societies and to build and expand a common infrastructure for the consumer cooperative system in the rayon, oblast, kray, republic, and country as a whole, are also playing a large role.

The deviation from Leninist principles for the cooperative movement and the dogmatic approach to evaluating the role of cooperative property inflicted serious damage on the system. The cooperative system found itself being made part of the state and to a great extent bureaucratized. The consumer societies and their unions were torn away from their shareholders. The meetings of consumer society members lost their role as higher cooperative self-management agencies. The administrative apparatus, especially that of the higher cooperative unions, concentrated an excessively large authority in its hands.

This has been justifiably criticized during the Fourth All-Union Congress of Kolkhoz Members, sessions of the USSR Supreme Soviet in 1988, election and reporting meetings of the shareholders that have been conducted, and cooperative conferences and sessions.

The adoption of the Law on the Cooperative System in the USSR, which has defined the economic, organizational, social, and legal conditions for cooperative activity in conformity to the present stage of the country's development, has a great deal of significance.

The 12th Consumer Cooperative Congress adopted a new Model Consumer Society Regulation. Essentially, this is a law for intra-cooperative life. It clearly defines the goals and tasks of a consumer society, the rights and duties of member shareholders, the procedure for the formation and functioning of management and control agencies, and the economic foundations of the management mechanism. The congress devoted special attention to questions concerning the radical restructuring of organizational, cooperative work. Its main substance should be the all-round development of democracy and glasnost, the active involvement of member shareholders in the management of affairs and the monitoring of the cooperative organizations' activity. The congress recognized that one must steadfastly strengthen and develop consumer societies as the main link in the consumer cooperative system and establish conditions for their effective activity based on the principles of self-management, complete cost accounting and self-financing.

The revival of rural consumer societies in many places can be related to the first results of restructuring. During the last two years, 2,500 of them have been established.

Instances where meetings and conferences have given an unsatisfactory rating to the activity of elected management and monitoring agencies and have refused to trust the directors of cooperative organizations and enterprises who have displayed a clear unfitness for the task, testify to the shareholders' growing activity.

Social self-management bodies—district committees and cooperative monitoring commissions—have been elected from among the more competent and active shareholders. The staffs of boards and inspection commissions have been renewed by more than half.

A procedure for electing the managers of stores, dining halls and other enterprises during shareholder meetings has been established. This affects more than 400,000 workers.

A new avenue is the establishment of production cooperatives: industrial, producer, procurement, public catering, etc., within the framework of consumer societies and their unions.

A total of 8,300 of them are already functioning. A portion of the cooperatives are being formed using existing enterprises. In accordance with the Law on the Cooperative System in the USSR, they have been granted complete economic independence and fixed capital and other property are being leased.

Statistics testify. In the consumer cooperative system, there are 390,000 retail trade enterprises, 108,000 public catering enterprises, 1,500 wholesale trade bases, 2,300 procurement production associations, 729 urban cooperative trade organizations, 21,000 industrial enterprises, 8 higher educational institutions, 127 technical secondary school, 1,550 enterprise schools, 13 health centers, 140 holiday homes, 213 kindergartens and nurseries, 198 Pioneer camps, and 430 health care points.

During the campaign to hear reports and conduct elections, the consumer cooperative system was sharply criticized for the serious shortcomings in trade in the village. It is understandable that the workers in cooperative organizations are primarily responsible for this. At the same time, many speakers at cooperative congresses in the oblast, krays and republics and at the all-union congress pointed out the incorrect proportion in the distribution of market assets between the city and the village. Preference is given to state trade almost everywhere. The result of this is a shortage of the most necessary items in the village. During last year alone, the requirement for light industry items was not satisfied by 4.5 billion rubles and 1.9-fold fewer goods were sold on the average to an inhabitant serviced by the consumer cooperative system than one by state trade.

Undoubtedly, there are also other reasons. The material and technical base of retail and wholesale trade enterprises does not satisfy modern requirements. According to a one-time accounting, 15 percent of the village stores are unfit for work and 25 percent require major repairs. It is the same picture in wholesale trade: 27 percent of the storage areas of rayon cooperative organizations are located in impractical premises; 30 percent—in run-down ones.

There are no stores in many small population points. There are 97,000 of them today. In a number of republics, they have begun to organize stores in homes in small villages; these operate according to the family contract principle. During the last two years, 3,500 of them have opened in Belorussia.

A low level of commercial work is having a negative effect on servicing the rural population. Demand is being studied poorly and goods are being brought in without considering the actual requirement for them and existing stocks. The existing commodity supply system is a multilink one: In many cases, goods undergo several transshipments. All this has led to the fact that commodity stocks in the consumer cooperative system reached 45 percent of their total amount in the country at the beginning of 1989. In this regard, unmarketable and stale goods form a considerable portion of this; 65 percent of such products falls to the share of the consumer cooperative system. The Uzbek, Azerbaijan, Georgian and Tajik consumer unions are especially overstocked with non-liquid items. This can lead many organizations to financial bankruptcy.

Statistics testify. In 1988, the retail commodity turnover in the consumer cooperative system was 98.6 billion rubles. Within the commodity turnover structure, 38.6 percent fell to the share of food products; and 49.4 percent—to non-food products. Their own commodity stocks increased from 15.3 billion rubles in 1985 to 21.7 billion rubles in 1988. Their proportion in the total amount of the consumer cooperative system's retail commodity turnover was 22 percent; and 50 percent—in the turnover for the sale of food items.

It is necessary to point out that the sale of lumber and construction materials has increased 1.6-fold during the last three years. The fact that more than 1,600 specialized enterprises have been commissioned since the beginning of the five-year plan and that approximately 10,000 economic yards and sites have been established at "household goods" stores, has contributed to this. However, the reserves here are still large. Little local building material is being sold and only 30 percent of the stores provide services in loading, unloading and delivering building materials to the buyer.

It is possible to say that a new market—small-scale mechanized equipment for the proprietors of personal subsidiary plots and garden and vegetable garden associations—is essentially beginning to be formed. During 1986-1988, 150,000 motorized units, 45,000 motorized cultivators and 15,000 field mowers were sold to the population. However, the number of those wishing to acquire these items was much higher. As calculations show, the demand is being satisfied by less than 20 percent.

The turnover in commission trade grew noticeably after the adoption of the Law on Individual Labor Activity. On the whole, the increase was 25 percent for the consumer cooperative system during 1988; 35 percent—in the Russian Union of Consumer Trade Cooperatives; 46 percent—in the Latvian and Georgian ones; and 60 percent in the Lithuania and Estonian ones. Last year, non-food items totaling more than one billion rubles were sold through commission stores. This was 1.7-fold more than in 1983. Even here, however, all opportunities are far from being used. The population's information is being supplied poorly and visits to out-of-the-way places, where goods would be accepted on the spot for a commission, have not spread very widely.

Statistics testify. In 1988, the turnover in the sale of agricultural products purchased for contract prices was 9.2 billion rubles as opposed to 4.8 billion rubles in 1985. Their percentage in the total amount of food sales reached 24 percent.

Economic cells of a new type—village procurement and processing enterprises which purchase, process and sell agricultural products and provide different services (village cooperative procurement industries) to the population—are being established within the framework of consumer societies. They are composed of procurement

points, small shops or sections for processing produce, stores for selling agricultural products with industrial item departments for their counter-sale to their suppliers, and rental points. These enterprises have well proven themselves in the Krasnodar, Voronezh, Rostov, Moscow, Kursk, and other unions of consumer trade cooperatives.

The restructuring of procurement activity is aimed at sharply strengthening the work of purchasing products in remote villages, bringing the activity of procurement and processing enterprises closer to the personal farms of the population and strengthening their collaboration on these matters with kolkhozes and sovkhozes.

Statistics testify. The consumer cooperative system has 11,500 breadbaking plants and bakeries, 1,081 shops for producing nonalcoholic beverages, 343 canneries, 98 breweries, 1,454 shops for producing sausages, and 2,846 enterprises producing non-food items. The percentage of the cooperative system is 34 percent of the entire production of bread and bakery items; 13 percent—of fruit and vegetable preserves; 9 percent—of sausages; and 15 percent—of nonalcoholic beverages.

Last year, cooperative industry produced consumer goods worth 9.3 billion rubles in retail prices; 864.3 million rubles of them were non-food products. A total of 302.5 million rubles of clothing were manufactured. The production of fur items expanded considerably. Whereas 98.8 million rubles of them were produced in 1987, last year it was 148.5 million rubles. This consisted of sheepskin jackets, short coats made of sheepskin, fur jackets, mittens, and gloves.

The congress decisions have attached priority importance to expanding the production of consumer goods in consumer cooperative enterprises as one of the most important sources for the fuller satisfaction of the population's needs. The task has been posed to establish in all rural rayons a widespread network of shops with small and medium capacities for the production of sausages, preserves and nonalcoholic beverages; to have small bakeshops with stores for the sale of bakery items everywhere; and to organize the fermentation, pickling and drying of fruit and vegetable products. The consumer cooperative system has been called upon to revive folk handicrafts and to expand the production of non-food goods.

1987 marked the beginning of the carrying out of the economic reform in the consumer cooperative system.

In accordance with the Law on the Cooperative System in the USSR, new approaches have been defined for drawing up economic and social development plans, for forming and expending wage funds and for intensifying cost accounting principles.

Beginning in 1989, consumer societies will develop and approve plans on their own in accordance with all volume and quality indicators. A meeting of the consumer society now approves such an especially important indicator for stimulating highly effective work as the wage fund. It defines the specific procedure for expending this fund's assets to pay wages according to tariff rates, piece-work rates, position rates, bonuses, one-time incentives, and awards based on work results during the year.

The role of management agencies—the oblast, kray and republic unions of consumer trade cooperatives and the USSR Central Union of Consumer Societies—is changing considerably under the new management conditions. The main thing in their activity now is to determine the main avenues in the economic and social development of the consumer cooperative system; follow a progressive scientific, technical and investment policy; and establish the most favorable conditions for the display of initiative and entrepreneurship by the labor collectives of cooperative organizations and enterprises. The management bodies have been called upon to provide qualified help to the main link in managing its activities, including temporary financial support for individual enterprises and organizations that are still not in a condition to have sufficient resources of their own because of objective work conditions.

The positive results of the work of cooperative organizations under the new management conditions have been demonstrated in such an undoubtedly important matter as the growth in income and profits. In comparison with 1986, profits for the consumer cooperative system as a whole grew by 19.6 percent in 1988; the number of unprofitable cost accounting enterprises and organizations was reduced fourfold. This trend has especially important significance because profit in the consumer cooperative system is the main source of its own resources. Using profits, funds for the financing of capital investments, social and cultural measures, housing construction, the training of personnel, incentives for the shareholders, and a centralized reserve for financial assistance are formed; deductions for shares for cooperative members are made; and the working capital of cooperative organizations is replenished. Moreover, profit is the most important evaluation indicator of the quality of work and the level of economic leadership.

Practice shows that the introduction of lease relations provides the best results in increasing cost accounting income and, consequently, wages. A lease contract is most effective both economically and socially: The psychology of the workers is changed in a radical manner, they see with their own eyes that work results are reflected in their pay in a very direct way, and they fortify the sense of being a proprietor and the collective principles in the work of the enterprises. The labor productivity of leaseholders, as a rule, is 1.5-2-fold higher than that of collectives who are operating in the old way.

For the consumer cooperative system as a whole, however, a psychological turning point in the thinking of the workers and its reorientation to an economic path have still not been achieved. Many directors do not know how to manage affairs competently and to work not at a loss but with a profit.

The growth in income and profits is not always accompanied by an increase in the workers' wages. Consequently, cooperative organizations have not been able to combine public and personal interests fully and create in workers real incentives for increasing labor productivity and improving the servicing of the population.

An indispensable condition for dynamically expanding the consumer cooperative system is the strengthening of its finances. On the whole, the system is operating under complete cost accounting and self-financing. Annually, its profit is more than three billion rubles. A concern for increasing profits while at the same time improving the servicing of the population has always been and remains one of our most important economic tasks.

The problem of financial resources remains an acute one. Their limited nature can become the main delaying factor in expanding trade and production activity, increasing capital investments, training personnel, and solving social questions.

The requirement for their own assets will increase even more during the next few years in connection with the increase in the workers' pay and the sizes of the deductions for social insurance, the rise in price for bank credits, and for other objective reasons. The 12th congress of the consumer cooperative system entrusted consumer societies, consumer unions and the USSR Central Union of Consumer Societies with developing and carrying out in each cooperative organization a program for normalizing and strengthening its financial condition. It is planned to hold an all-union scientific practical conference on the problems in improving the economic mechanism and strengthening the finances of consumer cooperative organizations in 1989.

No matter what branch of our activity we take—trade services, procurement, the production of goods—everywhere, it is necessary to achieve profound qualitative changes while increasing economic growth rates. It is at the achieving of these goals that the efforts of the consumer cooperative system's workers are aimed.

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Lease Brigade Results in Public Catering Detailed
18280136 Moscow *EKONOMICHESKAYA GAZETA* in Russian No 20, May 89 p 16

[Article by N. Primerov, director, public catering combine: "Public Catering Is a Public Matter"]

[Text] Why are you switching to the leasing system? It is customary that such a question is always asked when a collective is converting to the new form of economic

management. And so, as applied to our sector, I consider that leasing is the only possible, realistic way of forming within each public-catering employee a sense of pride in what he is doing, inculcating a thrifty attitude towards the people's goods, and high standards of service.

Our combine's financial status has always been stable; it has regularly fulfilled the state order with regard to retail goods turnover and the output of our own products; incomes have increased. Nevertheless, we proceeded to take this step, undertook the fuss and bother connected with converting the subdivisions to leasing relations, and we have been operating under the new conditions since May 1988.

It would seem that one year is a brief period of time, but some noticeable shifts have already occurred by way of improvement in our service to the public. Here, for example, is how some customers have evaluated the work of our Kulinariya.

We are very satisfied with the store. The service is at a high level. We particularly want to note the shift of Comrades Ye.P. Zaytseva and V.A. Doronina, who serve customers in a refined manner, attentively and politely. We wish them health, happiness, and success in their difficult work. (G.M. Smirnova, Apt. 191, House 14, Molodezhnaya Street, City of Mzhaysk)

And here are some notes made in the Book of Complaints and Suggestions of Cafeteria No 8 attached to the printing combine:

We workers in the offset shop are grateful for the well-cooked dishes and for their variety. (Signatures)

We workers in the folding section are grateful for the well-cooked dishes and their variety, as well as for the polite and tactful way in which the customers are served. (Signatures)

We are pleased by such changes. It means that matters are proceeding apace, although not quite so rapidly as we would like.

It must be said that the principles of leasing relations did not immediately get through to every member of the collective. The rank-and-file employees at first judged leasing only at the cash window, where their wages were paid out. Then, in January of this year the collective adopted a new provision concerning the organization and provision of incentives for the work done by the combine's employees, linking the material and moral benefits accruing to each employee with the end results of his work and the level of his service to the customers.

But just how are leasing relations set up?

A contract agreement was concluded for a term of three years between this combine and the public-catering administration of the Moscow Oblispolkom. In accordance with this, the combine took upon itself the responsibility for organization work to provide services to the public and to make optimum use of all types of resources; it also pledged to contribute a fixed sum of deductions amounting to 29,700 rubles to the association's account.

The combine is obligated to carry out product sales at prices which take into account production outlays, customer demand, and the accumulations necessary for full cost accounting in conformity with the existing provision as to the categories of enterprises. The distribution of wages is carried out within the limits of the residual income upon the decision of the labor collective council, taking into account the personal contribution made by each employee.

In turn, the public-catering administration under the Mosoblispolkom establishes the norms for a stable growth rate of retail-goods turnover and of our own products for the five-year plan; and it provides the enterprise with the necessary marketable goods. It has been stipulated that the agreement shall remain in force if the retail prices on the principal types of raw materials remain stable.

The magnitude of the cost-accounting income arouses the collective to increase the output of those items which itself makes, as well as company-made items, to seek out new forms for serving the public, to reduce production costs by means of cutting down on expenditures for electric power, transportation, and for obtaining stock-type equipment. Because, of course, **income cannot be increased by means of raising prices or "washing out" cheap products from the assortment.** This is excluded from the realm of possibility. This combine's collective accepts orders from the public for making culinary and pastry items, as well as semi-finished items. It also can be engaged to serve family holidays, weddings, anniversaries, etc.

The public-catering enterprises have been funneled and combined into lease brigades. At our combine 19 such brigades have been set up with material responsibility. The combine has an agreement with each one of them. But an agreement can also be concluded with an individual employee.

From an agreement on a leasing contract between the combine and a brigade (or individual employee)

The brigade (or individual employee) hereby pledges:

—to keep accounts of outlays and incomes, to regularly and at established intervals present to the combine financial accounts and to produce fixed payments in the amount of...

—to distribute the FOT [Wage Fund] among the employees in accordance with the individual contribution made by each of them to the implementation of the production program;

—to convey to the combine data on the actual expenditure of electric power, this report to be made on the 25th of each current month. It should also ensure that the average-monthly limit on the expenditure of electric power is observed;

—to ensure a good quality and high standards of service, the observance of the sanitary regulations at the enterprise and in the areas adjacent to it;

—to observe the established schedule for serving the public;

—to issue timely warnings to the combine's administration concerning the unsuitability or poor quality of raw materials, goods, or equipment received; or concerning circumstances beyond the brigade's control which may affect the performance of the conditions of the agreement;

—to reimburse from the FOT the full amount of fines caused by damage to the combine where the brigade (or individual employee) is at fault.

The combine pledges:

—to provide the brigade (or individual employee) with a price list, regulations for service at public-catering enterprises, blanks in the established format, advertisement, and a book for responses and suggestions;

—to provide goods, raw materials, and other materials and means within the limits of the production program;

—capital repair and current maintenance of the rooms allocated for the use of the brigade (or individual employee) shall be carried out by their own efforts by means of funds from the production program;

—in the event that this agreement is not observed, it may be abrogated in the established legal procedure....

A brigade's cost-accounting income is made up of the total of the trade discount minus circulation expenditures (except for wages). The trade discount (surcharge)

from the above-plan sales of alcoholic beverages (including beer) is withdrawn and channeled into the fund for the enterprise's social-production development.

The trade division also concluded a leasing agreement with the combine. This was connected with that particular role which is accorded to the trade division within the activity of the entire combine. It has at its disposal all the transportation means, on the optimum use of which a great deal depends. In addition to this, the public-catering administration guarantees commercial payment on the state order only by 90 percent, and the trade section is busily engaged in seeking out the necessary resources.

The expenditures connected with maintaining the service employees (laboratory staff workers, electricians, sanitary engineers, etc.) are formed from a fixed sum of deductions from the leasing collectives.

