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Dec 1988 -
Jan 1989

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DEPARTMENT OF
EXTERNAL AFFAIRS
OTTAWA,
CANADA

INI F11/80
DATE 24 April 1989
COPY 49

Dept. of External Affairs
Min. des Affaires étrangères
OTTAWA

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RETURN TO: [illegible]
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EXTRACTS FROM THE SOVIET PRESS ON USSR FORESTRY

AND FOREST-BASED INDUSTRIES

DECEMBER 1988 - JANUARY 1989

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The concluding speech was delivered by USSR Minister of the Timber Industry M.L. Beryzja.

In monetary terms, the forest industrial sector within the Ministry's jurisdiction had fulfilled the industrial production plan for 1988 by 105.2 per cent, as against a projected figure of 102.7 per cent, notwithstanding the fact that new conditions of management were introduced at the beginning of the year. The plan for 1988 with respect to timber extraction and the production of pulp, paper (including newspaper), wood fibreboard, and consumer goods other than foodstuffs (including furniture, white paper products and wallpaper) had been fulfilled. Substantial increases over the 1987 level were achieved in all the most important indices.

In all, 217 million cubic metres of wood were extracted.
Production volumes were as follows:

commercial timber - 194.2 million cubic metres (representing a shortfall in production of almost 6 million cubic metres);

marketable pulp - 3,281,700 tonnes;

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TIMBER AND WOODWORKING

Year-End Production Totals for USSR Ministry of the Timber Industry

On January 24 an expanded session of the Collegium of the USSR Ministry of the Timber Industry and the Praesidium of the Central Committee of the Trade Union was held. Its purpose was to discuss the fulfilment of the State Plan for Social and Economic Development of the Sector for 1988 and for three years of the 12th Five Year Plan, as well as measures relating to implementation of the 1989 Plan.

Reports were presented by a variety of speakers, including deputy ministers N.S. Lyashuk, F.G. Liner, V.N. Tokmakov and V.A. Sentyushkin, the First Deputy Head of the Main Technological Administration for Pulp and Paper Production and Wood Chemistry B.S. Zhuravlev, the Head of the Main Economic Administration N.A. Medved'ev, a departmental head of the USSR State Committee for Supply of Materials and Equipment (USSR Gosnab), and the Chairman of the Central Committee of the Trade Union.

The concluding speech was delivered by USSR Minister of the Timber Industry M.I. Busygin.

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In all, 217 million cubic metres of wood were extracted:
Production volumes were as follows:

commercial timber - 194.2 million cubic metres (representing a shortfall in production of almost 6 million cubic metres);

marketable pulp - 3,281,700 tonnes;

paper - 5,922,000 tonnes;

lumber - 37.7 million cubic metres;

furniture - 7.25 billion roubles worth;

wallpaper - 471.5 million standard lengths.

For the Ministry as a whole, contracted obligations for product deliveries were fulfilled to the extent of 97.5 per cent. Nevertheless, a total of 369 enterprises, i.e. every second one, failed to cope with the plan for deliveries. The economy suffered a shortfall of 650 million roubles worth of products. Underdeliveries included: round timber - 1.7 million cubic metres and as much again of specially made chips and sawn timber; plywood - 168 thousand cubic metres; cardboard - 36.7 thousand tonnes; fodder yeast - 24 thousand tonnes; wood particle board - 190 thousand cubic metres; and wood packing material - 151 thousand cubic metres.

The worst performers were the "Irkutsklesprom", "Sakhalinlesprom", "Dal'lesprom", "Zabaikallesprom" and "Kazmebel'lesprom" associations.

Improvements were made in the economic functioning of the associations. Extra-plan profit for the Ministry amounted to 417 million roubles. This represents an increase of 19.3 per cent over the figure for 1987.

Labour productivity increased by 7.9 per cent in comparison with 1987, notwithstanding a planned growth rate of 3.4 per cent. The entire increment in commodity output was due to the increase in labour productivity.

The standard relationship was maintained between salary increases and labour productivity.

A series of measures were implemented with a view to accelerating scientific and technological progress.

In construction, 2,207 million roubles worth of capital investments were assimilated. The introduction of new capacities for timber extraction, and production of sawn timber, wood fibreboard, furniture, plywood, cardboard, and the commissioning of new housing, pre-school establishments, public schools, clubs, hospitals and polyclinics all proceeded in accordance with the plan. At the same time, no new capacities were introduced for the production of wood particle board and pulp and paper, nor for waste water purification plants.

Despite the substantial overfulfilment of the plan with respect to profit, the improvement in the financial situation was slow. In a number of the enterprises it remained serious, due to shortages of their own working capital and infractions of payment discipline.

As of January 1, 1989 a total of 320 enterprises were operating at a loss, however during the year just ended the number of such enterprises decreased by more than 100.

Constituting a new stage in the development of profit-and-loss accounting and self-financing relations was the transfer of the enterprises to the leasing and cooperative mode of labour organization. At the time of writing, 41 enterprises and 485 crews were operating on leasing contracts. "Within the Ministry there are 635 cooperatives, 309 of which are for the production of consumer goods other than foodstuffs, 134 - for the provision of services to the population, 79 - for the output of industrial goods, and 36 - for construction and repair work. Forty million roubles worth of goods and services were produced by the cooperatives during the fiscal year."

Lesnaya promyshlennost'

January 26, 1989

Pages 1 and 3 (Abridged)

Resource - Saving Technologies Rather than Increased Fellings Needed to Make Good the Timber Deficit

Only two weeks are left of this year, which has been such a difficult one in every respect. The country's attention is now riveted on earthquake-stricken Armenia. There is not a republic, Oblast, district, enterprise or individual who would not make a contribution to help the sufferers. Humanitarianism and a desire to offer effective help to victims of the catastrophe unite all Soviet citizens and compel them to redouble their efforts in these trying days. Our "economic ship" has a sustained a grievous hole. How much timber alone will now be needed to restore the ruined cities of Armenia!

The timber supply situation, alas, shows no sign of improvement. In November, the indebtedness increased and at the start of the year will amount to almost 522 million roubles. It is clear that the sector must put an end to the losses as soon as possible at almost half of its enterprises and introduce everywhere cost-effective, resource-saving technologies and progressive forms of labor organization.