Such a form of interrelations has likewise substantially changed the role played by this combine's administration. And many problems which were previously solved from above have now been transferred to the localities. This has allowed us to noticeably cut back on the administrative apparatus—from 25 persons to 11. The director, his deputy, and the chief of the production division at the same time also head up leasing collectives. They receive their basic wages from the incomes of these enterprises. Upon the decision of the labor collective's council, these persons, because they have combined functions, may have an additional amount of income established for them of as much as 50 percent of their wage rate.

The centralized bookkeeping unit which existed previously has now been disbanded. Nowadays each large enterprise, or several small ones, has its own bookkeeping unit. Their functions have been noticeably expanded. They compile calculations and accounts, as well as drawing up balance sheets. They monitor price formation and think about prospective plans for the future.

Wages are computed in various ways in different collectives. In the Borodino Restaurant, for example, use is made of the coefficient approved by the brigade council for each employee. In the final analysis, all this has helped to improve the indicators of this combine's financial-economic activity. Here is how they looked in the second half of last year, as compared with the corresponding period of 1987 (in thousands of rubles):

Indicator	2nd half of 1988		% fulfillment	Rate of growth
	2nd half of 1987	Planned Actual		
Retail-goods turnover	1912.5	1913.0	2017.8	105.5
Goods turnover excluding alcoholic beverages	1590.3	1575.0	1685.9	107.0
Combine's own output	1131.1	1108.0	1272.5	114.8
Total income	533.0	469.8	579.2	123.3
as % of turnover	27.86	24.55	28.7	108.7
Circulation outlays	182.8	191.4	171.8	89.8
as % of turnover	9.55	10.0	8.51	93.9
Income for distribution	350.2	278.4	407.4	146.3
% of turnover	18.3	14.55	20.19	116.3
Income remaining in enterprise	319.0	258.2	398.7	154.4
FOT	295.6		309.8	124.9
Average wage per employee (in rubles)	184-51		194-84	104.8
Labor productivity per public-catering employee (in rubles)	7160		7610	105.6
				106.3

As we can see, there has been a noticeable increase in services to the public; and the collective has earned more funds for technical and social development.

Penalty fines constitute an important element in the system of training measures directed at increasing the operational efficiency of each employee. Unfortunately, we still have to resort to such severe measures frequently. For example, for violating the sanitary regulations the guilty persons are fined 50 rubles, for false counting or giving false weight—100 rubles, for violating labor discipline—50 rubles, and for covering up an instance of this—25 rubles from all the brigade members. Fines are also imposed for other kinds of violations connected with the employees' performance of their duties.

It must be acknowledged, however, that these measures are not always effective. For example, how can the behavior of the kiosk salesperson R. Aksenova be

explained? For giving false weight to a customer, she was, in accordance with the appropriate act of the State Inspectorate, fined by the STK [Council of the Labor Collective] in an amount totaling 540 rubles (the fine, her quarterly bonus, and her bonus for the entire year). It would seem that this lesson would be remembered for the rest of her life. But no! Within two months she repeated the violation. And the contract which we had made with her was abrogated....

Leasing has helped us to accumulate 100,000 rubles. But these are just crumbs for making a major change in our status. By our common efforts—those of the gorispolkom and the enterprises—we must create a good material base for public catering. We must see to it that every new construction project is allocated a place for a store and a cafeteria, that all the sanitary conditions are created for a high-quality preparation and cooking of the various dishes.

ORGANIZATION, PLANNING, MANAGEMENT

Krasnyy Proletariy Plant Modernization Versus Historical Preservation Debated

18230056 Moscow SOTSIALISTICHESKAYA
INDUSTRIYA in Russian 14 Jun 89 p 2

[Report by SOTSIALISTICHESKAYA INDUSTRIYA
special correspondent A. Valentinov: "A Plant Has Gone
Down in History"]

[Text] Moscow—"After all, what we are arguing about is
taking the Krasnyy Proletariy outside the city limits,"
said Tatyana Petrovna. "This is the whole problem."

"But after all, this concerns production of the most
complex, unique machine tools which are making it pos-
sible for our industry to leap to the world level."

"But don't we have any other plants? Let them produce
them there. Indeed, it is outrageous to compare machine
tools and a historic relic..."

This is the position held by T. Kudryavtseva, candidate
of architecture, senior scientific associate of the Acad-
emy of the National Economy under the USSR Council
of Ministers, member of the Expert-Consultative Coun-
cil (EKOS), and member of the Administration for State
Control for the Preservation and Use of Cultural Mon-
uments under the Moscow City Soviet (UGKOIP).

There are many persons who have the same view as
Tatyana Petrovna. For example, A. Shchusev, director of
the State Scientific Research Museum of Architecture.

"I collected signatures for a collective letter to M. S.
Gorbachev asking that the Krasnyy Proletariy plant be
taken out of Moscow," he said. "But while I went to
people and tried to persuade them, the plant's labor
collective council took the lead: it wrote to Mikhail
Sergeyevich with a complaint alleging that the enterprise
is not being allowed to develop. They sent this complaint
to the Union of Architects for specialists to express their
opinion. A commission was organized which brought me
in as a member. For this reason I did not send off the
letter, but I will fight to the end for my position."

We will return to this commission. But in the meantime
let us note that a considerable number of architects and
historians and members of official and public organiza-
tions, whom restructuring and democracy have given the
broadest opportunities to propagandize their views and
to assert their position as citizens in word and deed, are
in sympathy with T. Kudryavtseva and A. Shchusev.
And acting on the best motives, they have held up
implementation of a government decision to provide for
scientific and technical progress in one of the directions
of highest priority.

However, it is unlikely that they themselves agree with
this wording. On the contrary, their actions are moti-
vated completely in the spirit of the time: they are
fighting for normalization of the ecology around the
Donskoy Monastery, next to which a plant has been in
operation for 125 years. There is no doubt about the
urgency of the problem. Nevertheless, it would be natu-
ral to expect the concerned public to try to find the best
solution jointly with the production workers. If it were
that way...

Everything began in February last year when the USSR
Council of Ministers noted that because of the lack of
discipline in the Ministry of the Machine Tool and Tool
Building Industry, implementation of one of the points
in the CPSU Central Committee and USSR Council of
Ministers decree "On measures to radically increase the
technical level and quality of machine building produc-
tion and develop machine building, as the foundations of
scientific and technical progress..." is being hampered:
development of capacities to turn out machine tools of
the "processing center" type at the Krasnyy Proletariy
Plant. These ultramodern units with their tremendous
potential would enable domestic machine building to
reach a new level of quality and sharply reduce its
dependence on exports from the West.

Why did the choice fall to the Krasnyy Proletariy Plant?
Because this very old plant is one of few in the country
that are capable of coping with such a task. The shift to
very complex output requires qualitatively new technol-
ogy, the highest production quality, and most impor-
tantly, experienced, highly skilled personnel. And a
strong backbone of professionals who are masters at
coping with any technical complications has been put
together at the Krasnyy Proletariy Plant. It is precisely
for this reason that the government made it incumbent
on the Ministry of the Machine Tool and Tool Building
Industry to speed up renovation of the plant—to remove
part of the old structures and erect new, world-class ones
in their place. The work was begun. But it was stopped
soon afterward.

"At the beginning of this century, 12 structures were
situated on the plant site," T. Kudryavtseva said. "I
recommended that two of the buildings subject to dem-
olition be left as a reconstructed historical area around
the Donskoy Monastery. It seemed to be clear: we must
be patriots of our Motherland. And what happened? One
building was torn down... Well, if it is that way, let them
take the entire plant away."

There is no objection to patriotism. But patriotism also
assumes that there is a clear conception of the response
to today's decisions in our life and the life of our
children. Before the government decision, no one had
evaluated the old plant structures—being altered and
adapted for new equipment time and again—as architect-
ural monuments. But as soon as renovation of the plant

was begun, the Moscow branch of the VOOPK [presumably: an All-Union society for the preservation of historical monuments] officially warned the administration of the enterprise that a number of buildings located on the site had been recommended for state protection as monuments of industrial architecture. It was not specified precisely which ones. Then a report from the UGKOIP was sent to the plant indicating the "necessity of preserving Building No 5." But what about the remaining structures? The report gives a clear-cut answer to this: "The question of tearing down the remaining 11 structures is to be resolved not on the basis of their historic and architectural value but their functional purpose." In other words, if you need these buildings, leave them, and if you don't need them, tear them down. Somehow this position does not attest to a thoughtful scientific approach to historic relics.

Though 3 days later the UGKOIP sent a supplement to its report: not only the fifth building, but one more building "has been identified for preservation as an architectural monument recently brought to light." When was it identified? Who identified it? What document is this reflected in? It is not clear...

All this fuss could have been understandable if it were not for one nuance: it began after the notorious fifth building was torn down... Incidentally, the production workers are not objecting to the fact that it has been of historical interest. When a model was needed for a film to show the terrible working conditions that incited the workers in the 1905 uprising, this episode was filmed right here. It was filmed recently...

But with the elimination of the fifth building, where it was unbearable for our contemporaries to work, the renovation came to an end as well, inasmuch as the chief of the UGKOIP, A. Savin, had prohibited further demolition of the buildings. This took place on 14 June last year. But 2 months later, on 12 August, Yu. Grigoryev, the deputy chief architect of Moscow, submitted an architectural planning program for renovation of the plant...with demolition of the old buildings.

So this was the situation in which a representative commission of the Union of Architects was formed this March and given the task of cutting this knot. After noting that the opinions of all the official public organizations had not been collected when the government decision on renovation was prepared, the representatives of these very organizations on the commission handed down the verdict: stop the renovation and call to account those who are guilty of tearing down historic buildings. And only one specialist did not sign this document—Professor N. Kim, Honored Architect of the RSFSR.

"Before giving my own opinion on this problem," Nikolay Nikolayevich said, "I did what no other member of the commission found time to do: I carefully studied all the documents, familiarized myself with the working conditions in the old shops, and spoke with production

workers. I was convinced that there are no cogent reasons for canceling the renovation. And the demand that the enterprise be taken outside the city limits is preposterous, generally speaking. After all, most of the Krasnyy Proletariy workers live next to the enterprise. They will not travel outside the city, and the plant will lose its best people right away. Moreover, the structures built at the beginning of this century do not have any historic or artistic value. Except for two of them, and they are the ones the plant does not intend to tear down."

"But isn't the Donskoy Monastery still endangered, after all?"

"It is. Right now. But the danger will disappear after the renovation, when the ecological condition is improved."

I will interpret his words. Under the renovation plan, it is planned to remove the forge shop, sharply reduce emissions into the atmosphere, automate and robotize production, significantly reducing the number of workers. Moreover, it is planned to unify the new buildings architecturally with the monastery ensemble, reconstructing the historical atmosphere.

The Krasnyy Proletariy story is far from an isolated case, unfortunately. Hundreds of enterprises in Moscow, Leningrad, and other major industrial centers have turned out to be in roughly the same situation. Being pressed on all sides by city blocks and often side by side with valuable architectural or historic monuments, they are experiencing tremendous difficulties in their development. But without such development, without fundamental renovation, how are the problems of scientific and technical progress, without which restructuring is impossible, to be resolved?

There is only one way out of such a situation—seek sensible compromises. This is exactly the path that the Krasnyy Proletariy workers are trying to follow. As an example, they recently erected a large plant dining room; the outside wall of it, which faces the street adjacent to the Donskoy Monastery, has been stylized in accordance with the monastery wall. In the opinion of specialists, the entire architectural ensemble of the old monument not only has not lost from this; it has even been enriched. There are also a number of other interesting design solutions which make it possible to find the best possible way out of the situation.

The architectural community has the right to demand precisely such solutions, of course. But at least a clear understanding of the objective and a sincere desire to seek a way out of the situation that is acceptable to everyone are required for this. After all, what makes the opinion of the community strong is the fact that its ideals sum up the interests of society as a whole.

PRODUCTION

Creation of Mini-Plants to Produce Specialized Tooling Proposed

18230058 Moscow SOTSIALISTICHESKAYA
INDUSTRIYA in Russian 20 Jun 89 p 1

[Article by A. Smirnov, senior scientific associate of the Institute of Economics and Forecasting of Scientific and Technical Progress of the AN SSSR [USSR Academy of Sciences] and candidate of engineering sciences: "Why Take Shortcuts?"; first paragraph is SOTSIALISTICHESKAYA INDUSTRIYA introduction]

[Text] Where to get the means for solving vital social problems? This question was discussed with great interest at the Congress of People's Deputies. Such sources as a reduction of production-type construction and of expenditures on defense and outer space were named. However, many millions and even billions of rubles can be saved also, it would seem, in the most ordinary spheres of the national economy. From this point of view, let us take a look at certain aspects of scientific and technical progress.

World scientific and technical progress has in recent years become increasingly like a large-scale marathon race. The pace selected clearly is not within the capabilities of some of its participants, but they cannot quit—they will be crushed. And then they try to take shortcuts. Alas, those who have decided to do so find out fairly soon that the common route goes by the most convenient road, while there are quagmires and hills along the side roads. And so they turn out to be not shorter but longer.

These similarities come to a head when you try to follow the development of our machinebuilding. Yes, we are participating in the world race. But the faster the pace the more illusory our leadership becomes. Only a small portion of the new models of equipment are competitive on the world market—we manage to deceive only ourselves. And so, disdaining the everyday task of making molds, which is made up of trifles, our machinebuilders, urged on by merciless plan tasks, start to cut corners—to reduce the quality and reliability of output.

But if one gives a little thought and look closely at what the leaders have done, one can turn out to be a winner. What does quality depend on? Primarily on technology that is oriented to the application of machinery that enables the influence of the subjective factor—the worker's carelessness or lack of skill—to be avoided.

Well, what of it? We have as many machine tools and pressing and forging machinery as the U.S. and Japan put together, but we have much less special industrial tooling than they do. New dies, molds, models, templates and so on are required for the production of each new item. The time required for mastering something new depends on how quickly they can be fabricated, and the

quality of the product itself depends upon the quality of the tooling. The ratio here is like this: by spending a ruble on tooling, we get 50 rubles from raising the quality of the product.

In the West there is, as a rule, an enormous number of small companies engaged in manufacturing tooling. Thanks to narrow specialization, the quality and rapidity of filling orders are guaranteed. Only 3 percent of our tooling is made by specialized enterprises (in the U.S. it is 80 percent). As a result, each machinebuilding plant must do the work itself, diverting effort from basic production. This is expensive and time-consuming.

It is known that world scientific and engineering thought does not mark time. It is almost 20 years now that flexible manufacturing systems appeared. From the start we showed the greatest and, I would say, an exaggerated interest in it. We planned to manufacture GPS's [FMS's—flexible manufacturing systems] by the thousands. This was clearly extreme. The cost of flexible manufacturing systems is measured in the millions. Experience has indicated that if this expensive toy were sold to some enterprises, it could not pay for itself in a century. This means that FMS's must be singled out for independent enterprises—automation plants, which must produce output that is highly profitable and critical for the whole national economy.

As has already been said, machinebuilding includes the output of such special technological tooling. So why do we not organize its output at automation plants?

These plants should belong to any agency and should, under economic accountability principles, fill orders for any customer. They can be both state and cooperative enterprises. The main thing is they should be widely distributed and accessible for tens of thousands of potential clients. The plants should be of minimal size. Thanks to the replacement of manual labor by machines and round-the-clock operation of the automated equipment, the time taken to fill an order can be reduced by an order of magnitude and the cost cut appreciably.

Total expenditures for the manufacture of special tooling come to as much as tens of millions in civilian machinebuilding during the five-year plan. And indeed this amount is adequate for the construction of hundreds of miniplants for automation which have been sited about the country in accordance with the potential market for this output.

The design for such an automation plant in Kalinin already is being developed. However, the appearance of this design owes more to chance than to a well-thought out, planned solution. A single plant, even the best, cannot affect solution of the whole problem. The market must be saturated, relieving the shortage of special tooling, and effective competition for its customers must be created.

Series-production enterprises will be able to obtain quickly (in mere days instead of months) and inexpensively any necessary special tooling that can be used on standard equipment.

Of course, one must not think that such automation plants will play the role of panacea by magically bringing the quality of machinebuilding articles up to the world level. However, they will be able to bring solution of the problem considerably closer.

TECHNOLOGY ACQUISITION, ASSIMILATION, COOPERATION

Metalworking Equipment Produced by Soviet-West German Firm

*18230061 Leningrad LENINGRADSKAYA PRAVDA in
Russian 14 Jun 89 p 1*

[LenTASS report: "Partnership for Mutual Benefit"]

[Text] A powerful metalworking complex, manufactured by the machine tool building association imeni Ya.M. Sverdlov, has been built for use in the makeup of mechanized lines of enterprises in the Federal Republic of Germany. The system is the first in a series of similar multi-purpose machine tool modules intended for the

joint Soviet-West German firm "Schiess-stanko" in Dusseldorf. The new machine, intended for boring, drilling, milling, and other operations, will begin its operation in flexible automated production systems.

The Leningrad association, along with a number of related enterprises in Odessa, Gomel, and Lvov, is a shareholder in a commonly organized concern for carrying out trade middleman services. With its help, equipment bearing the trademarks of Soviet enterprises will be sold not only in West Germany, but in the markets of other countries. The Schiess-stanko specialists will provide design, specialization, and even registration of the tools, according to the wishes of the consumers.

The tool builders' cooperation also envisages the use of joint capital for mass output of metalworking equipment. The use of Soviet-produced electronic and hydraulic units, delivered by the Bosch and Vickers firms, in modernized prototypes of processing centers, provides commercial advantages to both sides. The organization of a number of joint enterprises is planned, in the creation of which the leadership of the Leningrad association and their West German colleagues expressed interest.

An important contribution in broadening cooperation is due to joint work with the Heinemann concern, which plans to set up a specialized technical center in Leningrad. It will be equipped with an automatic drafting system and a data bank.

CIVIL AVIATION

Minister Views Aviation Growth Prospects

18290210 Moscow KRASNAYA ZVEZDA in Russian
21 Jun 89 First Edition p 3

[Interview with A. S. Systsov, USSR minister of the aviation industry, in Paris by KRASNAYA ZVEZDA correspondent Col A. Andryushkov: "We See Prospects for Growth"]

[Text] The roar of turbines subsided over Le Bourget airfield. Navigators of the lead aircraft plotted the courses for the crews of hundreds of aircraft to their home bases. The time for displaying achievements was replaced by the time for aviation specialists to reflect on what they had seen. On the eve of our departure from Paris for home, I met with A. S. Systsov, the USSR minister of the aviation industry, and requested an interview for KRASNAYA ZVEZDA readers.

[Andryushkov] Apollon Sergeyevich, our airmen will land in the Motherland in a few hours. The 38th International Aerospace Exhibition at Le Bourget will become one more milestone in the history of aviation. KRASNAYA ZVEZDA readers are interested in the goals that we set for ourselves at this prestigious exhibition and the kind of results that were achieved.

[Systsov] Let us discuss this in a general way for the present. For the first time, our country displayed the most advanced models of aircraft, including fighters, ground attack aircraft, and a helicopter, at the Le Bourget aerospace exhibition. We set the objective of displaying our achievements in different areas of domestic aviation development—both the unique An-225, the gigantic aircraft for transporting large-sized cargoes, for example, and the new Tu-204 and Il-96-300 passenger airliners, as well as series aircraft: the MiG-29 frontline fighter, the Su-27 fighter-interceptor with increased maneuverability, and the SU-26M aerobatic aircraft.

In developing these aircraft, the designers applied a new principle in their design by creating the next generation of aircraft. They incorporated the achievements of science and new materials, such as aluminum-lithium alloys in a welded variation and carbon plastics. This was noted and evaluated right away by foreign firms, by the way. BTsVM's [on-board digital computers] were installed on our passenger aircraft.

[Andryushkov] The electrical systems have been exposed to the effects of the environment and are sensitive to thunderstorms. Won't this be reflected in their reliability?

[Systsov] The aircraft have four backups for the basic systems; for the present, pointer-type instruments have been installed in them which will be replaced in due course by more advanced display equipment. These

aircraft were designed so that they are practically uncontrollable without computer systems. They differ considerably from their predecessors in an economic sense as well. The Tu-154, with a weight of 100 tons, carries 150 passengers, whereas the Tu-204 is lighter by 4 tons but carries 204 passengers.

[Andryushkov] Specialists at the exhibition were devoting their attention to our flying hospital, the Mi-17-1VA, calling it the most humane aircraft at Le Bourget. What kind of aircraft—military or civilian—are being given preference for development today?

[Systsov] I will not give you an unequivocal answer. Despite the "warming" of the political climate in relations between the two social systems, the pace of arms production is not declining. Trading in arms is one of the means of enrichment in capitalist countries. Our combat airplanes and helicopters are not inferior in quality to the American or West German aircraft and interest is being shown in them. Why shouldn't we sell our aircraft if the "MiG's" and "Su's" are superior to others both on this and the other side of the Atlantic? You know that our pavilion was visited by NATO Secretary General (Bjornor). He gave a high evaluation of our equipment and our pilots' skill.

How many times have we, in turn, seen the primarily military orientation of the displays of developed capitalist countries, and objectively evaluated the F-18, the Mirages, Tornados, and (Rafals)... So we have no right to allow indulgence in matters of defense capability. We have the reserves. We know what to work on.

[Andryushkov] I heard that foreign correspondents have included Anatoliy Kvochur of the OKB [Experimental Design Bureau] imeni Mikoyan in the symbolic 10 best pilots in the world. Though he himself considers this an advance. After all, there were aces there such as the former chief pilot of the General Dynamics firm who tested the F-16, (Nick) Andersen, and the Briton Heinz (Frick), who taught how to fly the Harrier VTOL aircraft.

[Systsov] Kvochur's modesty and exactingness are known to everyone. But this is a really strong test pilot in all respects. And he is not the only one of this type that we have. Take, for example, Viktor Pugachev, who amazed everyone at Le Bourget with his "cobra" in the Su-27 and other pilots who demonstrated the highest level of their skill here, showing the qualities of domestic aircraft in detail.

[Andryushkov] Apollon Sergeyevich, I noticed this feature at the exhibition. In briefings and press conferences which you personally and the leading designers of our OKB's held, the foreign journalists were not energetic in their questions. How do we explain this, and what happened to their former inquisitiveness?

"They still have it," Systsov smiled. "I explain the decline in their energetic approach by the fact that we ourselves are frankly telling them about the things that they were unable to hit upon in their questions. We are not giving away any secrets, and you can reassure the newspaper's readers of this. But in discussing everything frankly we are showing our strength, not our weakness. You have noted how sparingly the local press is writing about us. The foreign specialists have become more taciturn compared with Farnborough last year."

[Andryushkov] They were probably lost in thought after seeing what we showed the world at Le Bourget?..

[Systsov] Possibly.

[Andryushkov] Tell us, aside from studying the trends in aircraft development in other countries and demonstrating our achievements, what other objectives did we have in going to Le Bourget?

[Systsov] I see your point. The most serious attention is devoted here to the commercial aspects. And it must be said we are having definite success at Le Bourget. A number of contracts for the sale of airplanes and helicopters were concluded with Bulgaria, the CSSR, and Cuba. A protocol was signed with the head of the French Serge Dassault company on joint cooperation to develop a business aircraft. Negotiations are under way with the Boeing firm. In a word, we broadened the horizons for the domestic aircraft industry at the Le Bourget exhibition.

[Andryushkov] Apollon Sergeyevich, won't some people get the impression that we are again making haste to declare that we are the most, the most, and the most?..

[Systsov] If we thought that way we would be deceiving ourselves. It cannot be worse than that. We still have enough problems. Here are just two of them. We should enlist every effort to provide for the development of microelectronics as rapidly as possible. We are lagging behind in this today. Tomorrow this lag will have an effect on aircraft manufacturing and other sectors of the national economy.

The second obstacle is the notorious COCOM system, which bans deliveries to the USSR and socialist countries of new technology, equipment, and instruments. They are afraid that this will increase our defensive might. But in point of fact, this is an obstacle in international cooperation. We must resolve this problem by political means and seek to bring about abolition of the Draconian decisions. So we see prospects for growth, and we have determined the paths to new successes in developing domestic aviation and cosmonautics.

Aviation Spare Parts Shortages Noted

18290229 Moscow VOZDUSHNYY TRANSPORT in Russian 11 Jul 89 p 3

[Article by I. Vaysberg, chief technologist, GURAT MGA [Repair of Aviation Technical Equipment Main Administration, Ministry of Civil Aviation]: "Restore or Buy?"]

[Text] Complaints about industry's unsatisfactory provision of spare parts for aviation equipment, primarily high-thrust aircraft engines, have become persistent in our sector, especially in recent years. Accordingly, a combination of steps were taken: joint collegiums of the Ministry of Civil Aviation and the Ministry of the Aviation Industry, expanded meetings of their party committees, regular meetings at different levels, and innumerable and to a large extent fruitless conferences. And in the final analysis, all these powerful forces and resources were aimed at shaking loose, obtaining, and delivering the needed spare parts for aircraft maintenance bases and aircraft repair plants. At the same time, no particular gain has been made in reducing the idle time of aviation equipment because of the lack of spare parts.

The question arises: is there an alternative to meet the demand for spare parts? It has to be taken into account at the same time that the Ministry of the Aviation Industry holds a monopoly in aviation equipment deliveries, and civil aviation has no practical levers to block the unchecked increase in prices for aviation equipment and the spare parts for it.

One would think that under the conditions of self-financing, when all expenditures have to be scrupulously counted, the increased requirements for spare parts should be met over the long term and primarily through their repeated use and the restoration of the assemblies and parts that have been worn out. This is a major intersectoral problem, unfortunately, and solution of it is still being awaited in the system of measures aimed at restructuring the sector's work. At present, we can speak only about some increase in activity to introduce advanced technological processes to restore worn-out parts at aircraft repair plants. We should mention Civil Aviation Plants Nos 402, 404 and 410 and a number of others which have mastered advanced processes for restoring parts, along with the electroplating methods that are traditional in repair work.

The annual increase of 20 to 30 percent in the amount of repair work on engines for the Tu-154 and Mi-8 would be impossible if Plant No 404 had counted only on the delivery of spare parts from industry. The introduction of gas thermal methods and plasma jet and detonation spraying has made it possible to reduce orders to industry by one-third as much for components in short supply for Tu-154 aircraft engines such as blades for the first

stage of the low-pressure compressor and injector, when the cost of renovated parts is five to seven times less than for those that have been newly manufactured.

The introduction of renovation processes and repeated use of expensive components in critically short supply, including the axles of the main landing gear and flap guidrails for Il-76 aircraft, is making a considerable contribution to Plant No 402's stable operation in repairing Il-76 aircraft and engines for the Tu-134; in this connection, they have not had to be ordered from industry at all.

Mastering the restoration of aircraft engine blades is particularly urgent and would bring the most economic gain. Some of them cost as much as 100 rubles, and after all, the annual program for repairing engines for the Il-76 and Il-62M aircraft at Civil Aviation Plant No 400 requires the replacement of several tens of thousands of blades with new ones; this has a substantial effect on the cost of engine repair and in the long run results in large financial losses for the sector. Just what will we do when the Il-96 and Tu-204, which have engines with blades that are monocrystalline in structure, go into operation? One such blade costs up to 1,000 rubles. How much will it cost to repair engines like this if the blades are only replaced with new ones and not renovated?

By the way, on utilizing foreign experience in Aeroflot. To the best of my knowledge, a group of civil aviation specialists studied experience in repairing and renovating aircraft engines in the United States as far back as the 1970's. It would be interesting to learn what this trip gave Aeroflot, aside from reports and pleasant memories. In particular, whether the sector is spending millions to acquire new spare parts because the processes were not mastered and the capacities to renovate engines, including blades, were not developed in a timely manner.

The problems of introducing new technological processes for repairing and renovating aviation equipment parts were discussed at a practical scientific seminar held in the VDNKh SSSR [Main Committee for Exhibition of Achievements of the National Economy of the USSR] and organized by the Repair of Aviation Technical Equipment Main Administration and the TsNTI GA [Center for Civil Aviation Scientific and Technical Information]; leading specialists and scientists from plants and industry, NII [scientific research institutes] and VUZes, and the Electric Welding Institute imeni Ye. O. Paton of the UkSSR Academy of Sciences took part in the seminar. Unfortunately, and this is also revealing, none of the deputy ministers and chiefs of main administrations, aside from the GUZSANT [Air and Ground Production Equipment Orders Main Administration], attended the seminar and seized the opportunity to look into the problems whose solution would provide the sector with a significant economic gain.

Restoring aircraft engine blades is a special problem. Taking into practical consideration the lack of technology and equipment to renovate the blades and at the same time, the sector's tremendous financial losses because of the need to buy these expensive components, it is expedient to consider the establishment of a joint enterprise with a foreign firm at the base of one of the aircraft repair plants. It will be necessary in the future to reorient a number of aircraft repair plants toward the renovation of assemblies and components. For example, those plants which are based at unpromising airports (Minsk-1, Zhulyany, and others).

In order to organize and coordinate the work to introduce advanced technologies for renovation and development of the needed capacities, it is expedient to provide for appropriate organizational forms in the Ministry of Civil Aviation, at the same time discontinuing a number of the services in the ministry that are engaged in control and dispatch work that is not characteristic of a central department and the preparation of numerous reports for management.

MI-8 Helicopter Crashes Near Sochi

18010866 Moscow KRASNAYA ZVEZDA in Russian
28 Jul 89 First Edition p 4

[TASS: "Helicopter Catastrophe"]

[Text] On the 26th of July in the mountains within 40 kilometers of the Sochi airport an MI-8 helicopter of the Sochinsk aviation enterprise crashed. Three crew members and five passengers were on board. Five people were killed as a result of the catastrophe. An investigation into the incident is being conducted by a commission of USSR GOSAVIANADZOR [State Aviation Oversight].

Alternative Helicopter Fuel Examined

18290231 Moscow VOZDUSHNYY TRANSPORT in Russian
15 Jul 89 p 6

[Interview with Vyacheslav Petrovich Zaytsev, chief of a sector of the Central Aerohydrodynamics Institute (TsAGI), by VOZDUSHNYY TRANSPORT special correspondent V. Patsiya in response to a reader's letter: "Menu for a Helicopter"]

[Text] *I have heard that test flights of helicopters were made in our country several years ago using fuel in gas form. But I have not seen any information on this in the press for a long time. Did the gas turn out to unpromising for aircraft use or has a promising development been tied up somewhere in the departments? [Signed] Engineer N. Volkova, Moscow.*

We asked Vyacheslav Petrovich Zaytsev, chief of a sector of the Central Aerohydrodynamics Institute (TsAGI), which is engaged specifically in studying the problems of using alternative fuels for aircraft, to respond to this question.

[Zaytsev] In aircraft, where higher demands are made on the reliability of engines and fuel-metering equipment and the conditions under which they operate are more diverse and complicated than for automotive transport, for example, the use of gaseous fuel has given rise to certain apprehensions. Nevertheless, efforts are being made to develop a helicopter and an airplane to use gas.

The problems which aircraft designers have had to resolve are very complex. For example, they have had to determine which hydrocarbon gas could be used most efficiently: methane, ethane, propane, butane... What temperature should be maintained for it in the tanks?..

[Patsiya] And how were these problems resolved? What have the scientists suggested for a helicopter's menu?

[Zaytsev] Institutes of the Ministry of the Aviation Industry, the Ministry of the Petroleum Industry, and the Ministry of Civil Aviation have been engaged in a study of this "ration." They have come to the conclusion that for helicopters, especially those that operate in the northern regions, the most convenient fuel would be a condensed (liquefied) mixture of propane, butane, pentane and hexane gases, which has been named condensed aviation fuel (ASKT).

The gas cocktail for helicopters can be obtained from a wide fraction of light hydrocarbons (ShFLU), which is produced in large amounts from petroleum gas at gas extraction plants in different regions of the country, including Western Siberia.

ASKT is superior in many indicators to the kerosene being used in helicopters. This fuel is ecologically cleaner and less corrosive. There are no sulfur compounds, tars, asphaltene, or other harmful substances in it.

Specifications to produce test batches of ASKT have already been worked out and approved, and we have a production installation to turn it out in sufficient amounts for test operations with several helicopters.

[Patsiya] But this installation will not do everything. How extensively can ASKT be produced in large amounts and how long will it take?

[Zaytsev] Technical studies have shown that production of ASKT can be organized at practically any gas extraction plant with a small amount of additional equipment. Moreover, this fuel theoretically can be obtained right in the oil fields, as well as at any point on the oil pipeline, with the help of small unitized installations. They are now being developed by institutes, KB [design bureaus], and enterprises of the Ministry of Chemical and Petroleum Machine Building and the Ministry of the Petroleum Industry.

[Patsiya] And what will a helicopter that uses gas fuel look like?

[Zaytsev] Designers of the Moscow Helicopter Plant have had to resolve a considerable number of complex technical problems in developing the world's first helicopter with gas turbine engines that operates on gas fuel, based on the Mi-8T. In particular, after detailed analysis it was decided to put the ASKT, in liquid form under low pressure, in uninsulated cylindrical tanks positioned on both sides of the fuselage. This method is more convenient for operation since it makes it possible to manage without refrigeration installations on the ground. These and other fortunate design solutions have made it possible to modify an existing helicopter engine for gas operation without resorting to the development of a new one.

The first stage of flight testing with an experimental helicopter was successfully completed in 1987.

Tests with the experimental helicopter enabled us to begin a comprehensive program to develop a test conignment of these helicopters for operation in the regions of Western Siberia.

[Patsiya] Why namely in Western Siberia?

[Zaytsev] These helicopters are utilized most efficiently in the northern oil-producing regions and regions that have been opened up recently with an insufficiently developed infrastructure. The difficulties in delivering liquid fuel from the settled areas of the country where the oil refineries are situated are particularly significant.

Shifting helicopters to gas fuel will make it possible to perform a number of important national economic tasks: to raise the level of use of petroleum gas and to save at least 500,000 tons of high-grade aviation fuel, to provide plenty of fuel for the region's helicopter fleet, and to extend the helicopters' operating capabilities.

[Patsiya] What is interfering with the introduction of such developments, which promise a major economic and national economic gain? There are helicopters that have been converted and have proved themselves very well in test flights, and the fuel exists, but... things are not moving.

[Zaytsev] With the introduction of helicopters with convertible engines, that is, ones which operate both with kerosene and gas, certain organizational problems may arise which are capable of being an impediment to this. One of them is the fundamental difference in the procedure proposed for supplying airports and helipads with liquefied gas and the procedure for supplying them with aviation kerosene. Questions of quality control of the ASKT and the different departments' responsibility for it during its preparation, storage, transport and in fueling operations may turn out to be a stumbling block which more than one innovation has run into. For this reason, the GKNT [State Committee for Science and Technology], together with the ministries and enterprises that are taking part in this work, should now

reason out the nature, form, and status of the acceptance documents and the checklist of basic control parameters in transferring the ASKT from the producer to the consumer.

And one more "but"... Despite the importance for many sectors of the national economy and the sizable economic gain that is expected, the development of helicopters with convertible engines has been conducted thus far by the initiative efforts of the Ministry of the Aviation Industry, the Ministry of the Petroleum Industry, and the Ministry of Civil Aviation. However, in connection with their shift to cost accounting, this work has been practically discontinued, since there has turned out to be no one to finance it. For this reason, an appropriate decision by the USSR Council of Ministers specifying the head organization and the sources of financing is needed for the work to continue.

Postscript: When this material was being prepared for press, a meeting was held in the Ministry of Civil Aviation by the ministry's Scientific and Technical Council. One of the points on the agenda was approval of the technical and economic substantiation of the advisability of using helicopters which operate on ASKT in civil aviation. The document was not approved because of lack of agreement in the contract relationships of the sides involved. The matter made no headway at all.

The newspaper VOZDUSHNYY TRANSPORT attaches considerable importance to this problem and is monitoring the course of development of helicopters which operate on gas fuel and their introduction in the sector.

Difficulties Finding Successor to An-2 Aircraft
18290206 Moscow SOTSIALISTICHESKAYA
INDUSTRIYA in Russian 16 Jun 89 p 2

[Article by M. Rostarchuk: "On Old Wings"]

[Text] Moscow—The An-2 aircraft has been flying over the country's fields for over 40 years now. Its characteristic biplane silhouette has become as much of a symbol of agricultural production as the tractor or the combine, let us say. More than one generation of tractors and combines has been replaced on the fields over these decades, but "the worker of the sky," "the flying all-purpose vehicle," or "the flying plowman," as the people fondly and justifiably call the An-2, remains just the same, irreplaceable and unchanging.

Most of the 80 million hectares of arable land being treated every year by civil aircraft are treated by the Antonov biplanes. And there is every reason to assume that they will hold out until the end of the century, leaving every conceivable record of aircraft longevity far behind.

So perhaps this is good? Perhaps the designer incorporated so many advanced concepts and anticipated aircraft development to the extent that a replacement for it will not be required? Alas, this is far from the case.

Let us remember that the An-2 was developed as a multipurpose aircraft, and primarily a transport. But they adapted it for work over agricultural fields. And of course, it has been impossible to take into account all the specifics of work with chemical substances, often toxic ones. But it has had no rivals, and there are none even now...

But the hardworking Antonov has become obsolete, hopelessly obsolete. It has not met modern requirements for a long time. Agronomists continually blame the pilots for dispersing fertilizers or pesticides inaccurately, which harms both the crops and nature. But it is not the pilots' carelessness or low skill that is the reason for this, but the imperfection of the aircraft, which is inferior to foreign models in its load ratio and the quality of chemical spraying. It consumes too much fuel and this makes treatment of the fields more expensive and leads to increased production cost for agricultural output.

The crew suffers as well: the lack of comfort and poor protection against the chemical effect of its toxic cargo leads to greater fatigue among the pilots and affects their health and flight safety. This fact is typical: every year up to 300 members of flight crews engaged in airborne chemical treatment work are taken off flight duty prematurely because of health problems.