The winter toil is unfolding at the forest plots. In making the transition at the start of this year to self-financing, the loggers have no need of slogans dropped from above. They are well aware that a winter cubic metre is two or three times cheaper to produce, and this is fully in accord with the demands of radical reform and their own interests. That is why it is already planned to extract 100 million cubic metres of timber in the first quarter of the coming year.

But this of course is not the main task. Each of these cubic metres must become raw material for high-quality output. It is not by accident that we are emphasising quality. While rejects at woodworking and pulp-and-paper enterprises are unacceptable to the State, for the loggers it is their conscience which stands in the way of waste. In this sense, it is hard to understand the workers of "Irkutsklesprom" who supplied "Irkutskmebel" with rotten roundwood instead of good-quality sawlogs. Well, the consumers' claims for replacement will fall on the head of the furniture makers. And so will the fines...

In general, the fulfillment of the assortment program is so far moving along the old, well-travelled track. This is again evident in the Ministry's reports for the 11 months just ended. Hauling out and cross-cutting into lengths are proceeding well. The production of round timber is also well in hand. But the commercial timber production assignment has been fulfilled by only 98%. Chips, sleepers, wood particle board, plywood, and sawn timber are also listed with a minus sign. But if there are no cherished hundred percents in the production totals, it would be naive to look for them in deliveries. What is the problem here? Is it that the plans are unbalanced again?

This, of course, cannot be ruled out. In order to make 260,000 sleepers for government orders, the Nizhneingashsk logging enterprise of "Krasnoyarsklesprom" must have a minimum of 60,000 cubic metres of sleeper timber in the forest land resource. But there are barely 45,000 there. So that in just half a year, the logging enterprise will pay out 35,000 roubles in fines for failing to meet deliveries. To the collective's credit, they are seeking a way out here: they are trying to organize secondary conversion of the timber. But the help of the "Kanskii timber industry complex" is needed: cement is required to produce wood-concrete bricks (worth 80 kopecks each). If they had such a shop - the logging enterprise, just from waste, without cutting a single tree, could produce valuable building materials for 10 years. There are other interesting ideas, but instead of tangible help from above, all they get is advice. And the Nizhneingashskys are right a thousand times over: what good is the production combine if it is just there to skim off its profit?

So we see, the imbalance in the plans is by no means the main problem. People have already got the message. The resulting gap must be corrected by a creative search for progressive technologies, and by thorough utilization of so-called waste. The very word "waste" is becoming increasingly rare in the loggers' vocabulary.

The more quickly the timber from the "new harvest" is cross-cut the greater will be the profit. This is precisely what V. Zhukova, the economist of the Argat-Yul'sk logging enterprise (Tomsk Oblast) tells the cross-cutting crews. An appropriate incentive has been provided here: the crews are not paid per cross-cut cubic metre, but for marketable

output expressed in monetary units. What is the result? Today the workers need no urging. They themselves are trying to squeeze the maximum in valuable assortments from each long log. In nine months, the logging enterprise has earned more than 150,000 roubles in profits.

At the Bui logging enterprise of "Kostromalesprom", they do not complain at all about the imbalance in production and delivery plans, even though they too have suffered the same fate. Is the forest resource base exhausted? Yes, 70 percent of it now consists of birch and aspen. Others would have panicked, for who needs this "foliage"? But they realized immediately what must be done: they must concentrate on woodworking. Already they have raised the proportion of woodworking in total output to 50%.

It is as if they had jumped right out of the loss column. Alas, the paradoxes of economics are unpredictable. The broad-leaved timber turned out to be more expensive than the lumber produced from it. That's right: while a cubic metre of timber costs 30.06 roubles wholesale, a cubic metre of aspen lumber sells for 26.49 roubles. This is all because a discount - 9.1 roubles per cubic metre, was recently applied to the wholesale price of broad-leaved lumber in the Kostroma Oblast. In the Kirov Oblast, on the other hand, the price has been increased (by 0.9 roubles) for the same product, which means that Kirov lumber costs ten roubles more than Kostroma lumber. This is absurd. Such a spread is hardly likely to contribute to the efficient utilization of broad-leaved timber. And, of course, it represents a serious blow to the losing enterprises: willy nilly they are going bankrupt. It seems that in such instances it is hardly necessary to wait for the beginning of 1990, when the new wholesale prices will be introduced. In the case in point they must be changed immediately.

When we recall the lessons of last winter, the first thing to consider is the living conditions of the logger. That is to say, he does not work in a warm office - but in the frozen, snowy taiga. There, a hot meal is important and one must warm up at break, and dry out. Indeed, the role of the human factor in recent times has increased immeasurably. Ignore it and it will become an economic factor with a minus sign. This is what happened at the Siisk logging enterprise of "Arkhangel'sklesprom".

There, new wage rates and salary scales were introduced and the workers' pay went down. This was mainly the result of organizational mix ups: a delay in the delivery of fuel here, a shortage of spare parts there. The council of the workers' collective decided that losses due to stoppages must be paid for by the administration of "Karpogorles". There followed a categorical refusal which resulted in a meeting that lasted the whole working day and caused further losses totalling 20,000 roubles. These losses might have been much smaller if only the Association had admitted it was in the wrong.

In general, the modern manager must see to it that word and deed are one and the same. Because they too are becoming economic categories. The person responsible for an error must be made to pay for it. Such is one of the principles of social justice. The hydrolysis production crew at the Syktyvkar forest industry complex, for example, was the first to go over to self-financing. They are working successfully and showing a profit. Where does it go? To the social development fund, they say. But if that is so, the housing problem should not be so acute: the queue numbers about 4,000 people.

In a word, it is not without reason that these categories of economic reform, democracy and openness (*glasnost*) are so closely intertwined. It is only when they form a single entity that they motivate *perestroika*. Conditions must be created for work collectives so that everyone has a clear sense of the value of their own work and of the benefit it confers, both on themselves and on the State. At the same time, it is precisely in winter that the loggers most often fail to make sense out of it, when a stream of timber is flowing to the lower landings and the railway cars, as if on purpose, are holding up the run.

As usual it is in winter that the enterprises receive joint instructions from the Ministry of Railways and the USSR Ministry of the Timber Industry about the need to step up production and delivery rates. We didn't miss out on them this time either. But while it is difficult to ignore the instructions, it is even more difficult to keep one's promises. The Ministry of Railways has proved to be an unreliable partner here: not only is it failing to fulfill its increased obligations, but also the regular plan for supply of empty cars. And what kind of empties are we getting?