Can it be that no one was aware that it has long been time to send the An-2 away for a well-deserved rest, as they say, and that no one was concerned about it? By no means! Moreover, the An-2's record of longevity is the result, to use a sports term, of another "highest achievement" of bureaucratic red tape, passing the buck on the decisions of directive organs, and the desire to play "only on their own field," that is, to do what is advantageous from a narrow departmental viewpoint. This "record-holder" is the Ministry of the Aviation Industry.

Let us not make unsubstantiated statements. It became clear as long ago as the 1960's that a replacement had to be prepared for the An-2. In 1964 a CPSU Central Committee and USSR Council of Ministers decree instructed the Ministry of the Aviation Industry to develop a new, more productive and economical aircraft for agriculture. Over the 24 years (!) since then, a considerable number of decrees have been adopted by directive organs, intergovernmental agreements have been signed with the Polish People's Republic, and dozens of decisions and orders have fluttered out of the depths of the Ministry of the Aviation Industry and the Ministry of Civil Aviation, as the customer, but there is still no new aircraft.

The An-3 aircraft developed by the Ministry of the Aviation Industry over a 14-year period (actually a modernized An-2) never got out of the "experimental" category, and later, in 1988, the ministry discontinued all work on this aircraft for the Ministry of Civil Aviation, since the TVD-20 (turboprop) engine designated for it did not meet current technical requirements, had a

short service life and high fuel consumption, and updating it required an unjustifiably high expense. In short, the engine "did not make it," and along with it, or more accurately, without it, neither did the An-3. For the same reason, the economically attractive program to convert An-2's into An-3's at aircraft maintenance plants was not realized, either.

Obviously, it will not be a strained interpretation to assume that the Ministry of the Aviation Industry also managed such successful red tape for so long because it hid behind an intergovernmental agreement signed in December 1971 (17 years ago!) between Poland and the USSR. In accordance with it, Poland was assigned, within CEMA, to create, develop and produce aircraft for agriculture and the appropriate equipment. If we call things by their proper names, the Ministry of the Aviation Industry escaped resolution of the problem by shifting the entire responsibility for development and manufacture of a new agricultural aircraft to a friendly country.

For the sake of fairness, we must say that our Polish comrades also had a hand in drawing out its development. True, it was assumed initially the unsuccessful TVD-20 engine would be used for this aircraft as well.

Finally, in March 1987, the USSR Ministry of the Aviation Industry and Poland's Ministry of the Metallurgical and Machinebuilding Industry concluded an agreement on the establishment of a joint Polish-Soviet design collective to develop the new aircraft.

In March last year, the Scientific and Technical Council of the Ministry of the Aviation Industry decided to speed up development of the TVD-500 [sic], a new-generation engine for small aircraft, in order to begin testing the new aircraft in 1990. However, it usually takes about 5 years to develop a new engine and 6 to 8 years to develop an aircraft. And there is no guarantee at all that the TVD-1500 "will make it," either.

As of today, the Soviet-Polish collective has completed only the drafting of technical proposals for the new aircraft, and the program for its development is limited to just the engineering plan. At the same time, the Polish side is not planning development and production of the engines, propellers, and equipment for the aircraft being designed, and the financial aspects of the entire project have not been resolved. It follows that a new intergovernmental agreement is required if we are speaking seriously about joint production of the needed aircraft, and it is necessary to speed up development of the TVD-1500 engine in the USSR as well.

So according to the most optimistic assessments, the new Soviet-Polish aircraft for agricultural use may appear over our fields no earlier than 1998, but by no means in 1991, as the Ministry of the Aviation Industry is trying to convince us. Is there a way out? After all, each new year of agricultural operation for the An-2 is fraught with

serious new losses—material, ecological, and personal—in the end. Meanwhile, under the intergovernmental agreement, the Soviet Union is obliged to receive 100 An-2's each year from Poland until the end of the five-year plan—again to the detriment of the national economy!

In light of what has been said, the Ministry of Civil Aviation considers the only acceptable solution to be: to develop, test, and organize series production of a new domestic aircraft for agricultural use and the special equipment for it in the shortest possible period of time. In this regard, a proposal in complete accordance with the spirit of the time appears attractive.

The "Sotrudnichestvo" Planning and Design Research Cooperative under the MAI [Moscow Aviation Institute imeni Sergo Ordzhonikidze] came forward with the initiative. Its OKB [experimental design bureau] for general aviation is beginning to develop and build three experimental Grach-4 agricultural aircraft in the 1989-1991 period. This will cost the Ministry of Civil Aviation 6 million rubles.

Further. If the tests are successful, the cooperative will begin organization of series production of these aircraft in 1992 at its plant or at several plants of the USSR Ministry of the Aviation Industry.

Let us not anticipate events—although the present preliminary design of the Grach-4 "examined" at the TsAGI [Central Aerodynamics Institute imeni N. Ye. Zhukovskiy] (without its conclusion the Ministry of Civil Aviation cannot accept any specific solution) has received an unfavorable evaluation. Now this preliminary design will be examined once again by an interdepartmental commission; those in charge of "Sotrudnichestvo" think that departmental pride is involved in the TsAGI's unfavorable assessment. In this connection, I would like to point out that healthy competition is the engine of progress, and especially in aircraft manufacturing. It probably would be advisable to announce an open competition—among the state and other KB [design bureaus]—to design and develop experimental models of a new agricultural aircraft. The results of such a competition should be judged by representatives of the Ministry of the Aviation Industry, the Ministry of Civil Aviation, and agriculture.

RAIL SYSTEMS

Call for Railroad Management Changes Voiced
18290222 Moscow GUDOK in Russian 11 Jul 89 p 2

[Article by I. Kolkov, senior lecturer of the NIIZhT [Scientific Research Institute of Rail Transport]: "By the Standards of the 1930's"]

[Text] Novosibirsk—Experience on the Belorussian, Donetsk, and Central Asian Railroads and a number of other lines demonstrates that optimization of transport

management is inseparably linked with a change in the existing boundaries of divisions and even entire mainlines and the development of independent areas of management and unified automated dispatching centers.

But how are the best boundaries for the areas of management and unified centers to be determined? In our opinion, the regions of origin and operation of heavy freight and railcar traffic, as well as the sections where locomotives are turned around, should be the basic criterion. At the same time, the capabilities of the rolling stock repair base must also be taken into account.

Unless these factors are taken into consideration, steps to develop the material and technical base do not produce the proper result. And this is clearly apparent in the example of the West Siberian region, which is served by two lines—the Kemerovo and West Siberian Railroads.

Substantial funds have been invested in developing the steel mainlines here, and technical reequipment has been carried out. There has been a small increase in transport volume here. It would seem that the quality indicators for rolling stock use should be substantially improved under these conditions. But this has not taken place. Why? As revealed in the results of an analysis, one of the main reasons is the outdated system for dispatch management of the operations work. It was developed as far back as the 1930's, oriented to steam locomotive traction!

Major changes have taken place, even from this viewpoint alone. There is a wide selection of new forms of traction on the lines now. Powerful traction. With greater capabilities and areas of use. But superimpose a diagram of operations by the means of traction on a map of the two railroads and their eight divisions—five for the West Siberian and three on the Kemerovo Railroad. Nowhere do the boundaries coincide with the turn-around points for the locomotives. The same picture is revealed when the boundaries of the railroads and divisions are compared with the areas of origin and operation of the heavy railcar traffic flows...

The question arises: can the best possible distribution of train and railcar traffic flows be achieved on parallel routes, can through traffic procedures be organized, and can dispatching methods of control be applied efficiently under such conditions? It is unlikely. And experience confirms this. Haphazard traffic distribution results in excessive strain on the Trans-Siberian and a low workload for the Sredsib [presumably: Central Siberian] Mainline, and as a consequence, standby runs by locomotives in opposite directions on parallel routes.

The majority of management decisions are being duplicated at the division and line levels. Lack of conformity in the objectives of the lines' administrations and divisions leads to procrastination in making decisions. More often than not technological discipline, the organization of local railcar traffic flows, is being violated; in coal

alone, about 40 percent of the total quantity loaded goes to them. Where can we expect coordinated actions, both between the major rail terminals as well as within them? Where will we find quality indicators here!

The way out of the situation is known—unified dispatch management centers. In our view, there should be three in the region. One, the Novosibirsk Center, covering the section of track with the Isul-Kul, Nazyvayevskaya, Irtyshskoye, Cherepanovo, Toguchiy, Tomsk, and Mariinsk stations. The second one is the Altayskiy Center. In its zone of activity are the Kzyl-Tu, Irtyshskoye, Karasuk, Cherepanovo, Meret, Artyshka, Biysk, Lokot, and Kulunda stations. And the Kuzbass [Kuznetsk Coal Basin] section of track, including Mezhdurechensk, Yurga, Berzas...

The Novosibirsk Center, in our view, should be the main one, coordinating the work of the entire triad and providing for efficient organization of transport in the region and distribution of railcar traffic on parallel routes.

Within the framework of these unified centers, it is expedient to establish junction dispatch centers as well: the Omsk, Novosibirsk and Tomsk junction dispatch centers in the Novosibirsk unified center; the Altayskiy, Biysk, Karasuk, and Rubtsovsk centers in the Altayskiy unified center; and the Novokuznetsk, Belovo, and Kemerovo centers in the Kuzbass unified center.

It is clear that establishing such administrative structures is not a simple matter. Thorough preparation and overall improvement in transport technology are required. And primarily the optimization of railcar traffic flows and the utilization of the fleet of locomotives and locomotive brigades. It is important to distribute the train traffic flows on parallel routes and sections efficiently, to put locomotive operations and the brigades' work in order, and to increase railcars' through traffic, especially from loading points. The formation and movement of heavy trains and those with long consists must be organized and the sections guaranteed for car movement must be increased. There are no more than 140 kilometers of the latter today. Does this really correspond to the technical capabilities that are available? Of course not. Calculations indicate that they can be increased by nearly 1.5 times as much.

The most important component is the organization of local work. There is someone to take an example from here. In particular, the Moscow Railroad has introduced intensive technology for work with local freight. We also should thoroughly reason out the potentialities of future consolidated transport management centers for delivering coal in local service by loop routes. Calculations show that the gain can be high here: the turnaround of cars will be speeded up by 8 to 10 hours, and the savings in operating expenditures will amount to about 5 million rubles annually.

A third step in preparation is improvement in the technology of the work and management of rail junctions and stations. The questions of intensive technology have already been worked out adequately here. A great deal has been introduced, as an example, at the Omsk, Novosibirsk, Barnaul-Altayskiy, Novokuznetsk, and Kemerovo junctions.

Experience demonstrates that the basis for the technology of the work of all rail junctions should be a firm schedule for the movement of transfer trains where the best possible plan has been substantiated for making up a train within the junction. Adherence to just this one condition reduces the turnaround time for cars within a junction by an average 6 to 7 hours.

A wasteful system is now in operation for making up and dispatching full-consist transfer trains. It causes unjustified delays of the cars arriving at and departing from stations in the junction.

Automation of the management of work at rail junctions awaits solution as well. But after all, the region has the good experience of the Omsk junction. Automated control systems have been established at its Vkhodnaya and Moskovka stations.

A new structure for dispatch management requires fundamental revision of the data base and the system of day-to-day planning of the operations work, and the best possible siting and equipment of the PTO's [technical maintenance points] for cars and locomotives...

This does not exhaust all the problems, of course. There are enough of them for many years to come. But as they say, he who starts will master the road. There is a powerful scientific potential for this in our region, and two institutes are in operation—the OmlIT [Omsk Institute of Railroad Transport Engineers] and the Scientific Research Institute of Rail Transport. Combining their research with the practical work of the West Siberian and Kemerovo Railroads can produce an extraordinary alloy of efficient innovations.

Railcar Congestion, Shortages Noted

Tank Car Backlog on Odessa Railroad

18290223 Moscow GUDOK in Russian 12 Jul 89 p 1

[Report by GUDOK correspondent M. Gorbis: "And They Are Still Carrying Mazut"]

[Text] **Odessa—Thousands of tank cars of this product are standing idle on the Odessa Railroad. Who is to blame for this?**

On the same day that P. Mostovoy, the candidate for the position of deputy chairman of the USSR Council of Ministers and concurrently chairman of the USSR Gosnab, set forth his program for improving our economy and increasing its dynamism and efficiency at the first

session of the USSR Supreme Soviet, transport workers complained to the GUDOK correspondents center about the chronic sluggishness of this department and the organizations subordinate to it. For the fourth month the Odessa port and the Odessa-Peresyp station which serves it have been choking with the influx of tank cars with mazut for export. And none of the worried telegrams to the Gosnab, the Goskomnefteprodukt [State Committee for the Supply of Petroleum Products], the Ministry of Railways, or the Ministry of the Maritime Fleet can stop this "black torrent" which has become uncontrollable.

And on that day, 3 July, when the words about dynamism resounded from the high rostrum, 15 consists of fuel—18 on the day before—were standing motionless on the approaches to the oil harbor. At that time, it was expected that 2,100 tank cars would be unloaded every day, but it came to pass that there were more than 3,000! What kind of planning, norm setting, and efficient management can we speak about when the nearest stations and sidings are choked up with oil tank cars and their work is being paralyzed?!

When I asked A. Udalov, the first deputy chief of the Goskomnefteprodukt's administration in Odessa Oblast, what had caused this congestion, he alluded to the delay in renovating the tank farm at the port. It was begun during the period of stagnation and has been affected little by the winds of restructuring. Had the USSR Council of Ministers decree of 1982 been carried out, it could accommodate about 900 tank cars of fuel, that is, 1.5 times more than at present.

The official failed to mention the neglect in his area of responsibility. As far back as March, A. Oganessian, the chief of the Odessa-Peresyp station, sounded the alarm that capital repair of the elevated tracks for discharging the mazut at the tank farm is being disrupted. Because of this, he said, layovers by the tank cars arriving here to be emptied and the tanker fleet have developed during the summer season.

And that is the way it happened. In April, instead of the 779 tank cars to be unloaded daily under the plan, an average of 632 cars were released, but 1,800 were waiting to be unloaded! The situation did not improve in May, either. In spite of the target that had been set, the managers of the Mozyr and Kherson Refineries were sending considerably more fuel to Odessa—on certain days 1.5 times as much and even twice as much as the norm.

In order to curb the suppliers' excessive generosity somehow, a delegation from the collectives of the Odessa-Peresyp station and the tank farm came to Moscow at the end of May. Ye. Zhivago, a deputy chairman of the USSR Gosnab who received them, promised to take steps without delay. An authoritative commission from the Gosnab flew to Odessa soon afterward. It gave

assurances that the delivery of mazut would be put in order and that things would be better when the tank farm renovation is completed in June.

In June, in fact, they reduced the delivery plan to 625 tank cars per day and they managed to bring the number of cars emptied up to 678. But the pressure of mazut increased—the number of tank cars remaining with fuel each day reached 2,190. On 26 June, the fuel discharge was discontinued because of a ban imposed by the special inspectorate for preservation of the Black Sea—the ballast water purification plant had become “choked up.” On board the tankers *Lenino*, *Groznyy*, *Ulyanovsk*, and other vessels in the roadstead, 50,000 tons of contaminated ballast had been accumulated. By that time, all capacities at the tank farm turned out to be filled with mazut and the number of tank cars containing it was getting closer to 2,500!

Distress signals flew off to the Ministry of the Maritime Fleet, the Soyuznefteeksport [All-Union Association for the Export and Import of Oil and Petroleum Products], the USSR Gosnab, and republic organs. And A. Sam-borskiy, first deputy chief of the Odessa Railroad, sent a telegram to the Ministry of Railways, appealed for understanding from the managers of the Donetsk Railroad, who have continued to “pump in” the mazut from this line. In the first 3 days of July alone, they contrived to send 383 tank cars of mazut beyond what was authorized from the Novozolotarevka station.

Alas, it is as if they hear neither the telegraph alarm bells nor the appeals on the Donetsk Railroad and other mainlines. They evidently think that the people in Odessa are joking... And they respond in the same way—they send more mazut. The tank cars of it have “presented” the Odessa Railroad with about 2 million car-hours of idle time. And accordingly, financial losses as well. And this is despite the fact that a 40-day embargo was announced on the delivery of this truly black gold in the second quarter. Otherwise, the financial losses would be even more substantial.

Nevertheless, Odessa is Odessa—it is joking, although a little glumly this time... Do you remember when the schoolboy was asked: “Why is the sea salty?” And he answered: “Because herring are swimming in it.”

The people in Odessa have modified this tale. They are asking:

“Do you know why the sea is Black?”

Many persons already know: “Because they keep bringing more and more mazut to us!”

Railcar Handling Problems on Baltic Road *18290223 Moscow GUDOK in Russian 12 Jul 89 p 1*

[Article by F. Kudryavtsev, chairman of the leading group of People's Control for management of the Baltic Railroad: “Tank Cars at Anchor”]

[Text] **Riga—Two export transshipment bases—in Ventspils and Klaypeda—exert considerable influence on the results of work on the Baltic Railroad. They should be unloading 1,500 tank cars at them every day. But problems of different kinds are dooming the critical rolling stock to lengthy layovers.**

The Ventspils tank farm is 30 years old. Many processes have been automated here, it will be quickly noted. But the railroad tracks and elevated tracks for discharging petroleum products have not been developed and improved at all in such a lengthy period. Only 24 or 25 tank cars with the same type of petroleum product can be emptied. For many years, unit trains of large-capacity eight-axle tank cars have been coming here. However, the line has the technical facilities for unloading one such tank car... Because of this, 55 such capacities stood idle for a long period of time in February and March. Moreover, additional complications arise in switching operations when one large-capacity car has to be included in a group with ordinary tank cars.

For a long time the line has insisted on transporting petroleum products by loop routes with large-capacity tank cars, which will make it possible to substantially reduce the physical inputs at the points where they are filled, as well as to drastically reduce pollution of the environment (these tank cars are more leakproof). However, the preparation to receive them is being postponed from year to year.

A regulation in effect since 1929 forbids the discharge of petroleum products when there is a wind force of 8. And instead of carrying out the appropriate technical measures to provide for unloading in any weather, the managers continue to take refuge in this antiquated regulation. Various press organs, including GUDOK, have raised this problem many times. Following a PRAVDA statement in 1986, the manager of the Ventspils Petroleum Transfer Tank Farm, V. Gutenev, stated that designers had developed and tested a mobile cab enabling the workers engaged in unloading to conduct operations when the wind is up to 20 meters per second. But all this proved to be an empty promise in actual fact.

Nothing is being done for the unloaders' work in bad weather at the Klaypeda tank farm, either. The tank cars are still idle when it is windy. And under conditions on the Baltic, there are over 100 such days each year. On these days the consists are lined up next to each other for tens of kilometers. We have to wonder: doesn't this really concern the union and republic departments?