At the Lesosibirsk forest base, 339 timber flatcars were loaded in November and 272 of them were delivered without floors or sides. In the 11 months just ended the railways have undersupplied the enterprises of the USSR Ministry of the Timber Industry by about 126,000 cars. However, it is not they, but the loggers who pay the fines for the stoppages. Similarly, the transport workers bear no responsibility for the spoilage resulting from delayed shipments of timber. Now, it seems, it is high time for justice to be restored. In conditions of radical reform, we cannot have the railways riding herd over all the other departments. This is an anachronism reeking of naphthalene.

So, the sector has been on full profit-and-loss accounting for almost a year. Is this a long or a short period? For the anticipated benefit of course, it is short. Essentially, an economic lesson has been taking place. With no time off work, constantly "on the go". But the first achievement is to hand: psychological restructuring. The real possibility of bankruptcy, delays with payment of wages, a drastic drop in centralized financing - all this has finally convinced the collectives: they must rely solely on their own resources and innovative abilities for a long time to come.

Well, from awareness to action is but a single step. It is important only to choose one's own version: self-financing model no. 1 or model no. 2. There are some enterprises for whom the choice has narrowed and has been determined very clearly - either the leasing contract or go under the hammer. In the near future it is intended to put 48 losing enterprises on leasing contracts. It has been possible to reduce the total number of these losers by 28 in six months (the reduction in losses was 40 million roubles). Everyone who has put the leasing arrangement into effect has experienced its literally explosive effect: things take a sharp turn for the better. And this is all because (in the pure form) this arrangement deliberately destroys the paths of the administrative-command system. Having paid off the lessor, divide what is left for the collective by the labour participation factor.

At the Bortom lumber camp of the Sysol'sk logging enterprise, for example, three cross-cutting crews have gone over to leasing. The agreement with the logging enterprise specifies only the lower limit of

production (less still would mean bankruptcy). The list of assortments is also specified, of course, but the crews retain the right to produce high-cost products. The rest is simple. An intra-shop price per unit of output has been set, and a rental for the equipment. The payment is divided by the unit price to give the amount of output which is necessary in order to settle with the logging enterprise. Everything that is done over and above this is your own. The effect rises like yeast: productivity has jumped and wages have also risen sharply.

Why do I describe "the kitchen" in such detail? Well, there is no end to the questions we get in the mail: how do you introduce the leasing arrangement, what do you start with, how do you build an accounting system, and so on. The interest in the new, as well as the doubts and fears are all understandable. It is not clear, however, why the Main Economic Administration of the Ministry has not yet provided the enterprises with procedural manuals in this matter. They are needed, after all, not only by the losing but also by the profitable collectives.

On the other hand, those for whom the lease has become the only saving "straw" do not wait for explanations from above, they act. And they are most successful where the economic service is well organized. Moreover, the lease sometimes takes on an original flavour. At the "Ziminskles" Association, let us say, there is its auxiliary farm at the village of Verkh-Oka. The loggers, of course, have practically no agricultural experience. They obtain only six tonnes of meat a year, although ten times as much could be produced. They are in a tight spot for fodder, and they have very little knowledge. But next door is the Maslyanogorsk State farm. It in fact offered to take the loggers' farm and saw frame on lease. The terms are highly attractive: in this year alone, the combine will receive 10 tonnes of meat, and in 1989 70 tonnes. And this is not without profit for the State farm: they set up a shop for increasing the milk yield from non-calving heifers in the auxiliary buildings. In effect, a joint multi-sector enterprise has been created. The loggers are helping to reconstruct the farm. And they are getting meat at a lower price than before.

I am confident that the future lies with such multi-profile cluster enterprises operated on leasing principles. It seems that the supervisors of the Cherpovetsk furniture factory have understood this. Five cooperatives have been set up there. And they are all in different areas of specialization. The agreement with them is drawn up in such a way that the factory's sales plan takes into account the consumer goods and various consumer services produced at the cooperatives. The benefit is substantial - the furniture makers are flourishing.

In general, the lease-and-cooperative fly wheel has moved from the dead point and is beginning to revolve. Given the general situation in the felling areas, where the raw materials base is becoming increasingly impoverished, it is very important to include these forms of management so as to make use of what is still called waste. This is where genuine managers will find plenty of scope for activity. Suffice to say that at "Krasnoyarsklesprom" alone, in a single year about 4 million cubic metres of waste are obtained. And until now the lion's share of this has been burned at dumps. It has been estimated that millions of dollars worth (in export terms) are consigned to the flames. Is this not a rather grand gesture for a combine where almost half of the enterprises are losers?

Yes, we are learning to manage in the new way. But we mustn't drag our feet. Life betrays slogans. Already the slogan "Cut more - with lower costs" is becoming obsolete. Another slogan presents itself ever more insistently - "Cut less - with higher yield". And there is someone from whom we can borrow this capacity. Our good neighbour Finland has the same forest area as Arkhangel'sk Oblast. Whereas in Finland they harvest more than 54 million cubic metres of timber, in the Arkhangel'sk Oblast it is only 24 million. And the forest resources of the Finns are barely diminishing at all. Why? In the first place, they use mainly non-clear cuttings at logging enterprises. In the second place, they use only wheel technology. Thus they are able to take out three or four forest crops before complete maturity. Moreover, they do not remove the slash: they leave it to rot as a natural fertilizer. This is why the young stands grow more quickly - two or three times more in a few years. These "Finnish style" fellings are now being done successfully by the "Enso Guttseit" joint-stock company at the Itkyarantsk integrated logging enterprise of "Karellesprom" by crews of only 3 men.

But most important - there is a purpose. What a long way we are from efficiency, not only in felling and primary conversion but also in the utilization of valuable raw material! Whatever figure you look at, it causes mental anguish. For instance: every year we simply let rot 20 million cubic metres of timber. All this because the level of treatment with preservatives is unacceptably low. But preservation prolongs the service life of forest products from 5-8 to 20-25 years. And what do we have in the way of progressive kinds of forest products (boards, plywood, etc.?) They amount to a mere 22% in the total mass of products (as against 57% in the developed countries). And can we accept the fact that 95 million cubic metres of timber - one quarter of all procurements for the country as a whole, go just for fuel?

It is clear that the problem of the timber deficit (amounting to 25 million cubic metres annually) must be solved not by increasing fellings, but by the active introduction of resource-saving technologies. It doesn't suit us one bit that of 45.7 million cubic metres of annually-generated waste, only 40.7 million are used. And even of this fraction, only three-quarters are being used to meet production requirements. We are sending only 40-50% of our waste for board production, as against 80-85% in Finland. Just try to think of a new word to denote the concept of "waste". The old term is clearly a misnomer...

Translated by the Secretary of State Translation Bureau,
Multilingual Services Division.

Lesnaya promyshlennost'
December 15, 1988
Pages 1 and 2 (Full text)

Complaints About Wasteful Felling Practices and Overexploitation in the Angara Region

Statement. The timber complex of the Boguchanskii district in the Angara region accounts for 96 per cent of all the merchantable output originating in the district. This comprises almost seven million cubic metres of Angara timber and more than 11,000 tonnes of resins.

Shortly before the district conference of the Party took place I visited the plot where the team led by Leonid Lobanov is working. It is one of the best in the Karabul'skii forest industry enterprise (lespromkhoz). It happened to be the day when they had harvested the millionth cubic metre of timber since the start of the Five-Year Plan. But Lobanov did not even refer to the event, which would previously have resulted in a meeting or some other celebration.

"You know what's worrying me?" said the team leader, as we strode up and down the plot. "It's what our grandchildren will say about us. For we have been turning the pine forests into tundra".

Lobanov was not given an opportunity to speak at the Party conference. But the preoccupations of the man and his sense of responsibility for what he himself is doing and what is being done at his behest were echoed in speeches delivered by a foreman of the Inbakha lespromkhoz, an electrical cable installer from the Severnyi lespromkhoz, the General Director of the "Karabulales" Association and others.

There is indeed good reason for the Boguchanskii Communists to feel anxious. The most modest estimates indicate that some 30 per cent of the timber felled in the district is either left behind at the plots, rots in the stacks, is set on fire in the dumps and at the lower landings, or sinks to the bottom in the course of the timber float. Although the enterprises of the "Boguchanles" Association annually harvest about 3,000,000 cubic metres of timber, not a single cubic metre is dispatched in the converted form. It has been this way for tens of years. More than 400,000 cubic metres of wood are written off as "wastes" here every year. Wastes, you say? More than 100,000 of these cubic metres consist of wood already delivered to the lower landing: shortwood, wood culls, tops. The remaining 300,000 cubic metres of "foliage" and broken ends are left at the felling sites. Collect all this raw material, put it to work - and you can protect the forest over an area of 1,600 hectares.

What if you collect the timber strewn along the banks of the Angara? If you raise the sunken logs in the water-transport depots? Not less than two million of them would be garnered throughout the region, in which case four thousand hectares of forest stands would not need to be axed.

Meanwhile, fellings in the Angara region are increasing at record rates. And they are finding excuses for this: the Boguchanites have to produce saw timber for export, and since there are many overmature stands in the region, they fell them.

Specialists claim that, given the current rates of felling and sophisticated technology, the reserves of Angara timber will be sufficient for 28 to 30 years. Already, the Pinchuga, Inbakhinskii, Govorkovo and Osinovskii lespromkhoz are finding that their raw material resource base is running out.

In addition to all this, the region has been literally taken hostage by independent logging operators. More than thirty of these dwarf organizations have latched onto the Angara pine, and every year they are taking a million cubic metres from the taiga. Their behaviour is barbaric: they remove the wood from the felling areas only when things go without a hitch.

The workers of the collective are up in arms against this policy. They grumble and hold protest meetings. It appears that both the First Secretary of the CPSU District Committee, A.T. Obukhov, and the Chairman of the District Executive Committee V.N. Vekshin, who were formerly directors of lespromkhoz and are aware of the worth of timber, will have to support them and raise the question point blank. Unfortunately, in Obukhov's presentation not a word was said about this problem of problems.

One who did seize the opportunity when speaking at the conference was I.A. Kirillov, the General Director of "Krasnoyarsklesprom", who made the following remark: "We shall be offering additional financial incentives to loggers for effort on the job".

But how can they exert themselves any more than they already are? The Secretary of the Party organization of the Angara lespromkhoz A.A. Sidorov informed the delegates that the entire collective of the enterprise had protested against the new apportionment for 1989. The lespromkhoz has an extraction capability of 345,000 cubic metres, but

every year the enterprise is burdened with an additional 10,000 cubic metres to cover the "increment". Last year, at the cost of enormous efforts, the collective managed to harvest 390,000, whereupon the following advice was straightaway received from the "Boguchanles" Association: "Get ready to advance to 405,000".

The District Committee of the CPSU had certainly not shut its eyes to the thoughtless destruction of the taiga. In July 1986 the bureau, together with the District Executive Committee and the "Krasnoyarsklesprom" Association approved a programme aimed at the accelerated social development of the region's timber sector in the long term. However, little actual progress has been made. The three bodies mentioned have been operating by the outdated paper methods and no turning point or concrete results have been achieved.

The need for restructuring the work of the timber complex in the Angara region is enormous. The slow progress in the provision of social amenities and also the housing shortage are impeding the fuller utilization of the timber being harvested, and the achieving of an increased output of consumer goods. Of course, the District Committee attempted in its report to portray the situation in the social sphere in rosy colours. But the delegates to the conference did not share its optimism.

Lesnaya promyshlennost'
December 13, 1988
Page 2 (Slightly abridged)

A Difficult Year Anticipated for Soviet Timber Exports

Every autumn before the commencement of the new season for advance sales of forest products, the timber press in many countries begins to display heightened interest in estimates of world market prospects for the coming year. The way in which the advance sales originate, and how they fare, determines the profits of numerous importing firms, exporters, sellers and buyers, and ultimately, the material well being of tens of

thousands of people employed in the forest products industries of very different countries. Under the new system of incentives for external economic activity which is beginning to take hold in our country, the state of the external markets has also become important to Soviet enterprises producing for export.

Usually, the first basic estimates of the coming season in Western Europe, which continues to be the leading foreign market for sales of our forest products, are roughed out at two major annual forums: one is a session of the EEC's Forest Products Committee, in which representatives of the European countries, the USA and Canada take part; the other - a special conference of traditional exporters and importers of sawn coniferous timber. The summated data on production, consumption and external trade in individual wood products which are presented at these conferences by the individual national delegations also serve as a starting point for estimates of the state of the European and even the world market in the coming year.