The state is incurring tremendous financial losses from such mismanagement. We have calculated that from 1985 to 1988 inclusively, over 100,000 tank cars, which stood for about a million car-hours beyond what was authorized, were held up at the two tank farms cited. And there were more than 3 million car-hours on the approaches to them.

These figures are well known to those in the party and soviet organs of Latvia and Lithuania. In the 17 November 1988 issue of the newspaper SOVETSKAYA LATVIYA, O. Misurkin, deputy chairman of the Latvian SSR Council of Ministers, stated in response to inquiries from deputies B. Fogel, A. Kruminsh and S. Riksha that the problem of unloading tank cars at the Ventpils Tank Farm when the wind is up to 20 meters per second had been resolved. A report just like this came after to the management of the Baltic Railroad from Yu. Rusetskiy, the deputy chairman of the Lithuanian Council of Ministers: he said that wind up to 21 meters does not interfere with work at the Klaypeda Tank Farm, either.

The results of the first quarter of this year attest to the worth of such assertions by the respected managers. Tank cars stood idle for unloading at the Ventpils Tank Farm for more than 8 days, and the cars were idle for 12 days at the Klaypeda Tank Farm. At the same time, more than 4,000 tank cars were abandoned on the tracks of line stations for the Ventpils Tank Farm, and their layover was in excess of 100,000 car-hours; for the Klaypeda Tank Farm, these figures were 9,000 tank cars and about 220,000 car-hours, respectively.

But what will happen in the fall, when there are more windy days? Will the tank cars be standing at anchor once again?

Rail Accident Statistics for First Half of 1989 Reviewed

18290236 Moscow GUDOK in Russian 25 Jul 89 p 2

[Article: "Traffic Safety: How Operations Went During the First Six Months of 1989"]

[Text] This hot summer has brought quite a few aggravations to railroad people, especially trackworkers. Of the three wrecks which occurred in June, two (on the Southwestern and Kuybyshev Railroads) happened because of a buckling of the continuous [jointless] track rails. This was also the cause of accidents involving passenger trains on the Transcaucasian and Southern Railroads. Nobody was hurt in these accidents.

It is characteristic that all the incidents of buckling in the rail-tie grid have been marked by weight consequences, and there is only one reason for this—violation of wheel-repair technology and a neglect of bitter experience. Just take, for example, last year's terrible wreck of

the Aurora express train on the October (Leningrad) Mainline, after which an order of the minister was issued. The latter seemed to provide for everything; now if it were only carried out!

On 12 June a freight train had a wreck between Yurlovka and Glotovka on the Ulyanovsk Division. Traffic was interrupted for 16 hours. Just five hours before this accident the track had been straightened out here under the supervision of Brigade Leader V. Agafonov. And "it did not occur" to anyone to make a scheduled measurement of the temperature stresses in the rail connections. After the "window," train traffic was resumed on this section without any limitations being placed on train speed. And the hot weather continued....

Just a short time before this—on 1 June—after an analogous track buckling, E. Poddavashkin, chief of the Kuybyshev Railroad, signed a telegram addressed to trackworkers, which included the following words: "It is categorically forbidden to conduct any types of work connected with changing the position of the rail-tie grid [network] or loosening the ballast layer, when the temperature of the outside air is 25 degrees C or higher...."

To whom was the supervision of the trackworkers' work entrusted? Here is an excerpt from the reference record of Brigade Leader V. Agafonov: "He has been working in transportation since 1978; he was a road foreman and a track installer. He has had a passive attitude toward his duties; he does everything only after being ordered to do so; he has no close contact with the workers. And he has spent time in a sobering-up station...." What is to be expected from such a commander?

During the first six months of this year trackworkers were to blame for 13 wrecks and 6 accidents (during the corresponding period of last year these figures were 15 and 10 respectively). The principal causes were as follows: breakage of rails (5), of switch points (1), of mobile frog cores (1), buckling of track (5), expansion of rails (3), lack of fencing around the work place (1).

The situation is worst on the October (Leningrad), Southwestern, Baltic, Kuybyshev, Moscow, and Transbaykal railroads.

Particular mention must be made of crossings, where 108 persons were killed and 120 injured during this six-month period. The number of accidents involving even the persons in charge of crossings has increased. The situation is especially alarming on the Central Asian, North Caucasus, Gorkiy, Kuybyshev, Lvov, Moscow, Alma-Ata, and October (Leningrad) railroads. Preventive work by the GAI [State Motor Vehicle Inspectorate] organs among motor vehicle drivers has been conducted badly.

There has been a sharp reduction of attention paid to traffic safety in the management of the haulage service. Traffic was to blame for 3 wrecks and 9 accidents (during

the first half of last year the corresponding figures were 1 and 5). Great alarm has been caused by accidents involving passenger trains (there were 5 of them), and particularly by the wreck on the Volga Railroad. Serving as the principal causes of ChP [extraordinary events or accidents] have been: receiving and dispatching trains for unprepared routes, moving centralized switches under trains, letting unattached railroad cars "drift away," violating the rules governing switching operations, and leaving a brake shoe under the car of a train being dispatched (Moscow Railroad).

The Volga Railroad remains the most accident-prone where the traffic people are to blame. The situation is particularly bad on the Volgograd Division of this mainline (a wreck, an accident, a train being received on an unprepared route, and letting cars drift away).

Great difficulties have been introduced into the overall operational work of the network by drifts and collisions, as well as switching cuts in switching operations allowed by the locomotive operators. They were entirely to blame for the occurrence of 1 wreck and 5 accidents (during this same period in 1988 there were 8 and 3 respectively). The causes were as follows: passing/running through stop signals, irregular locomotive crews, and collisions.

Locomotive crews allowed a total of 56 passing through red signals to occur (as compared to 75 for the corresponding period in 1988). They all took place in stations or station yards; 16 such passings were allowed by locomotive engineers working all by themselves. What puts us on guard is that, of the total number of such passings, 17 were committed by persons who have been certified to operate for 5-10 years, and 13 by those with more than 10 years of service. More than a third of all incidents were committed by those who have previously been penalized for analogous transgressions.

Without a doubt much of what has been cited above was committed by persons who were utterly fatigued. Fourteen of the passings were committed by those who had worked for 530 hours of overtime during the previous 12 months. Just think: on the Mogochinskiy Division of the Transbaykal Railroad one crew worked for 18.5 hours straight, after which it committed a passing. The number of violations of the work-and-rest schedule for locomotive operators in this network increased by 65 percent during this past six-month period.

Considerable losses have been caused by trains stopping on runs due to the poor quality of repairs and technical maintenance of the locomotives (accounting for 82 percent of all breakdowns), and because of detachments of the in heavyweight and extra-long trains.

Railroad-car maintenance workers were to blame for the occurrence of 4 wrecks and 2 accidents (for the first six months of 1988 these figures were 12 and 4 respectively), and 45 breakages in the axle journals [bearings] of wheel pairs. A good half of these accidents occurred on the

Moscow, West Kazakhstan, Tselin, Volga, Azerbaijan, and October (Leningrad) railroads. There is a single cause—the poor quality of repairs and certification of wheel pairs at plants and in the railroad-car depots /shops/. Among the worst we must cite the Odessa-Zastava Depot, the Nizhnedneprovsk-Uzel, Krasniy Liman, Popasnyanskiy, Bogotolskiy, and Darnitskiy Railroad-Car repair plants.

Many railroad-car inspectors at PTO's [technical service centers] have not and do not manifest the necessary watchfulness. More than half of the breakages [fractures] in the spring supports and truck sides (of 14 instances) occurred at the sites of old cracks. There was an 11-percent increase in the number of falls onto the track of railroad-car parts (especially doors and hatch covers). There were instances where the riser beams of the railroad cars ripped off.

Among communications workers on 9 railroads there was a doubling of the number of instances of breakage [flaws], particularly in the North Caucasus, Alma-Ata, and Far Eastern railroads, and on the BAM [Baykal-Amur Mainline]. The principal reasons for the violation of traffic safety here are the following: poor maintenance of technical means, violations of the rules of production operations, as well as shortcomings in the design of switches.

Train operations have been negatively affected by defects in and breakdowns of signaling equipment and systems. There was a total of 71,100 instances of these during the six months in question. Most of these have occurred as a result of poor maintenance of rail circuits.

There has been no reduction in the amount of loosening and spillage of freight onto tracks, for which blame must be placed on the container-haulage and commercial operations-services. The principal cause of this is the [improper] fastening of freight on rolling stock. For example, on the North Caucasus Railroad a reinforced-concrete column fell on a flatcar. When it was being loaded in Minsk, it had not been fastened in accordance with the rules.

It is characteristic that in April there was not a single wreck and no accidents of any real importance. There is a direct connection here with the spring checkup of all technical equipment in transportation. It is possible, therefore, for the railroads to operate without accidents if they increase the responsibility of every person who is connected with train traffic, and if effective monitoring controls are introduced.

Perilous State of Railroad System Examined *18290220 Moscow SOTSIALISTICHESKAYA* *INDUSTRIYA in Russian 8 Jul 89 p 2*

[Interview with M. Lyakishev and A. Shinkarev, procurators of the Administration for Supervision of Execution of the Laws of Transport for the USSR Office of Public Prosecution, by G. Aleksandrov, SOTSIALISTICHESKAYA INDUSTRIYA correspondent: "What Has the Railroad Come to"]

[Text] Once, not so long ago, the railroad was a model of order, accuracy and discipline. You could check the time at

sidings and flag stations by the passing trains. Gradually, however, all this changed. Counting the days, we spend twice the time on the road. Increasingly often we hear of accidents, explosions and train wrecks, which take the lives of dozens of persons.

How have we reached such a state, who is to blame and what must be done? This is the subject of the interview given by M. Lyakishev and A. Shinkarev, procurators of the Administration for Supervision of Execution of the Laws for Transport of the USSR Office of Public Prosecution, to our correspondent G. Aleksandrov.

[Lyakishev] As the checks made by the organs of the Office of the Public Prosecutor show, the situation on the railroads is truly alarming. In the last five years, hundreds of accidents and wrecks, in which several hundred persons have been killed and injured, have been permitted. Over 300 locomotives and several thousand cars have been damaged and destroyed. In 1988 the material damage was almost triple that of the preceding five years. A large number of citizens suffered and hundreds of buildings were damaged as the result of the explosion of one freight train alone at the Sverdlovsk station on 4 October. The loss amounted to over 200 million rubles.

[Correspondent] What is the cause of these tragedies?

[Lyakishev] Analysis of the criminal cases shows that these accidents happen most often because of so-called "trifles"—failure to adhere to the rules of technical operation and instructions.

Here is just one example: the wreck on the Moscow Ring road. Brigade leader Rodin, when replacing defective tracks with operative ones, did not place the signal man at the agreed distance, did not extend the emergency warning, did not measure the new rails, which proved to be two centimeters longer than the former ones, and closed the electric circuit. After this, the automatic block signal system was switched on, the green light on the traffic control signal was turned on, and the freight train entered the unfinished section. Eight tank cars filled with propane caught fire and exploded, and the electric locomotive and 25 cars were damaged. Rodin was sentenced to three years of confinement.

[Correspondent] Take incidents that occur practically every day. I have in mind the train delays which have, unfortunately, become almost the norm for all railroad workers. Last year every tenth long-distance train arrived at the destination station with an average delay of one hour and 20 minutes.

[Shinkarev] The delay is usually connected with the carelessness of individuals. There is another reason, however—the state of the track is so bad that normal speed has recently become dangerous.

At present, about 30,000 kilometers of track have reduced operating stability and reliability of up to 70 percent. About 46,000 kilometers of the rails in operation are simply worn out. Almost half of the switch assemblies fail to correspond to the type designation of the rails. The number of unserviceable wooden sleepers, switch and bridge ties is triple the permissible norm. About 12,000 kilometers of track are being operated on subgrade that does not meet the technical requirements.

[Correspondent] Consequently, the question must be raised, not only of individual errors and omissions, but of incorrect transport policy?

[Shinkarev] There is no doubt of it. Would it appear that the procurator's "eye" can behold something here? For us, however, the lawyers, certain deplorable consequences of the programs adopted by the sectorial personnel are fully noted.

Let us say, in 1985, the Ministry of Railways was tempted to perform quite a daring "experiment"—a considerable increase in freight car loads. The data obtained by the USSR Office of the Public Prosecutor from the Commission on Transport Problems of the USSR Academy of Sciences and the departmental scientists shows that increasing it up to 75-80 tons reduces the service life of many parts of the cars by a factor of 4-6. This often leads to wrecks like the one that occurred on the Baykal-Amur Mainline, where three sections of a diesel locomotive and 33 cars were destroyed, or the one at the Suzun station of the West Siberian Railroad, where the overload of a car led to the breakdown of the suspension beam.

In addition, the "experiment" made it possible for foreign firms and our plants to refuse warranty service on the cars that they built. All the same, the Ministry of Railways, firmly disregarding the warnings of the Ministry of Heavy, Power and Transport Machine Building and their corresponding services, continues to violate the scientifically substantiated norms for loading. They have the upper hand.

[Correspondent] Was the management of the Ministry of Railways, in undertaking such a serious experiment, really not worried about simultaneous or even outstripping reequipment of our economy?

[Lyakishev] In order to reequip, there must first be at least some "weaponry." At the sites there is often a shortage not only of necessary equipment, but even of primitive tools of labor. On the Chuyskaya track division of the Alma-Ata Railroad, there are only two shovels and two crowbars apiece per 15 workers of each track section....

[Correspondent] How, then, did the directors of the sector intend to complete the "great leap forward" into increasing labor productivity in railroad transport, in order to "catch up with and pass the United States," which was reported in the press?

[Shinkarev] One of the "hobby-horses" is the Belorussian experience. The Belorussian Railroad, with a certain surplus of labor resources, reduced the staff, combined many occupations and duties, and raised the wages of the remaining workers. Labor productivity, naturally, rose. Then this method began to be disseminated throughout the country, even where there were probably not enough people.

The tough cutbacks in the number of workers led to a chronic shortage of personnel in some regions. On the Alma-Ata Railroad the staff of track fitters was only 64 percent complete. On the Oktyabr Railroad, 33 brigades are working with one person each, and 21 brigades—have no workers. At a number of places, with inspection and maintenance of the track at an extremely poor level of mechanization, instead of 4-6 kilometers as a norm per track worker, he is assigned up to 90 kilometers of track.

After all, are we not familiar with passenger trains with "one-and-a-half-car" and even "two-car" conductors? After this, what can be said about service and about a safety guarantee!

[Correspondent] Railroad transport work has "lost" people, particularly the ones it called upon for service. It turns out that the trains are not for us, but for the Ministry of Railways—we act as the source of deriving funds.

[Shinkarev] Actually, the Ministry of Railways is oriented not toward worsening the service to passengers and enterprises of the national economy, but toward those "indicators." The GOST requirements for preparing passenger cars for a run and maintaining the tracks are not even very strict and are often disregarded. The trains operate with faulty water supply and sanitary engineering equipment, with inoperative heating in the fall and winter period and with uninsulated windows.

[Correspondent] Forgive me for a trite question: just where is the monitoring and where do the inspectors look?

[Shinkarev] Quite a large army of line inspectors "are at war" on the railroads. Their main task, however, is to fight with people traveling without tickets.

[Correspondent] Just where is the actual link which, having been taken up, can pull out the whole chain?

[Shinkarev] In our opinion, a law can and should serve as this link. If you trace the sources and cause-and-effect relationships of the negative phenomena, you can be

convinced: they are seemingly programmed, predetermined by the existing legal conditions. These conditions have not formed by chance. For example, the Ministry of Railways can clearly see: being the result of an administrative-bureaucratic system, our civil legislation has to a considerable extent lost its true intent. The main shortcoming: the necessary parity between the state and the individual has been violated. The chapter on "Transport" in the Fundamentals of Civil Legislation and in the republic code, regulating contractual relations, essentially rules out the possibility of legal action by a citizen for failure to observe a contract.

Unfortunately, we have permitted the ministries and departments to establish substantial rights and duties for citizens through the mechanism of instructions, rules, orders and other delegated legislation. As a comparison: the constitution of the Hungarian People's Republic specifies that the fundamental rights and duties of citizens are established only by law, that is, by an act of a higher state organ. We must forbid the ministries and departments the right to create legislation.

[Correspondent] The conclusion arises: departmental creation of right must be stopped and it must be brought into accordance with the law.

[Shinkarev] I feel that this is a primary task. The legal directives presently in existence are not so inoffensive as it appears "from inside" the department. Regulatory documents are being drawn up and approved in the directorial offices of the sector. Then the events in them will be analyzed and the orders prepared for their results. The heads of departmental norm-creation will retain responsibility "for the personnel." The punitive hand of justice most often falls down upon the persons who are directly to blame, who are often not so much criminals as victims of the damage of the sectorial policy. Therefore, the actual reasons for the tragedies at times remain unknown, and this means, not removed.

[Correspondent] What do the railroad workers themselves think of this?

[Shinkarev] It all depends on the civilian position occupied by the person. I think that it is worth quoting a letter from B. Zverev, Honored Railroad Worker from Sverdlovsk, to the USSR Office of the Public Prosecutor. He writes: "...the hypocrisy, deceit, and report distortion in railroad transport has taken on a mass nature.... The picture would be considerably clearer if Minister Konarev had showed off, not the average weight of the train, but the productivity of the locomotive, and not the statistical load of the car, but the productivity of the car.... Those guilty of wrecks because the locomotive brigades were asleep should be sought not in the locomotives in the person of the "sloppy individuals"—the sleeping engine drivers—but within the precincts of the Ministry of Railways, among the highly placed bureaucratic officials, who sabotage the use of measures and means to combat sleep while driving trains.... In a

network of roads with a minimum need of 250,000 track fitters, established by the recent technological norms (order of the Ministry of Railways of 17 October 1988), they are about 100,000 short.... And at the same time, the ministry, being gripped by the ostentatious idea of catching up to America with respect to labor productivity, continues to reduce the staffs of the leading occupations.... On 30 December 1988, at the selector conference, Minister Konarev announced: 'In three years, labor productivity rose by 19.5 percent. The task of increasing the growth by 6-10 percent in the two remaining years is completely real.' Everyone hears it, everyone sees it, and everyone keeps quiet.... In our country everything is built to protect the 'honor' of some titled full dress uniform or other and to accuse sometimes completely innocent 'switchmen'...."

It is difficult not to agree with him. Judging by the letter, however, such voices are not being heard at the Ministry of Railways.

From the Editor. This material was already ready for press when the report arrived that the USSR Supreme Soviet had not approved N. Konarev's candidacy for the post of USSR Minister of Railways. In this way the deputies made it understood that the country was extremely dissatisfied with the state of affairs in the sector, vitally important for the entire State, and that there is now someone from this department to protect the interests of the people. We do not yet know the new candidate for the vacant ministerial post, but one thing is certain: the new minister will bear a tremendous responsibility. Let us hope that the time will still come when we can call our country, without any strained interpretation, a truly great railroad power.

Investigative Body Member on Ufa Railroad Disaster

18290203 Moscow TRUD in Russian 9 Jun 89 p 3

[Interview with I.Ye. Klochkov, AUCCTU secretary and member of investigative commission, by A. Lyapustin, special correspondent: "The Entire Country Is Helping Out"]

[Text] The questions asked by TRUD special correspondent A. Lyapustin are answered below by I.Ye. Klochkov, a member of the government commission sent to investigate the causes of the catastrophe on the Chelyabinsk-Ufa Railroad Section and to render aid to the sufferers, and a secretary of the AUCCTU.

[A. Lyapustin] Igor Yevgenyevich, the entire country already knows what happened. A gas leak from the product pipeline. But how and why did this happen?

[I.Ye. Klochkov] That is what must be ascertained by the commission, the investigative organs, the experts, and specialists. It's still too early to come out with an unambiguous conclusion.

A wide fraction of lightweight hydrocarbons is transported through this product pipeline. This mixture is transported in liquid form at a specific pressure lower than which it can become a gas, thereby expanding in volume by a factor of several hundred, and when mixed with air, it is transformed into a dangerous mixture.

The causes of the leak? Pipes made of poor-quality metal, a violation of operational technology, or a defect in the pipeline caused by the construction workers—this is what the commission is trying to discover now.

[A. Lyapustin] When the commission arrived at the site, what were its functions, in addition to the ones which you have already cited? And what is the role being played therein by a trade-union leader?

[I.Ye. Klochkov] We flew out from Moscow on the morning of 4 June and arrived at the site in less than three hours. The government commission is carrying out a great deal of work on various levels with regard to coordinating all actions connected with the consequences of this tragedy. This entails, above all, saving people, rendering aid to the suffering, and eliminating the consequences of the accident. Each commission member engages in his own field of work: we then meet twice a day at 1000 and 2000 hours. We sum up the results of the previous night's or day's work and make any necessary adjustments.

The trade unions of Bashkiria, where the principal center of operations is concentrated, in Chelyabinsk, Novosibirsk, Omsk, Kurgansk, and other oblasts (passengers on the trains were primarily from these regions) have focused their attention since the first day on very specific and important tasks. These include, above all, aid to the relatives and friends of those who suffered in the catastrophe. It is very important to provide the necessary information. They want to know everything about the fate of their loved ones. Where should they look for them: in the hospitals of Ufa or those of other cities where a considerable number of the sufferers were brought in the days following the accident? Or are they on the list of those who perished?

In order to conduct this work in a well-organized and smooth manner, an information center has been set up in the Bashkir Oblast Trade Union Council. The work is being carried out in close cooperation with the activists of the Soviets, the Komsomol, and the students.

We view the principal task of the trade unions during these sorrowful, tragic days as making sure that people are surrounded with as much attention and concern as possible, that unnecessary time is not lost in this city of many millions of persons, a city which is also unknown to many. But we do not always manage to succeed in this task as much as we would like to.

In any case, the people here pay no heed to time; they are trying to do everything possible to support those who are arriving in their measureless grief.

But in this matter just the desire to help, kindness, and mercy are, nevertheless, not enough. The very nature of the tragedy, its scope and the consequences of that whirlwind of fire which raged over this section of the railroad have not allowed us to this very day to determine with reliable accuracy a precise list of those who suffered and their fates. We now have the information on those persons who were evacuated to hospitals in Moscow, Leningrad, Kuybyshev, Sverdlovsk, Chelyabinsk, and, of course, those who remained in Ufa. We have coped with the problem of establishing the identity of those persons who have remained in a state of shock. They have all been found by their relatives with the exception of one five-year-old boy. It is a much more complex task to establish the identities of some of the persons who died, as well as those whose remains have not been found. A great deal of work along these lines is being done by the organs of the MVD [Ministry of Internal Affairs] and the procuracy. New information comes in to them every day and every hour. The investigative organs are conducting a search along the entire mainline; they are following up on trains, questioning people who were traveling together and who then got off at intermediate stations. In short, they are using all possible methods for finding things out. The fate of every persons will be cleared up.

But this work requires a certain amount of time. And, in this connection, we understand the pain and aggravation of those who still cannot obtain absolutely definitive information about their relatives. Quite a few bitter words were directed at the commission and the investigative organs at the most recent meeting with the relatives yesterday at the Petroleum Workers' Palace of Culture.

[A. Lyapustin] At first there were more than 330 of the sufferers in Chelyabinsk Oblast (some of those evacuated). Tens of specialists and hundreds of relatives and friends came there. What is the scope of things in Ufa?

[I.Ye. Klochkov] As of today, there are more than 1400 persons looking for their loved ones in the hospitals, preventive-medical clinics, and dormitories. More than 600 specialists have arrived in Ufa in connection with the catastrophe. They are being given free meals and are rendered the necessary medical assistance. Bashkir motor vehicle owners and those from other oblasts have made available more than 400 means of transport of various types.

And trade union representatives are also taking part in all this complex work.

[A. Lyapustin] All this is operation aid. But what kind of work are the trade unions participating in with regard to the personal fates of those who have suffered and in rendering help to their families in the future?

[I.Ye. Klochkov] It is undoubtedly the direct obligation of the trade unions to solve without delay a whole range of social problems connected with ensuring and providing for the families of those persons who have suffered in this catastrophe.

The AUCCTU has adopted a decision to allocate 300 rubles from the trade union budget to each person who has suffered. And in the total complexity, by means of funds from the state budget, the social-insurance organs, Gosstrakh [State Insurance], as well as public and other organizations, each person will be provided with a one-time assistance grant ranging from 2,500 to 4,500 rubles. The latter sum will be paid to families who have lost their breadwinners.

On a nationwide basis, Account No 704802 has been announced, to which labor collectives and individual citizens are transferring money. We are receiving reports that the labor collectives of Bashkiria and Chelyabinsk Oblast, the country's transportation construction workers, the Ministry of Railways, and public organizations are contributing a day's wages or are organizing additional workers' solidarity shifts.

At a meeting between the government commission and the relatives the desire was expressed to set up a monument to those who perished at the site of the catastrophe. It was supported, and the funds collected in this account could serve as a source of financing.

In both trains 84 members of the train crews either perished along with the passengers or were seriously injured while performing their service duties.

With the participation of the USSR Goskomtrud [State Committee for Labor and Social Problems], a governmental decision is being prepared on providing pensions to families in cases where the breadwinners were lost, or formulating pensions for those who suffered labor mutilations due to the explosion from the product pipeline. Such a motivation will make it possible for pensions to be computed at the maximum levels. These computations must be freed of excessive bureaucratic formalities; trade unions at the workers' places of residence must show concern about this and render all manner of assistance.

The AUCCTU has adopted the following decision: members of families caring for their relatives in hospitals shall be paid 100 percent of the hospital bills during the entire period of time necessary for such care. The AUCCTU has transferred to the account of the Bashkir Oblast Trade Union Council the sum of 500,000 rubles for allotting grants and other necessary assistance.

[A. Lyapustin] Nor has the pain of this tragedy failed to touch the hearts of Soviet people: they have donated blood, clothing, bedsheets, and contributed money to a fund for the sufferers. What kind of further aid is needed?

[I.Ye. Klochkov] After coming out of the shock of being burned, the hardest period of struggling for life ensues. Therefore, they need volunteer nurses to sit with them and care for them. They will also need continuing donations of blood. And, what is most important, they will need plastic surgery, and, therefore, they will need volunteers for skin transplants. Trade union committees will concern themselves with rehabilitating the sufferers, providing them with sanatorium treatment at trade union health resorts.

[A. Lyapustin] Igor Yevgenyevich, could you, as a member of the government commission, evaluate the work of the Ufa people?

[I.Ye. Klochkov] At every level—from the rank-and-file inhabitants to the republic's leaders—everything possible is being done. The work is proceeding in a well-organized manner. There is no petty-mindedness here. And, in my opinion, everyone here understands this. People are saying words of thanks to the Ufa people.

BAM Construction Situation Update

18290207 Moscow GUDOK in Russian 17 Jun 89 p 2

[Interview with Viktor Iosifovich Shmidt, deputy chief of the Board for BAM [Baykal-Amur Mainline] Construction, by GUDOK nonstaff correspondent V. Chul: "The BAM: In Search of Understanding From Its Partners"]

[Text] Tynda—A tense situation has taken shape on the BAM. The railroad must be turned over for continuous operation, and not at the end of the fourth quarter, as planned previously, but in October. In this connection, the situation with respect to deliveries of complete sets of equipment to the sections under construction, which is critical as it is, has become aggravated.

In order to shed light on the state of affairs, our nonstaff correspondent interviewed the deputy chief of the Board for BAM Construction, Viktor Iosifovich Shmidt.

[Chul] The decision to shorten the time for turning over the mainline for continuous operation has probably made a substantial change in your plans.

[Shmidt] We foresaw it. The matter was discussed in February, when V. Ginko, the first deputy minister of railways, and the chiefs of a number of main administrations familiarized themselves with the sections under construction. They noted the high readiness of the line's engineering projects. It was decided at a meeting of the ministry's collegium in March to take every step to put the BAM in operation in October.

Turning the line over ahead of time, which is hated by everyone, is not for the sake of a resounding report to honor some date, of course, but an effort to put the facilities in operation with high quality without a rush before the New Year, and what is of no small importance, before the cold weather. It is understandable that there is more trouble. We must shift the schedule for deliveries to the quarter accordingly and bring the basic engineering equipment to the construction areas in the first half of the year.

The complete sets of items are numbered in thousands of units. This creates considerable difficulty for the Material and Technical Supply Main Administration of the Ministry of Railways. Operational groups formed under our board are taking the most drastic steps to supply the sections under construction with everything necessary. The ministry leadership is providing businesslike assistance.

[Chul] But what if...

[Shmidt] All "ifs" have been ruled out. We are working out two or three alternatives in reserve for the most difficult positions. For example, the problem of delivering six pumps for the boiler room in Taksimo is extremely difficult. But we have taken precautions, providing for the transfer of funds from another enterprise to the BAM in the second quarter or for the installation of less powerful pumps, but ones which meet the settlement's needs, of course.

The elevator equipment for shopping centers is a complicated problem. It should be delivered by a plant in Spitalak... They transferred the order for six elevators to Sverdlovsk. They accepted the order there for the fourth quarter, but the management of the enterprise, meeting them halfway, promised to ship the elevators in August.

[Chul] So there are no problems?

[Shmidt] Alas, we have enough of them. The GUMTO [Material and Technical Supply Main Administration] has not put matters right with regard to the electrical engineering equipment to date. We need 12 safety panels and automatic equipment. The "Elektroapparat" NPO [Scientific Production Association] in Tashkent makes them. But it has refused to deliver to us. But without them, it will be impossible to put the traction substations in the section from Angarakan to Taksimo and the automatic block system in the section from Taksimo to Chara into operation.

We cannot come to an agreement with the Ministry of Power and Electrification, either. Despite a decision made jointly with the Ministry of Railways, it refused to provide RTM-3300 reactors for the REU [regional power administration] "Buryatenergo."

[Chul] What are the reasons for the disruptions in deliveries?

[Shmidt] I think one of them is the decline in interest in the mainline, promoted by a number of unreasoned statements in the press and on radio and television. Naturally, this has put suppliers on the alert. Even the plants with which we maintain ties of long standing are putting us at the end of the line. It is hard to remove what has been established...

[Chul] But aren't the planned commitments really the law for suppliers? After all, emotions are one thing, but if you have undertaken something, carry it out!

[Shmidt] The BAM is a distinctive reflection of the features of our economy, which has been pretty well worn out in past decades. Mistakes and omissions in the system of planning and distribution of material resources have had their effect. Over 640 plants spread over thousands of kilometers are delivering their output to us. How was everything divided up before? Better, for the leading lights; for the rest, which never had enough, in accordance with the principle: the one who was bold was the one who ate.

In a word, there were also interruptions in deliveries when the BAM resounded throughout the country. But the problems were easily corrected then for precisely this reason. Now, in order for this not to happen or to happen less frequently, we need the businesslike concern of partners and mutual economic dependence.

[Chul] But after all, restructuring creates the conditions for this...

[Shmidt] Alas, they are made for effect at present. The BAM is a state order. They do not recommend that we enter into direct contracts for day-to-day solution of problems. We appeal to enterprises and we hear the response: "We cannot help, we're overloaded with the state order..."

[Chul] But the BAM is also a state order.

[Shmidt] "Try to get centralized distribution," they answer. And the circle is closed this way.

Yes, restructuring has made changes in the system of material and technical supply, of course. Many Gosstab departments have been broken up and territorial supply organs have acquired greater independence. While the BAM's needs were provided by centralized deliveries before, we are now receiving equipment, engineering and materials more and more from kray and oblast associations. But, let us say frankly, they have not been prepared—even purely psychologically—for the scope of BAM operations and its efficiency.

[Chul] Please give us a specific example of the relationships with territorial organs...

[Shmidt] As many as you like. Even if we take electric ranges for household use. A simple thing, but you can't have a house without it. We upheld our demand in the "Chitsnabsbyt" [Chita supply and sales organization] for 739 ranges for the buildings under construction in the Chita section. In February they confirmed the delivery of 700, but they reduced this to 190 ranges in March, 100 of them in the first quarter. But they deceived us here—only 80 arrived. And this is the state of affairs with ranges alone.

But it was put a different way in the "Amursnabsbyt." They assure us there: we will provide 1,400 ranges, but when the buildings are ready. We can only welcome this. The managers of the "Buryatsnabsbyt" do not always have enough efficiency and an honest, businesslike approach, either.

[Chul] Can direct contracts with enterprises be utilized or is this expensive?

[Shmidt] Expensive? Yes, direct contracts are most often open to extortion. In order to pay off suppliers in lumber as they demand, we would have to cut down the entire taiga along the mainline and give up all the construction equipment, and that probably would not be enough.

Many managers are making a cold, immoral calculation: there is nowhere for the BAM workers to go, they say; the railroad will soon be turned over; they will not accept it without certain equipment; the plant is a monopolist in the country, and I will jack up the price a little higher for this reason.

[Chul] Yes, we encountered a similar situation last spring when we made a spot check of supplier plants with the KOMSOMOLSKAYA PRAVDA propaganda train. We traveled from Nakhodka to Chelyabinsk, and as a rule, the situation was dramatized in the offices of many managers: we are overloaded with orders, there is no possibility of coming to the BAM workers' aid, hard times...

But in the shops we met with workers, told them about the BAM's problems, and they volunteered to help themselves. It turns out that there are reserves.

[Shmidt] It would be good to repeat something similar to an arrangement in the first years. At that time collectives from Magnitka, the West Siberian Metallurgical Combine, appealed to suppliers to spread competition: "A green light for BAM orders!" Such a movement would be most welcome today. I am confident that there are reserves at enterprises. Small consignments of items are required for the BAM, but on time, and ahead of schedule even better. Under mutually advantageous conditions, not one-sided ones, of course.

[Chul] Are they trying to impose such conditions? Can you cite a specific case?

[Shmidt] Generally speaking, we have begun to be afraid of the press. We will anger a supplier and he will refuse entirely. But there have been cases... The Kusinskiy Machine Building Plant in Chelyabinsk Oblast has a commitment to deliver four fireboxes for boilers—to Severobaykalsk, Kuanda, Chara, and Fevral'sk. They are responsible in accordance with the Council of Ministers decree, you understand. The fireboxes should come together with the boilers.

They sent us the boilers, and then the blatant extortion began: in return for the fireboxes they demanded three machine tools, including a large milling machine. But we do not have such machines, or more precisely, we are short of them ourselves. We asked them very politely in writing: ship the fireboxes and we will give you the machine tools as soon as we find them somewhere. In return we received a lordly formal reply from the deputy manager, V. Chizhov: there is a bilateral contract between us. The fireboxes will be shipped only under condition that the machine tools are delivered. Of course, the law is on our side and we will get our way, but lawsuits have never promoted business. So as of today, direct ties are not the best solution for us.

[Chul] All the same, there is no getting away from them.

[Shmidt] Yes, we are obtaining the equipment, although sometimes at a high price. In the final stage of the project I would very much like to see understanding of the BAM's needs by the territorial administrations of material and technical supply and the suppliers.

Amur-Yakutsk Mainline Construction Examined
18290200 Moscow GUDOK in Russian 10 Jun 89 p 2

[Interview with Yefim Vladimirovich Basin, deputy minister of transport construction and chief of the PPSO Bamtransstroy [possibly: Industrial Production and Construction Association for the Baykal-Amur Mainline], by GUDOK correspondent T. Andreyeva: "The Amur-Yakutsk Mainline: A Temporary Shutdown or Construction?"]

[Text] Tynda—This question is now being discussed by members of a state expert commission. At the same time, the fate of thousands of persons who are at risk of remaining unemployed is being decided as well.

Our correspondent has held an interview with Yefim Vladimirovich Basin, deputy minister of transport construction and chief of the PPSO Bamtransstroy.

[Andreyeva] Two significant milestones in the history of the BAM's construction are when the mainline's final "gold" link is laid and when the railroad is turned over for continuous operation. Five years ago, when the rails were joined together, did the builders look ahead to the future with greater optimism than now, before it is turned over?

[Basin] Yes, of course. After the linkup the attitude toward our construction project changed abruptly. But I think that only an incompetent person can maintain that the BAM was a "creation" of the stagnant period. The problem, I believe, is not that the mainline is not needed or that it was built prematurely; on the other hand, this is the only case in which construction of a railroad preceded the start of a region's development. Thanks to the BAM, a long-term state program was adopted to develop the productive forces of Siberia and the Far East. But the trouble is that continuity was lacking, particularly in the Gosplan, to bring about overall development of the territory.

[Andreyeva] For that reason, many are worried today by the question: what are the construction workers to do tomorrow? Recently OGONEK even carried a photograph of one of the mainline's original builders, the famous brigade leader Sasha Bondar, with a sign reading "I am looking for work." Won't the entire Bamtransstroy association have to follow his example as well?

[Basin] Sasha found work for himself. He is now the deputy chief engineer of the Nizhneangarsktransstroy Trust. But it is more difficult for the association. A complicated situation is taking shape. Today the construction workers have more than enough to do: they will have to put over 700 million rubles in capital investments to use this year. But the subunits have unequal workloads. The prospects are good for the trusts in Irkutsk and Amur Oblasts: there are plans and projects, and customers have been located. But in Chita Oblast and the Buryat ASSR, a slump is expected. We must redistribute our forces, but we do not know where yet, because there is no clear-cut order, and most importantly, no confidence that the plans outlined earlier will be implemented.

Frankly speaking, the matter appeared to be resolved when the Far East Program was adopted. We planned to concentrate on its implementation. Especially as there are no transportation arteries in this region except for the BAM and the Trans-Siberian Railroad. Everything must be begun from square one.

The current structure of the PPSO provides for the entire technological cycle—from surveying to the commissioning—to be tied up in one bundle. Unfortunately, the huge state budget deficit has forced us to reduce capital investments in new construction projects and to put off part of the program for the future. The construction of many projects in the Far East Program is undecided. For this reason, we cannot tell individual collectives today what they will be doing tomorrow.