Forecasts of the development of the overall economic situation serve as source material for analysing the future state of the timber market. Most foreign economists are in agreement that in 1989 there will very likely be a slowing of the economic development of the leading foreign countries and of the capitalist world as a whole. Preliminary data indicate that, whereas in 1988 economic growth rates in the industrially developed capitalist countries will be close to four per cent, in 1989 they will decline to between 2.8 and 3 per cent. They anticipate that this drop will have a specially severe impact on building activity - the leading area of consumption of the main types of forest products. During the last three to four years, in foreign countries this sector of the economy has been experiencing a boom, with the result that consumption of forest products has increased. However, in countries such as the USA, Canada and the Netherlands, the building indices, and hence the demand for forest products have begun to fall.

An alternation of rises and falls in demand, and the cyclical character of economic life remains the law of capitalism. Moreover, similar dangers are engendered by the overall instability of the financial

and currency situation in the capitalist world, and by the aggravation of the inflationary trend which slackened temporarily in the eighties but is again on the rise.

Taken as a whole, the current perception of the prospects for economic development in the leading capitalist countries is giving many foreign economists definite grounds for expecting some lessening of the demand for imported forest products. The latest prediction of the Forest Products Committee of the EEC reflects a similar view on the part of specialists. According to the Committee's estimates, the total demand for imports of forest products (not including pulp-and-paper) by the European countries in 1989 will be approximately three per cent less than the anticipated demand for the current year. Expressed in terms of raw wood, the reduction in imports amounts to about four million cubic metres. Imports of coniferous sawn timber, our main currency-earning forest product, will drop from 30 to 29 million cubic metres, or by four per cent. Appreciable cuts in purchases of coniferous sawn timber abroad are contemplated by Great Britain, which accounts for a quarter of the European imports, and also by such major purchasers as Belgium, Denmark, France, Italy and the Netherlands.

It is expected, however, that due to the growing shortage of saw timber, the leading suppliers - in particular Sweden, Finland and Canada - will curtail the supply of the product.

Much of the uncertainty in predicting the development of the world market for coniferous sawn timber arises from the situation in timber-consuming industries in the United States. That country alone purchases abroad, mainly in Canada, more sawmill products than does all of Europe. With respect to the U.S. the view of the experts is practically unanimous: in 1989 that country will begin to cut back on purchases. The overall conclusion regarding a possible balancing of the European market in the coming year is based on an anticipated cut of roughly five per cent in American imports. But all that would be necessary for world markets to be literally flooded with the cheaper Canadian product would be for the American consumers to curtail imports by say, eight per cent rather than five.

At present, the supply and demand ratio for coniferous sawn timber in Japan is very unstable. That country has moved into third place globally for imports of such timber, being surpassed only by the USA and Great Britain. While the demand for lumber remains relatively active there, prices as before are fairly high and amount to approximately 130-140 roubles worth of hard currency for a cubic metre of Canadian squared timber with a side measuring 10.5 centimetres. But it is precisely these extremely attractive prices for exporters that are stimulating the Canadian, American, New Zealand and Chilean firms to increase shipments of lumber to levels above the customers' requirements. This has resulted in Japanese ports and warehouses being filled to overflowing with sawn timber.

It comes as no surprise, therefore, that in the autumn of this year Western European importers were playing a waiting game and taking a very cautious approach to the conclusion of contracts for deliveries of coniferous sawn timber in 1989.

The demand for pine for use in carpentry work remains high in the western European countries. Supplementary purchases of low-grade pine products are being made in the second half of the year by countries in the Middle and Near East. In recent weeks there have also been reports of transactions involving spruce lumber with a slight increase in prices. In actual fact, however, the new prices are no different from those that prevailed at the beginning of this year.

Our Canadian competitors are now taking a different position. After July, they lowered their prices in Europe by 10-20 per cent.

A decrease in the capacity of the European market is also predicted for other forest products. The requirements of this region for saw timber imports are determined by the EEC Wood Products Committee to be 5.9 million cubic metres as against the 5.6 million anticipated for 1988. European imports of pulpwood may drop from 28 to 27 million cubic metres, and of plywood and wallboard - from 12.1 to 11.8 million cubic metres.

The conclusions from all that has been said are obvious: a difficult year lies ahead for our exports-oriented organizations and firms and for their workers' collectives. On world markets "the customer is always right", but in a time of economic recession he is "right" twice over: when the market capacity is contracting there is an inevitable increase in the stringency of his requirements for product quality and adherence to the terms of contracts. The fact that our enterprises, unfortunately, became accustomed - in the years which are now called the period of stagnation - to making changes in specifications, shipping unordered products, delaying deliveries and committing other violations of contracts concluded with capitalist firms, simply will not do in a time of recession. The exporter who is capable of satisfying customers' requirements is the one who will be able to hold his ground in the marketplace and sell all of the product on hand without loss of prices.

In conclusion I would like to mention that each cubic metre of assorted lumber that has not been shipped abroad represents three tonnes of bread or 150 kilogrammes of meat or 50 kilogrammes of butter which has not been purchased. Indeed, they have not even been delivered to our stores. The latter can hardly be said to be suffering from an over abundance of goods. The substitution of no more than one cubic metre of assorted pine planks by fourth grade material means a direct loss of the currency with which it is possible to obtain a ton of bread, or 15 kilogrammes of butter, or 50 kilogrammes of meat. This is to say nothing of a reputation, which will not be bought on external markets, however much money is available.

(Article signed by Candidate of Economic Sciences V. Statiev)

Lesnaya promyshlennost'

8 December 1988

Page 2 (Full text)

A Call for Maximization of Profits Through Self-Financing

It is common knowledge that a process of economic renewal is under way in the timber industry. It is already 11 months since the industry began operating under conditions of self-financing. The positive effects of the economic reform are indisputable. The government order for the production of round timber, commercial pulp, paper, cardboard, wood fibreboard and consumer goods other than food stuffs is being met. The plans for furniture and white paper products are being overfulfilled. In 10 months, the capital investments limit has been fully utilised and the plan for the commissioning of residences, school, hospitals, polyclinics and clubs has been overfulfilled.

Labor productivity in the sector has increased by 7.8% as against 3.7% in 1987. The norms for wage increases have been sustained. The relative reduction in the number of personnel came to 134,000.

* * *

However, there is still a long way to go to achieving a state of complete well-being at the fellings. According to last year's figures, almost every second enterprise here proved to be unprofitable: the total loss exceeded 380 million roubles. In the first half of the year the loss was cut back a little, but this is clearly not enough. Losing enterprises were especially numerous in the large associations such as "Arkhangel'sklesprom" (28.3%), "Vologdalesprom" (27.7%), "Irkutsklesprom" (26.4%), "Komilesprom" (26.0%), and "Dal'lesprom" (23.9%).

Half of the enterprises in "Bashlesprom" and "Murmanles" are operating at a loss. The situation is little better at "Tomlesprom", "Gor'kles", "Zabaikalles", "Yakutles" and "Kemerovoles". But at "Omsklesprom", not one of the 14 enterprises is losing, at "Lenles" only one of the 19 is losing, and at "Tyumen'lesprom" only 3 of 35. Even these figures attest to the correctness of the policy being followed.

A healthy economy, of course, calls for a constant growth in the khozaschet (profit-and-loss accounting) income at each link in the production cycle. Those who incur a loss are, in fact living parasitically at the expense of the profitable enterprises. While up to now they have been rescued by subsidies from above, beginning in 1990 this practice will be discontinued. Of course, we must waste no time in preparing for this strict regime.

What is at the root of the troubles in the logging enterprises? We often hear references to so-called objective difficulties: problems with the transfer prices for forest products, the increase in timber haulage distances, the labour shortage, and so on. But these factors also obtain at enterprises where they are able to maintain their profitability. At "Lenles", the raw material resource base is no greater than at "Bashlesprom", where of 24 enterprises, about half are operating at a loss. The problem, as we see it, does not lie in objective causes, but in the manner in which production is organized, the extent to which profit-and-loss accounting has been introduced, and how interested people are in doing productive work.

Analysis shows that losses are the result of excessive expenditures on production and on various fines, penalties and forfeits. It is also necessary to dispose of the surplus of production-oriented fixed assets that yield no benefit, since these will now have to be paid for. Each surplus tractor, timber-hauling truck or clustering machine is a financial burden. To maintain them in the present conditions is an indication of lack of business sense and indifference to the job. Equipment must be utilised to maximal effect, in two to three shifts as a rule, and be repaired quickly and well. It is only in that case that technology will not drag us down into a pit of debt.

Much depends on the skilful exploitation of the designated coupe and on the quality of cross-cutting into lengths. Enterprises incur substantial losses due to inefficient cutting of long logs. It seems that we must one again pay attention to the training of cross-cutters, and get them to become interested in obtaining the most valuable assortments.

One of the most effective ways of eliminating losses is to expand the processing of waste and broad-leaved timber, the production and sale of special purpose chips from fuelwood, and long-log butts and tops. Here one can earn a profit not only in roubles but also in foreign currency, since the chips, including the broad-leaved variety, are in demand on the international market.

It is no secret that spilled shipments of long logs lie for years by the sides of our logging roads. Nobody has found the time to pick them up and put them to use. Losses of timber during the float are also heavy. Just try to count the long logs scattered along the banks of rivers. And how many have been discarded in the fellings areas? Not only fragments of small-diameter trees, but also some that are perfectly suitable for manufacture of quality saw-wood. No appeals will suffice to correct this matter, so long as the workers themselves remain disinterested in a proprietary sense in the valuable raw material. They ought to be, since each such log is worth up to 30 roubles retail. The answer is plain to see: people's wages should not be reckoned per cubic metre, but from the difference between production costs and the sale of final products.

The leasing contract should rightly be regarded as the key to success here. Having accepted and paid for standing timber the lessees will not allow even the smallest long log to remain unused. Similarly, not a single crew that has leased a timber-hauling truck will allow it to stand idle for a moment or waste a minute's fuel. Material self-interest will in this way automatically solve the problems of economising on materials, making efficient use of machinery and maintaining it in good condition. The leasing contract is the true road to solving the personnel problem. There is no place here for the negligent worker. If you want to earn you must work at full capacity.

As for the managers, if they want to keep their jobs and be reelected to them they must keep a firm hand on the economy. Together with the worker collectives' councils and the trade union committees, they must now carefully analyze the enterprises' capabilities, locate unused reserves and develop a clear program to overcome losses.

At the same time, the leasing contract is running into considerable difficulty in the enterprises of our industry. The habit of biding one's time and awaiting orders from the top remains strongly entrenched. Many petition-bearers are still besieging the Ministry in hopes of getting additional funds or resources. Social passivity, it seems to me, is one of the main factors inhibiting perestroika in the forest sectors. In many respects, then, the rights and opportunities afforded to enterprises are far from being fully utilised. We must now bend every effort to learn how to work in the new way: to count every rouble and to teach our workers, foremen, craftsmen and supervisors of production subdivisions to do the same. We must master the ability to predict the state of the market, make timely and direct deals with the consumers, and be bolder in solving personnel problems.

It is clear that there is no time to waste! Already by the fourth quarter of this year, 43 losing logging enterprises must make the transition to the leasing contract, and beginning in January 1989, all of the other "backward" enterprises must do the same. Of course, nobody should be forced into leasing. This is a voluntary matter. What is required is that the explanatory material be well organized, so that people understand the advantages of the progressive system, what they themselves stand to gain from it.

It is also very important to improve the material-and-technical supply situation. More than once in the past progressive undertakings have run up against deficiencies there. The leasing contract, however, has the advantage that the standard of maintenance of the machinery and equipment will be greatly improved. Consequently, the consumption of spare parts, fuels and lubricants and other materials will be reduced.

One thing is clear: by 1990, there should not be any so-called planned-loss enterprises in the industry. The experience of the Badzhei logging enterprise of "Krasnoyarsklesprom", the Mezhevaya logging enterprise of "Kostromalesprom", the Vygoda forestry enterprise of "Prikkarpatles", and some others, show what can be achieved even today,

while there is still no wholesale trade in means of production. Here they do not wait on the weather, but boldly move into new ways of management. Thus, at the Vygoda forestry combine, the first joint-stock company in the industry has been created. The workers have contributed 40,000 roubles to the total capital and on this basis they have increased the output of consumer goods. The incentive has been appreciable: they are being credited with five percent of the annual revenue instead of the three for ordinary savings contributions. If they succeed, however, the combine plans to raise this payment to ten percent.