[Andreyeva] Is it possible that the planned funds to complete construction of the BAM will be cut back? And if so, won't it be turned into a gigantic incomplete project?

[Basin] I doubt it. By the end of the year the railroad will be built, it will begin operating and yield a return. But by next year there will still be more than a billion rubles that have not been assimilated. This also includes completion of the Severomuysk Tunnel, incidentally. However, evidently the fears that allocations will be cut back after the mainline is turned over for continuous operation are not unfounded. The Gosplan is already thinking about reducing the capital investments stipulated by the last decree on the BAM by 100 million rubles. We are also concerned that in the next five-year plan the funds for completing the BAM construction will be planned not as a separate paragraph as it has been thus far, which has saved it from departmental encroachments, but at the cost of the Ministry of Railways' limited funds.

[Andreyeva] Can it come to pass that the BAM will get the leftovers?

[Basin] Yes, in the assessment of the Ministry of Railways leadership, the BAM is technically better equipped and social problems are being resolved more dynamically than on many operating railroads. For this reason, it is quite possible that the funds will be utilized where the situation is more difficult. Consequently, part of the BAM plan may turn out to be unrealized, and so the people here will lack a great deal for normal living and work. We cannot allow this, in my view.

[Andreyeva] We say over and over again that we cannot repeat the mistakes made with the BAM in beginning a new construction project. Four years ago construction was begun on the northern spur of the mainline—the Amur-Yakutsk line. What lessons have been learned there?

[Basin] A great many, I would say. The need for thorough analysis of the plan, first of all. After all, a photograph taken from space that was somewhat overdue showed the kind of problems the builders of the Severomuysk Tunnel will have to overcome. Had the project planners received such data earlier, there is no question that they would have selected another route. Because of the same not very thorough geological study, they "planted" several new settlements on a layer of permafrost ice up to 90 meters thick. We even had to abandon construction of two of them.

Another error was the popular conception that the transport construction worker is a temporary one who will build a line and leave, and for that reason, they say, there is no need to provide living comfort for him. But experience has inserted its corrections: the construction worker comes to an area of pioneering development for a long time, and he should live and work under normal conditions for that reason.

There have been other lessons as well. As an example, the selection of places to station the construction workers has not always proved to be well thought out, and the base of the building industry has not kept pace because of this.

Together with the Mosgioprotrans [Moscow State Planning and Surveying Institute for Transportation Construction], we considered five alternatives for the AYAM [Amur-Yakutsk Mainline] route, and we selected the best one, in our view. Three base settlements have been built for the people: in Berkakit, Aldan, and Tommot, by introducing the work shift method on the route. In addition, we have set up good bases on the line and developed the Berkakit junction in order not to hinder movement of the unit trains carrying coal from Neryungri. We have sent the best construction workers to the AYAM with experience working under extreme conditions on the BAM. Today we are building on a broad front from Berkakit to Tommot. We have laid 150 kilometers of the main and station tracks and built more than 270 kilometers of roadbed, bridges, and pipelines. This will make it possible to bring the track into Tommot in 1991 and into Yakutsk in 1995, as planned.

[Andreyeva] On the condition that they do not put spokes in your wheels, of course.

[Basin] Alas, they have not allowed us to work normally for all 4 years. We have already endured several expert commissions, and estimates and contract prices have been revised on the side of reduction, of course.

The Soyuzstroybank [All-Union Bank for Financing Capital Investments], whose actions are literally giving the construction project a fever, has maintained an unacceptable position. Over these 4 years it has cut off financing for it 15 times. And what does this mean for the collective, working under full cost accounting and self-financing? Delays in payment of wages, disruption in deliveries of materials and structures, fines, and so forth.

[Andreyeva] Undoubtedly this also drags out the construction periods? Everyone says that the country is losing millions on long-term construction projects, but the financing organs continue to provoke them...

[Basin] With an attitude such as this, of course, the times for beginning train traffic to Yakutsk, set forth in the USSR Council of Ministers decree, will be disrupted. This is the situation: the mechanized columns, for example, are basically completing their work on the section up to Tommot this year. We need to move to the next year, but we do not have authorization for this. There is none to erect a bridge over the Lena River, either. Eight years and about 300 million have been allocated for this. Only preparatory operations are under way at present. It is already clear today that the bridge will become a major obstacle on the route to Yakutsk.

[Andreyeva] The same history as on the BAM is being repeated on the AYAM. They have not managed to build it, but they have already begun to question whether it is needed.

[Basin] Those who know the situation have no doubts. The line is simply necessary for the development of Yakutia and the entire North of the country.

The cost of the AYam is 3.5 billion rubles. The period possible for recovery of the cost—less than 3 years—is astonishing. Usually twice as much, even three times as much is spent on this. The point is that the republic requires a large amount of different materials which it cannot produce under conditions in the Far North. And it is not simple to bring them in. This is the current transportation arrangement: about 4 million tons are being delivered by the Lena from the port of Osetrovo, and the rest is delivered by motor transport and maritime vessels. Imagine the difficulties and losses in shipments. The republic has been forced to build up a stock of material resources in excess of 300 days. The scientists even cite the figure 360, that is, annual stocks are withdrawn from circulation. This means a loss to the state of 2 million rubles annually. With the introduction of the AYam, they will be included in the turnover. Let us add the difference in rates for transport, which yield another half billion rubles in savings. So judge for yourself: is the railroad necessary or not?

We cannot disregard the political aspect, either. In the autonomous republics bordering on the BAM, social problems are being resolved on a lower level than in other areas now. This was also mentioned at the Congress of People's Deputies. As an example, Yakutia holds one of the last places in housing. And roads are essential for the development of any "outlying district."

[Andreyeva] All these arguments will probably be taken into account by the state expert commission which is to give its conclusion on the advisability of building the AYam. There is only one question here: why didn't they do this 4 years ago when the project was begun?

[Basin] At that time technical and economic grounds for a new construction project which evidently did not give rise to any particular objections were presented to the appropriate authorities. But the question of continuing the construction is discussed almost every year. Quite recently, after carefully considering the advisability of building the AYam, they decided not to close down its facilities temporarily. But the Soyuzstroybank persisted: is the railroad necessary? And this is at a time when construction is under way at full speed. Specialists have estimated that a temporary shutdown of the section already built and the settlements on the AYam would cost the state 100 million rubles, and as much would be necessary to open train traffic to Aldan. Moreover, we are prepared to open it in the middle of next year.

[Andreyeva] The AYam construction workers have already expressed their attitude toward the arbitrariness of departments at a meeting in Aldan and they sent a letter to the government signed by about 1,000 persons.

Similar material has been sent to GUDOK as well. The authors are worried about a troubling question: what will happen to the AYam and its builders?

[Basin] It worries us, too. How does one tell 10,000 construction workers: "We do not require your services; look for other work"? But where do they look? Who will provide work positions in this territory, which is still undeveloped? Do we transfer persons to other regions, to the Nonchernozem Zone, for example? And how will it turn out? Do we relentlessly insist that the Far East region needs manpower resources and at the same time start sending people from here who have already come to love this land and have taken root here? And begin everything all over again in 3 or 5 years? How eccentric we will seem to our contemporaries, not to mention the next generation!

[Andreyeva] We have been called upon to "live within our means" lately. But the gold and diamonds being extracted in Yakutia probably would be enough for more than one AYam.

[Basin] The opinion is current among amateurs that Yakutia's gold and diamonds quite possibly can be taken out by aircraft, and there is no need, they say, to build a road. But they forget that tens of tons of equipment, machinery, and materials, as well as food and commodities, must be brought here to extract a kilogram of gold... And bringing one ton of freight to that same Aldan by motor transport costs over 21 rubles, as an example. About a half million tons of coal alone are being delivered every year. Imagine what this costs the state. But shipment by rail costs tens of times less.

I believe that building this railroad is a task of state importance. It is incomprehensible why its implementation is being disrupted because of some market condition considerations.

As far as the funds are concerned, the Soyuzstroybank is suggesting that the AYam be built on a shareholding basis by the ministries concerned. We are not opposed to this. But after all, this should have been planned from the start of the five-year plan. Today this means disrupting the construction. We cannot count on ministries taking money from some of their own projects and giving it to the AYam. Generally speaking, I believe it must be financed like the BAM, from the state budget. And by no means from the limited funds of the Ministry of Railways. We often commit the error of taking the intradepartmental economic gain into account, but not the national economic gain. The Ministry of Railways will not profit from the new railroad under existing rates, at least initially, when there will be a one-way traffic flow on it. But the profit exists from the viewpoint of the national economy, and the Gosplan cannot disregard it.

[Andreyeva] In the opinion of some of our citizens, there is no reason to undertake new construction projects when the shelves in stores are bare. What do you think about this?

[Basin] Yes, there are construction projects that can wait. Don't build new plants when old ones can be renovated, and don't get involved in crossing rivers and digging canals of questionable value. But road construction, as we know from the history of America, is not premature. They are the national wealth of each country. And they are paid back with interest.

There is no doubt that the region will bring great benefit to the national economy if everything is done sensibly. And I would say to my fellow citizens: we cannot live just for today and for our daily bread alone. We must think about the future and our children as well.

Railroad Tariff Use Examined

18290216a Moscow GUDOK in Russian 1 Jul 89 p 2

[Article by S. Abbakumov, candidate of economic sciences and Moscow Rail Transport Engineer Institute docent: "A Tariff That Does Not Prompt One To Hurry"]

[Text] Moscow—Many arguments are occurring over transport tariffs: What should they be? They should be ones which increase transport effectiveness to the maximum and which insure the principles of complete cost accounting and self-financing. We have still not managed to achieve this. Freight turnover in our country has been calculated in the trillions of ton-kilometers for a long time. Transport costs in the national economy are estimated at approximately 120-130 billion rubles and are continuing to grow. However, is it justified?

One of the reasons for the growth in freight turnover is the fact that they arrive at ton-kilometers using an accounting indicator in words but which remains an estimated one in fact—as it has in the past.

Up until now, the income from shipments on the railroads has been formed in proportion to the completed tariff ton-kilometers and on the railroad divisions—in accordance with operating ones. Several years ago, motor transport workers rejected ton-kilometers and now evaluate their work in accordance with motor vehicle ton-hours requiring payment. Perhaps there would be no harm in the rail workers learning from them?

Rail transport should not simply transport freight but deliver it safely and at the time exactly stipulated by the contract. In this regard, the users of transport services should know why they are making tariff payments. There is no glasnost like this today. The shipper does not know how much he has paid for renting a rail car as a warehouse on wheels, for loaded and empty runs, etc.

The tariff manuals have no explanations. You see, a client, who knows for what he is paying, can use the carrying capacity and tonnage of a railcar more effectively.

Today, the percentage of empties has grown to 40 percent within the total shipment volume. One can reduce this percentage with economic buying and selling methods. It is clear that administrative-command influence measures are no longer suitable. Nevertheless, they are still operating. If a shipper loads a railcar below the rated weight norm, the rail workers take seven hides from him, figuratively speaking. They make up their expenses for shipping "air" tons and even exact a penalty for the underloading.

Unearned income and profit appear. However, do they really serve the client better because of this? Not at all. During the first six months of last year, the Moscow Railroad exacted more than 1.5 million rubles of fines from shippers because railcars were not fully loaded. The profit plans were often overfulfilled by two-threefold but operational activity was not improved.

Who needs such cost accounting? One should declare war on it everywhere. However, ... it has its defenders—the developers of tariffs in the All-Union Scientific Research Institute of Railroad Transport. As before, they are using a gross transport output estimate. They say that the more we carry, the more one must pay. They suggest a reduction in tariffs for shipments of, for example, sugar but an increase for coal.

The entire world does it differently; it reduces tariffs and the profit accumulates with the acceleration of shipments and heavy freight. We are pursuing an increase in tariffs. Is this not why the speed of delivery is not taken into consideration? You see, there is nothing in the present approach to prompt a speed-up in shipments.

The serious situation on the tariff front has taken shape to a large extent because the All-Union Scientific Research Institute of Railroad Transport associates have conferred on themselves a monopoly right to develop freight tariffs; the drafts of their work are not even shown to anyone. It is not necessary to discuss these drafts or to think about them.

Tariffs should primarily correspond to socially necessary expenditures. In 1985, Moscow Rail Transport Engineer Institute studies pointed out that expenditures, which do not depend on freight volume, represent 40-50 percent of all shipping expenditures. Approximately 20 percent goes to amortization and depot repairs of freight cars.

In addition, according to the instructions of the USSR State Committee for Prices the cost of freight output should include a profit in proportion to the active portion of the producer goods. Thus, almost three-quarters of the cost of transport output is connected with quality indicators in the operation of a rail car. Only 25

percent entirely depends on transport volume. That is why it is advisable to provide a separate tariff rate for the use of a railcar in the form of leasing it.

In other words, it is necessary to pay not for ton-kilometers but for railcar-hours. This will increase interest in using the rolling stock's carrying-capacity and tonnage better. Tariff rates for movement operations should be linked with the amount of freight being transported. Then, one can establish a different price for the run of a loaded and empty railcar; The poor utilization of the railcar is reflected in the budget of the freight owner.

This principle for constructing tariffs can be used not only for railcar shipments but also for small shipments and containers, having provided for the degree of use of the railcar's tonnage. Is it worthwhile to show that the use of the rolling stock's carrying capacity primarily depends on the shippers themselves?

When tariffs are correctly constructed, there is an opportunity to accelerate a railcar's turnover substantially. The targets for this indicator are still not being fulfilled. Last year, the branch lost more than 260 million rubles of profit because of this. According to statistics, railcars were primarily idle at freight, servicing and intermediate stations and only 23 percent of the time while moving.

That is why tariffs will encourage an increase in shipment speeds and a reduction in distances and empty runs with a shift to railcar-hours. The experience of the motor vehicle workers, who have already tested such a system, testifies to this.

For the system to become a through-put one, it is necessary to establish an estimated price for a standard railcar-hour during the formation of incomes and to use economic sanctions for exceeding the norms for servicing and moving railcars on.

Such an income formation system corresponds to the tariff principle for distributing monetary receipts. As many tariff collections as transport receives from freight owners are transferred to all its subunits. In this respect, the balancing of the incomes and profits for the railroads, the divisions and their structural units is guaranteed.

In the proposed system, profit is included in the calculated price of a single railcar-hour according to a norm. The balancing of profit is assured through the fulfilled norm railcar-hours. For the railroad as a whole and for the division, they represent the total railcar-hours for all structural units. Incidentally, this also corresponds to the USSR State Committee for Prices method for including a profit in the product price according to its norm for active production resources. In transport, as is known, the working fleet of railcars represents the active portion of production resources.

According to All-Union Scientific Research Institute of Railroad Transport recommendations, the balancing of incomes should be achieved with the help of coefficients that complicate the task—in other words, leveling out the distribution of profits to the structural units.

Today, many mainlines are using the road coefficients for distributing income receipts that have been proposed by the Moscow Rail Transport Engineer Institute. The purpose of using these coefficients is to take the objective shipping conditions on each railroad into consideration. They have now been established to pump income from highly profitable railroads to unprofitable ones.

Using this artificial means, all railroads, including low-loaded ones, have been converted into profitable ones. It is even possible to make the Baykal-Amur Mainline a profitable one with such a manipulation of coefficients. Why, it is asked, should one work strenuously if one can live at the expense of other railroads?

It is generally known that, when earnings are received in industry from the sale of products, expenditures beyond one's control are evaluated in the actual product sales volume through the wholesale prices. Expenditures are evaluated in a similar manner during the formation of incomes for railroads and divisions. However, there is no recalculation like this for the structural units. That is why a paradox occurs: When the volume indicators are overfulfilled, costs are reduced but profits are not increased. Structural units, for which volume indicators are not planned in general: for example the signaling, interlocking and blocking divisions, communications, power, tracks..., are particularly perched on a "starvation" diet.

In the tariff construction system that we are proposing, the expenditures of all structural units beyond their control should be evaluated in the number of completed norm railcar-hours. If the dispatch freight is delivered to its destination station on time as a result of speeding up (making up) the movement of railcars on some railroad or other, its subunits can receive additional income from those roads which delayed the passage of the freight traffic. Material responsibility for the delivery of freight on time will appear.

Conference Examines High-Speed Line

18290216b Moscow GUDOK in Russian 4 Jul 89 p 1

[Article by M. Kaganskiy: "The Price Of High Speed"]

[Text] Leningrad—A press conference has been held in Leningrad during the All-Union Meeting of Specialists on High-Speed Travel. G. Fadeyev, program director for constructing the Center-South high-speed mainline and first deputy minister of railways, emphasized the need for a very rapid solution to this problem which is not only one that has matured but also one that has passed its prime. In his opinion, it is possible to set up the work at the beginning of the next five-year plan and to complete

the construction of the lead section of the Leningrad-Moscow route by the end of the century. A large and steady stream of passengers, which an additional stream of people from the Kola Peninsula reinforces, exists on the Leningrad avenue.

G. Fadeyev pointed out that an erroneous opinion exists that it is possible to insure a travel speed of 200 kilometers an hour on the Leningrad avenue by modernizing the existing lines and thereby remove the problem's urgency. However, the fact is the October mainline has been oversaturated with freight shipments. In order to increase the speed of passenger trains, one must remove the freight consists and this is practically unfeasible.

The load on the southern avenue mainline has also approached the limit. The Ministry of Railways Collegium thinks that it is impossible to increase passenger traffic here using traditional means. The only way out is to build a special high-speed line. They are constructing them abroad rapidly—for example, 300 kilometers a year in France.

Naturally, the question arises of where to get the resources? You see, a high-speed mainline is an expensive matter. According to preliminary calculations, the Leningrad-Moscow section will cost 3-3.5 billion rubles and the entire Center-South route—10-12 billion.

A weighty counterargument has been put forward in response: The railroads are losing approximately 15 billion rubles a year because of the lack of freight shipment carrying capacity alone. Generally speaking, they do not take it into consideration for passenger traffic; there is no data on the cost of a passenger-hour.

(Zh. Matye), the director of France's department for large railroad projects, recalled the story of the establishment of a high-speed mainline of 20 years' prescription. He said that far from everyone liked the idea at first. It was necessary for a long time to seriously prove the line's economy and its social significance.

(Matye) pointed out that all interested regions participated in financing the construction since the entire French Republic profits from the organization of high-speed travel.

Essentially, viewpoints of different poles appeared during the press briefing. The Ministry of Railways representatives demonstrated the need for a very rapid development of the work to build the high-speed mainline. The position of V. Pavlov, deputy chief of the USSR Gosplan's transport department, was opposed to this. Without denying the importance of the idea of establishing high-speed transport, he regarded its practical realization with great doubt. V. Pavlov pointed out that comprehensive, sound and convincing studies and alternative versions still do not exist. He quoted the opinion of a state commission of experts which pointed out that the study of the proposals to establish the Center-South

high-speed mainline has been insufficient in technical, technological and economic terms. The overstating of the estimated shipping volumes and the understating of production costs were also pointed out. An integrated technical and economic justification with more precisely defined calculations of all parameters is required in order to make an objective judgment on this mainline.

It seems that the argument of the USSR Gosplan representative is a rather serious one and no matter how much we would like to fly more rapidly on the wings of an iron fire-bird, it is evident that one can only accelerate this flight using one method: by conducting a serious scientific and economic study of the idea without dallying, by "dressing" it in accurate figures, and by submitting it for review by a competent commission of experts.

Automated Dispatching System Performance Reviewed

18290218 Moscow PUT I PUTEVOYE
KHOZYAYSTVO in Russian No 6, Jun 89 pp 14-15

[Article by V.P. Sychev, V.B. Shafirkin, candidates in Technical Sciences: "Track Workers and the Automated Dispatcher Center"]

[Text] At the beginning of 1988, the first section of automated dispatcher center control of the Ministry of Railways (ADTsU MPS) was put into operation. It was created with a view to radically improving centralized online control of the work of the roads and combining control and management functions in transport organization into a unified structural subdivision—the Main Transport Administration. Control, calculation, analysis of the fulfillment of the norms and assignments, daily planning, working out measures to regulate traffic with minimal losses in utilization of the throughput and processing capacity of the roads and increasing the smooth flow and uniformity of transport—that is by no means the entire list of problems solved by the ADTsU.

The ADTsU ensures prompt reliability and complete information on the work of the roads, expands the coverage of the objects and processes controlled, and improves the conditions for coordinating the operations work with all the transport subdivisions.

At an ADTsU dispatcher junction there are multi-tiered automated work places (ARM) for the chief dispatchers: transport, locomotive, main car-distributor, duty attendants for groups of roads, inspector-dispatchers for the main routes. Here there is an ARM for the management of the ministry and the Main Transport Administration. A total of 17 automated work places are fitted out. In creating the second section of the ADTsU it is proposed to expand the information resources of the system and to create ARM for shift dispatchers for the railroad transport facilities, including the Lines Main Administration.

The automated work place for the dispatcher is a table on which are installed videoterminal devices (display, television receiver), connected to a computer complex installed in the Main Computer Center of the Ministry of Railways. Dispatchers, by pressing certain keys, obtain online information on the range of their duties on the screen of the display or television receiver, and when necessary can print out copies of the documents. At the end of the shift the computer makes it possible to evaluate the dispatcher's actions.

Located in the dispatcher room are the means of collective display of information: a graphic panel of the roads, in the form of a panel measuring 23 X 9 m, on which the arrangement of the junction, freight and shunting stations are shown by indicators and the link-up inter-road centers and railroad routes are singled out. Fluorescent panels for 30 characters are located near the most important link-up points. Any deviation in the indicators of the operations work is displayed on the graphic panel by the indicators; in case of great deviations they start to light up, and with deviations requiring the dispatcher's immediate intervention, they flash. The fluorescent insets of the panel display the quantitative data on the passage of the trains and cars along the link-ups. The computer makes it possible to support the conditions: immediate issuing (in 10 seconds) of information on the events in the train operation and on emergency and critical situations; dialog—by the start of each job run (once every 3 hrs); regulatory—analytical problems are solved at the main computer center of the Ministry of Railways on a large computer, and they can be issued to the dispatcher in advance, in a certain established time.

The data is transmitted to the main computer center along communications channels from the workers in transport service at the level of stations and divisions to the road computer center (DVTs), where an automated online road control system is in operation (ASOUP).

Information to the DVTs, and from there to the GVTs [main computer center] is transmitted at least every 3 hrs, and in emergency or critical situations in the transport process, as well as when cars pass through inter-road link-up points—in the actual time scale, i.e., immediately.

Stipulated for the first section of the ADTsU is the transmission of the basic indicators of the work of the network, once a day: the loading and unloading of the cars, the operating fleet of freight cars, transfer of the cars between roads, the course of fulfilling the freight operations with respect to assigned objects (by types of freight, enterprises, ports, border stations, availability of cars, etc.), the position of the assigned stations (cars arrived, departed, reformed, delayed on the approach to the station, etc.), the train position on the road network (number of trains at assigned stations by routes, empty

routes, etc.). Every 3 hours the ADTsU registers transport malfunctions: wrecks, accidents, cases of breakdowns in operation causing the stoppage of train traffic and disruption of the schedule, planned and unplanned "block intervals" for track work.

The main task of the inspector-dispatcher is to coordinate the train work on the route in order to prevent delays of the trains at approaches to the assigned stations and inter-road link-up points, and to ensure equal movement of the train flows along the sections and routes. The duty attendant for operations control directs the train operations of the area of the network assigned to him, and is directly subordinate to the chief dispatcher. The chief locomotive dispatcher and car-distributor, also subordinate to the chief dispatcher, carry out the online shift control of the locomotive and car fleets.

In the future, to develop the second ADTsU section, the dispatcher shift is to include a duty attendant of the Lines Main Administration, for whom an automated work place is specified. The obligations of the duty attendant of the Lines Main Administration within the framework of the ADTsU specifies: calculating and analyzing cases of defects and failures in line operation; monitoring the issuing and rescinding of warnings on speed restriction for train traffic; efficient management of carrying out track work in a "blocking interval" (timely release of the track section after work is completed, monitoring the movement of service trains, movement of hopper-batcher consists) and evaluating, on the basis of this information, the reliability of the line work on the sections or in areas of the network, when a complicated situation develops that is related to redistribution of the train flow.

Carrying out the tasks of online calculation and management on the basis of the data from the ARM of the Line Main Administration presupposes the inclusion of the following information content: data on wrecks through the fault of the track workers, cases of defects in their work, with indication of the reasons (for example, collisions at crossings, derailment of rolling stock, derailment of line machines and other types of defects), and with indication of the break in movement (over 2 hrs, without a break in movement); damages to track and structures causing a break in train traffic or requiring restricted speed of traffic with a breakdown by types of the defects (subgrade, track, rails, etc.), indicating the length of time of the effect of the warning, its rescinding, the extent of the track on which this warning is in effect, and a number of other indicators.

The basis of the data includes information on "block intervals"—the need, actually submitted, hold-over of the "block intervals" in hours and the reasons causing them, and what was done during the "block interval" (kilometers of track laid, number of VPR-1200, BPO-3000, VPRS-500 machines operated, and in winter—snow clearing units, track snow plows, snow trains, snow removal, work forces, etc.).

The main supplier of information in this case is the track division. Because of the introduction of ADTsU, the position of the track division dispatcher, who is obliged to receive information in the form of telegraph communications from the line on detecting defects or track work fulfilled, record the information in a special log, prepare reports and transmit them in the established period to the road computer center, was officially confirmed.

Monitoring the movement of service trains and hopper-batcher consists can also be provided within the framework of the second section of ADTsU. The tracking system gathers data on the movement and location of objects and on the prompt proceeding of hopper-batcher consists along the route: the loading point (crushed rock plant, quarry), and the base of the track-laying machine station, with a permissible change in the route in a complicated train situation. At the first stage of developing the system, tracking is carried out for a service train as a whole (by train number) and individually for a hopper-batcher consist. Prediction of the approach to destination points and tracking the movement of a single hopper-batcher is to be implemented at subsequent stages of development of the system.

The initial data is gathered through the duty attendant for the station according to the general technology of the ADTsU. The GVTs transmit information: on the departure of a formation, on the passing in transit of assigned stations and inter-road link-up points and on arrival at the destination station. The ARM of the dispatcher of the Line Main Administration will be entrusted with issuing the information-documents: on the placement of the monitored train (shuttle car), on the location of the monitored trains (shuttle cars) on the line, information on the departure and arrival of the monitored train (shuttle car) and information on a change in the consist of the monitored trains.

Planning of the second section of ADTsU has already begun. In the future, 45 road dispatcher centers of control are to be created (these centers are already being created at Chelyabinsk, Minsk, Tashkent and Donetsk), and creation of an ASU—traffic safety in railroad transport (ASU BD) has begun.

The question arises: who will prepare and transmit the information for these ASU? At present, as was noted above, the information is gathered by the traffic personnel through ASOUP. There is no "line" model in ASOUP, although certain indicators were specified for track service. For example, road repair workers could obtain from the ASOUP regulatory documents for past days to monitor the movement of service trains and calculate and analyze wrecks, accidents and incidents of defects through the fault of the road repair men, causing a stoppage of traffic for over 2 hours, certain information on warnings, track work in a "block interval", etc., i.e., information in a volume which is in any case necessary

to control train traffic. It is impossible to transmit other information along the given channels, and it is difficult to include a "line" model in ASOUP.

Consequently, if the track workers wish to obtain more detailed information from the dispatcher control centers, and to have an automated work place at these centers, there must be new technology for gathering data, in consideration of the requirements of ADTsU, and expansion of the functional potentials of ASOUP, with a number of duties on preparing and transmitting the information entrusted to the track workers. It is above all necessary to know the opinion of the track workers of the line subdivisions, on whom the authenticity of the information, the reliability of the entire technological chain of information gathering will depend: PCh—NODP—DVTs—GVTs, on which the nature of the work of the dispatcher-track men at the dispatcher centers of control depends.

Will work efficiency increase from expanding the information resources and increasing the online nature of the decisions made when the dispatcher-track worker is included in the system of dispatcher control and an automated work place is created? Under the conditions of the new economic mechanism, how will direct monitoring of the course of fulfilling the track work be fulfilled?

The track workers should not remain inattentive to the question raised. They should speak out with their comments and proposals, which will make possible the correct choice of direction for further work on ADTsU MPS, ASOUP, ASU BD and other automation systems of ASUZhT [automated railroad transport control system], using online information on the effect of the state of the track on transport and traffic safety.

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MARITIME AND RIVER FLEETS

Concern Over Aging Fleet's Safety Record
18290226 Moscow PRAVDA in Russian 15 Jul 89
Second Edition p 3

[Article by M. Aleksandrov, rector of the Nikolayevskiy Shipbuilding Institute: "In the Wake of a Catastrophe; A Testament of Those Who Will Not Come Ashore Again"]

[Text] [bold]There are difficult moments in life. What you have seen and endured deprives you of peace. You sense an urgent need to act and to prevent the same thing from happening again.

But time passes, the acuteness is smoothed over, and you begin to accept the reasoning of those who justify what happened...

The very clear color photograph shows somewhat long whitish cases, and there are bouquets of chrysanthemums and carnations bound with black ribbons on them, and burning candles. Farewell is being said in the Japanese port of Osaka to those who perished in a fire on the motorship Preamurye.

And other photographs come to mind and together with them diagrams—materials of an investigation into the reasons for the loss of the Admiral Nakhimov which took 430 lives. Was it possible then in quite mournful Novorossiysk to think that, aside from a personnel reshuffling and an administrative paper squall, that nothing substantial was done or would be done?

Is it really possible that the Mikhail Lermontov, the Admiral Nakhimov, the Priamurye, and a dozen other ocean vessels lost in recent years—more than half of them with the entire crews—are only an inevitable tribute of the ocean elements?

However, it can be heard more and more frequently, not only in professional circles, that our domestic ocean fleet is aging quickly, that coastal servicing of ships is beneath criticism, and that the social sphere has been neglected in the industry. The captain has been deprived of independence, every step they take is regulated, the dominance of instructions... All of this cannot but help have an effect on safety. Statistics indicate that the relative losses of vessels in service more than 20 years exceeds by 4-5 times losses of ships that have not attained 10 years of age. But on the average, our fleet has passed the 15-year line.

Deficiencies have been accumulated in the industry over the decades, and their elimination will take prolonged periods and require substantial resources. But this cannot be justified by inaction at the present time. Because accidents have also exposed negative phenomena that can be eliminated rather effectively. And among these are a number of organizational phenomena.

How could the passenger steamship Admiral Nakhimov put to sea, having been built more than 60 years ago, and having a number of substantial design defects and hopelessly obsolete rescue gear? The USSR Register—an organ of technical supervision for ensuring the safety of navigation should answer this question. And here is the paradox: The controlling organ is subordinate to one whose ships are being inspected—the Ministry of the Maritime Fleet. The USSR Procurator General has pointed out the absurdity of such a situation and the need to change the status of the register. But a commission of the Gosplan [State Planning Committee] and special experts, selected chiefly from interested ministries, was able to defend the old positions.

The years have receded into the remote past when transport vessels predominated on the ocean expanses. Recent decades have seen a significant expansion of areas of human activity in the hydrosphere. The world ocean annually yields 70 million tons of fish and ocean products. The ocean is becoming one of the sources of various kinds of raw materials, including oil and gas. The scale of scientific research is increasing sharply with the use of the newest technical systems, especially for the collection and processing of data about the ocean.

Any activity in the world ocean that involves millions of people is accompanied by increased risk. It is stipulated by the instability of processes occurring on the border dividing the water and air environments. According to data of the Norwegian bureau "Veritas," an authoritative organization in the area of the safety and protection of the environment, underwater work is shown on the list of all specialties that have the greatest risk for people. Further down in decreasing danger are developing the shelf, motor vehicle transport, fishing, and maritime transport. On the average, one person out of every hundred divers and other specialists who work under the water perishes each year. Numerous dangers lie in wait for crews of deep-sea apparatuses.

Great difficulties accompany the exploitation of ocean drilling platforms, of which there are about 5,000 in the world today. They cannot seek shelter during an oncoming storm. There is a limit on the movement of platforms in relation to holes, inasmuch as they threaten to gush oil and gas. On 15 February 1982, 170 miles to the east of the island of Newfoundland, the huge floating oil drilling platform "Ocean Ranger" turned over and sank in a fierce storm. It was not possible to lower the rescue boats, and the entire crew, numbering 84 persons, perished. An example from last year. July, the North Sea. One hundred and sixty-six persons died after a series of explosions on the English oil platform "Piper Alpha." The cause of the explosions was a sudden large gas leak.

Complex conditions for operating the commercial fleet explain the increased accident rate on ships of this nature. It is feared that the new economic management mechanism might instigate violations of safety requirements for the sake of immediate profits.

A cardinal improvement in the situation is not possible without a comprehensive approach and a resolution of fundamental scientific problems in such areas of knowledge as hydromechanics, structural mechanics, meteorology, science of materials, energetics, and automation. Movement forward will require prolonged research on real processes, surmounting great theoretical difficulties, and the development of new experimental equipment. All of this can be accomplished only within the scope of special programs.

I would especially like to say something about one factor. Detailed analysis of catastrophic events in a majority of cases points to one general condition: their causes have a subjective nature. The price of human error is getting higher and higher. At the same time, the task of a more expedient division of the functions of control between a human being and a machine is far from resolution. The possibility of the development of unforeseen situations does not permit complete reliance in management on automation. On the other hand, the human being, who can orient himself better in complicated and nonstandard situations, can stumble in a level area.

Current approaches to the resolution of this problem are most fully realized in cosmonautics. Unfortunately, the list ends here, leaving out even such areas of technology as aviation and nuclear power engineering. The situation that has developed in maritime technology cannot be considered to be successful. Research into human behavior in these conditions constitutes an independent task. Apart from rather frequent extreme weather deviations, the maritime professions are associated with many other negative factors. People are deprived of the opportunity for valuable rest, because they continuously find themselves in the same situation. Changes in temperature, pressure, and climatic zones are also unfavorable.

Some people react badly to space limitations and close contacts. As a consequence of this, the requirements for the formation of a collective and maintaining a good morale in it are more severe than under normal conditions. Unfortunately, the most apparent tendencies for increasing the economic efficiency of the maritime fleet—an increase in cruise time and crew reduction—aggravate the influence of the cited factors.

It is impossible not to consider many other factors as well: professional prestige, form of organization and salaries, professional training, situation in the family, everyday material support, and many other factors that encompass concepts in the "social sphere" and the "human factor."

A lot has been said and written about all of this. But we will never make the switch from words to deeds. It seems that because of the host of problems, we do not see the key problems.

Let us take one "detail" as an example. Here is what Captain S. Rudnitskiy from Klaipeda wrote to the journal *MORSKOY FLOT*: "The fishing industry has more ships and personnel afloat than sailors and river transport workers put together. And the worries of the fishermen are no less. So that our common problems have to be resolved working together." Captain A. Mokeyev from Sevastopol notes: "In my opinion, the time has come to set up a single organ for investigating accidents at sea for all ministries and departments." Amazing! Experienced captains do not know that all of this is a function of the Register? Or does its activity for the practical workers simply remain unnoticed? Unnoticed although Article 7 of the Code of Merchant Navigation states: "Technical supervision of sea-going ships and their classification, regardless of departmental ownership of the vessel, is implemented by the USSR Register."

Official circles persistently assert that subordination of this control organ to the Minmorflot [Ministry of the Maritime Fleet] will not hinder its normal activity. This is the very dangerous illusion. You see, instead of seeking the most advantageous ways to increase the safety of sea-going ships to a level defined by international

requirements, various subterfuges are sought in the Register that enable administrative offices to avoid the most needed expenditures. The sad results of such "cooperation" are well-known.

Specialists want to see this organization as the initiator of scientific and technical progress which, incidentally, is provided for in the cited code on commercial shipping. An objective analysis of accidents and the determination of their true causes are important to an increase in safety. Here is the opinion of Captain A. Mokeyev: "During accident investigations and analysis of accident rates, there is no examination of the reasons caused by shortcomings in fleet leadership on the part of the ministries and departments. Those guilty of an accident, the captains traditionally acknowledge, are the command staff and other members of the crew. Here is something to think about!"

The close hold over the Register in the maritime transport ministry is also the main reason for the flimsiness of its technical policy in other maritime technologies. The absence of specialists and material capabilities does not allow them to conduct any kind of systematic work in the analysis and generalization of experience in operating nontraditional types of vessels, ocean drilling platforms, deep-sea apparatuses, etc. It is known that substantial losses accompany accidents of low-tonnage ships. Their significance is growing continuously, and their number is measured in the tens of thousands. At the same time, a standard base is virtually lacking and, on the part of the Register, no actions are foreseen to correct the situation.

These are the kinds of problems that underlie such a detail as the subordination and the efficiency of the USSR Register! And it should not be forgotten that the health and lives of people exposed to unwarranted risk depends on their resolution.

The work of the Register must be changed in a fundamental way. And first of all, it must be given the status of a state control organ subordinated directly to the Council of Ministers. In general, the USSR Register constitutes an independent cost accounting complex, with developed research and development capabilities that lead to a high technical level of standard and classification work and that form a real advanced technical policy that is worthy of representing the interests of our country beyond its borders. The center of attention should be the human being and safety.

It is not possible to put off the formation of a national program "Safety at Sea" that could be entrusted to scientists of all interested ministries and departments, including advanced schools. Thought should also be given to the organization of a well-equipped coastal rescue service, whose necessity has been apparent to everyone for a long time.

All of this is not a dream. It is a demand of the times, a demand of those who experience the vicissitudes of the maritime profession directly. It is the testament of those who will not come ashore again.

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