The Ministry has developed a procedure for determining the khozaschet (self-financing) leasing payment per unit volume of output. The total of normative material expenditures, payments for equipment and machinery, and the calculated wage payments constitutes the calculated cost of production. Such a system serves as an incentive to the collective to work with a smaller staff. It is not surprising that the lessees themselves are refusing to enlist specialists for equipment repairs, preferring to use their own resources. Strict accounting of fuels and spare parts also follows. The workers are striving to make use of the equipment in a multi-shift regime. The wisdom of such an approach is indisputable: it promises direct advantages to each worker. The revenue of the lessees is determined by multiplying the amount of output produced by its agreed price. To this are added bonuses for foremen, night shifts, separation from family and so on. And the cost of expenditures on materials and of fines paid for failure to meet obligations is subtracted. The remainder is the wage fund, which is divided in accordance with the labor participation factor.

If you do more and do it better, you will receive more. This is the essence of the leasing contract. You see, people have the feeling that they themselves are the real masters of production. There are no ownerless tractors or other machinery belonging to no one. Nor are there superfluous people. Everything has been weighed and taken into account. Everything is to the point and business-like. That is why, in just a few months the previously losing Mezhevaya logging enterprise, after going over to the leasing contract, made a profit of 776,000 roubles against a planned

135,000 and increased labor productivity by 34%. Contracted deliveries were overfulfilled there by 100% and the 10-month plan was overfulfilled by 133%. The yield of special lumber was 7% higher than the planned yield. Without any additional outlays, eight thousand cubic metres of round timber were obtained. All this made it possible to increase earnings by 200,000 roubles.

For the coming year, the collective of the Mezhevaya logging enterprise has planned and consolidated this gain with an agreement to increase extraction volumes by 20,000 cubic metres, round timber output by 18,000 cubic metres and marketable output by 900,000 roubles against the control figures of the Five-Year-Plan. The agreement provides for an increase in labor productivity by 51.3% in comparison with 1985 and for the obtaining of 200,000 roubles in additional profit.

The leasing contract is essentially an improved second model of profit-and-loss accounting. We must lose no time in seeing to its universal introduction. The greater the number of enterprises that make the transition to this method of operation, the more quickly and effectively will perestroika take hold in our industry.

Translated by the Secretary of State Translation Bureau,
Multilingual Services Division.

(Article signed by N. Medvedev, Chief of the Main Economic
Administration, USSR Ministry of the Timber Industry)

Lesnaya promyshlennost'

December 12, 1988

Pages 1 and 2 (Full text)

Perestroika: In Praise of Leasing Contract

Of the various forms of khozraschet (profit-and-loss accounting), the most effective is the leasing contract. Last year, every fourth enterprise of the USSR Ministry of the Timber Industry operated at a loss. The number of

them has now been reduced, although there are still more than 300 losing logging enterprises and sawmills in the sector. The collegium of the Ministry of the Timber Industry has instructed managers of the union republic ministries, and the territorial production associations, to analyze the activity of each losing enterprise and take all necessary steps to facilitate the transition to progressive forms of work. This includes borrowing from the experience of those who have already mastered them.

Our story today is about one such enterprise - the Mezhevaya logging enterprise of the "Kostromalesprom" Association.

* * *

A backward glance into history

Just a year ago, and incidentally throughout its entire life, the Mezhevaya logging enterprise was a planned loser. The raw materials base was scattered; the average hauling distance: 59 kilometres. The inventory yield of commercial timber was 84% for spruce, 62% for birch and 36% for aspen. The average long-log volume was 0.28 cubic metres; the average standing volume per hectare, 218 cubic metres. The coupes designated for felling in 1987 and the following year were scattered over more than 20 compartments, separated by tens of kilometres from each other. Scarcely anyone would envy such a raw materials base...

The yearly extraction volume is 270,000 cubic metres, of which 60,000 is in the form of commercial long logs supplied to the woodworking and sawmill enterprises in the town of Shar'ya. The rest are cross-cut into long logs at a riverside lower landing and handed over in this form to the Unzha timber floating bureau. The cross-cutting is done in the summer by four, and in the winter by six enlarged crews, some of which are made up of seasonal workers.

But the enterprise's chief misfortune lies in the fact that, having only one lower landing for four logging units, it supplies output in the form of long-logs or roundwood without any processing. Essentially, this enterprise was a raw materials adjunct of the "Shar'yadrev" Association and the Unzha timber floating bureau and did not have a share in their profits.

Everyone knows that veneer logs are more expensive than building timber and broad-leaved sawtimber. But it is by no means from every birch long-log that one can get a log measuring at least 4.5 metres in length and therefore suitable for making veneer. The curvature, knots and other stem defects preclude this. But the timber floating bureau will not accept short longs, which could be cut out even from a defective long log. The customers themselves are glad of the additional profit which is to be gained from efficient cross-cutting.

It is not surprising that in these circumstances the logging enterprise has for many years been receiving a subsidy of 600,000-700,000 roubles from the government.

But now hardly a year has gone by, and already they have put an end to their losses. Labor productivity at the logging enterprise has risen by 31%. And this took place after the enterprise went over to the leasing contract.

How the idea originated

On August 1st of last year the logging enterprise began working under a collective agreement and was preparing to make the transition to the second model of khozraschet.

This was a time for the study and mastery of khozraschet, primarily by administrative personnel. People learned how to assess their activity by economic yardsticks and taught themselves to locate and eliminate production bottle-necks.

The whole production process was reviewed. The corrections introduced made it possible to markedly reduce fines for unsatisfactory clearing of felling sites and violation of production commitments. Fines and penalties for the supply of poor quality output were completely eliminated. Both labor productivity and commercial timber yields increased and there was a dramatic rise in the output of marketable goods. They were even able to curtail the losses in 1987. The extraction output per mechanised shift increased by 10%. The corresponding increase per tractor-shift was 9% with the annual output per worker rising by more than 17%.

The target for the nine months of the current year, even before the transition to the leasing contract, was achieved for all of the main indicators. They were able to reduce the number of workers at the logging sites by 29 and increase the average wage from 247 to 312 roubles. Such results could hardly fail to inspire the collective to take the next step - the development and consolidation of khozaschet. This was the transition to the leasing contract.

For experience - to the Moscow region

The director of the logging enterprise visited the Butovo Building Materials Combine, which by that time had already gone over to the new management method. He familiarised himself with their work, made a copy of their agreement (for which he paid 50 roubles) and returned home confident that his enterprise was fully up to the leasing contract.

After weighing all the "pros and cons", it was decided to put the question to the collective. A committee was formed, which included the director, the chief engineer, the chief of the production-technical department, the chief of planning-economic department, the senior engineer of the labor and wages department, the chief accountant, the supervisor of the Sovetskii logging unit, as well as several of the more active workers. They all paid repeated visits to the crews and explained with actual calculations the essence and advantages of the leasing contract.

Party meetings were held at the logging sites. The annual trade union conference also came along at this time. So as not to assemble the people twice, it was decided to discuss the proposal for the transition to the leasing contract then and there. The opinion of the workers and office personnel was approximately thus: "although we have still not made out just what this 'leasing contract' is, we'll give it a try".

Introduction of the leasing contract

The new system clearly aroused people's interest and inspired them to new heights. A plan of measures was developed to ensure an increase in the proceeds from sales of commercial output. In particular,

they decided to raise the commercial timber yield by more efficient cross-cutting of long-logs, making wider use of small-diameter wood to produce metre-length pulpwood, using the wastes accumulated at the lower landing as firewood for the workers of the enterprise, and building log roads on spurs and sidings out of broad-leaved timber and branches only.

Just as specifically did they identify ways of reducing production costs, eliminating unproductive expenditures, increasing the per shift return on machinery and divesting themselves of superfluous equipment, etc.

In general, everyone liked the plan. People were put in charge of implementing each point. Literally everyone had an interest in the success of all aspects of the program, for on it depended the amount of the khozaschet revenue, and consequently, their wages.

The official date when the logging enterprise went over to the leasing contract was October 1st of this year. An agreement was concluded between the logging enterprise and the "Kostromalesprom" Association. What is the nature of this agreement? It would probably be useful here to cite the contents of a typical leasing agreement, at least between a logging crew and a production unit.

Its form is typical: such and such a production unit in the person of its director and such and such a crew in the person of the foreman conclude between them the present agreement for a given period of time. Then follow the obligations of the parties.

The production unit is obliged:

- To lease to the crew the equipment required to fulfill the contractual obligations.
- To provide the crew with the material resources (fuels and lubricants, spare parts, forested area, etc.), in accordance with the current norms.

- To credit the crew with the income it has earned, on the basis of the actual expenditures and the estimated contract-price per unit of end product in the accounting period in question.
- To set aside monthly half of the saving in resources, and to make a final calculation at the end of the quarter.
- To keep individual accounts for the crews, showing totals for the accounting period.
- To accept from the crew only wood that has been trimmed of knots.
- To keep stack lists indicating the volume of timber by species.

The logging crew is obliged:

- To fulfill the contracted obligations in terms of volumes of timber logged.
- To observe the regulations relating to safe operation of machinery, coupe layout and long-log stacking, as well as fire prevention.
- To ensure correct operation of the leased machinery and the safekeeping of machines and equipment.
- To pay to the production unit the leasing fee and amortization deductions for the machinery used, as well as the stumpage for the forest area designated for felling.
- In the event of failure to meet obligations for product deliveries, to pay a fine in the amount of 10% the value of the non-delivered product.

- To make the final release of the developed coupes to the forestry enterprise.

General questions:

- The estimated contract-price is determined on the basis of the current norms for all resources and the material incentives funds due per unit of output (the pricing estimate is appended to the agreement).
- The crew itself will be responsible for the hours of work and time off, arrangements for shift work and the disposal of its khozaschet revenues.
- The production unit will be responsible for delivering the crew to the work site and providing it with hot food and work clothes.
- A loss incurred by the production unit as the result of sub-standard work by the crew, violation of equipment operation regulations, etc., shall be compensated by making an appropriate deduction from the khozaschet revenues of the crew.
- The production unit shall compensate the crew for any loss of revenue for which the unit is at fault.
- The administration shall not have the right to divert workers to other districts without the agreement of the crew.
- The production unit, on receipt of a request from the crew, shall allot relief workers (in periods of leave or illness), and they will be remunerated from the crew's revenues.
- If supplementary workers are enlisted to effect repairs, they also will be remunerated from the crew's revenues.

- If the crew economises on the use of machinery, the amortization deductions for the equipment thus made available shall remain in the crew's revenues.
- The leasing fee for the equipment is reduced after the balanced cost of it has been repaid; the estimated contract-price does not change in this event.
- When errors in calculations are found or working conditions change, corrections can be made to the estimated contract-price over the entire life of the agreement.

The very same principle was applied in drawing up the leasing agreement between the logging enterprise and the combine. Naturally, it also includes such points as renovation of production, having regard to technological advances, major repairs to the basic means of production, and improvement of workers' living conditions financed by the logging enterprise itself.

According to the agreement, the logging enterprise is obliged to transfer annually to the Association a leasing fee in the form of fixed sums, these to include 200,000 roubles in 1989 and 300,000 roubles in 1990. As for the Association, its obligations include mainly the rendering of assistance rather than direct provisioning: in securing the requisite spare parts, supplies, equipment and an allowable cut, improving the professional training of crews and the like. The agreement also contains a very important point relating to the release of the logging enterprise by the end of 1990 from the obligation to pay for production funds and labor resources. The agreement between the Mezhevaya logging enterprise and "Kostromalesprom" is to terminate on December 31st, 1995.

First lessons

Visitors have become more frequent at the Mezhevaya logging enterprise. They come to gain experience. There have already been delegations from the Kirov, Leningrad and Tyumen' oblasts and the Komi ASSR. The people arrive and are astonished.

"What is there to see here?"

Actually, nothing. Just the usual machinery and equipment. The only thing new is the attitude to the job.

"I came to the felling site", recalled the chief engineer of a logging enterprise, "and noticed that for some reason the fellows were on edge. We chatted and smoked some cigarettes but the conversation didn't seem to get going. They just stood there, shifting from one foot to the other. 'What's the matter?' I asked. 'Well,' they replied, 'it's time for us to get back to work, please excuse us...' And off they went to their work place..."

That's the lease for you! No one has to be told to save time. The workers themselves use every minute to good purpose.

...We arrived at Comrade Men'shikov's logging crew just in time for the dinner break. Of course, the director of the Il'insk production unit, the slow and judicious Valentin Sergeevich Elin, had selected that particular time for a good reason. After the meal, the people were calmly smoking while relaxing in the small warming-up shack. The technical director of the unit, Sergei Borisovich Gulyaev, was giving some explanations. The workers became more interested when the talk turned to equipment.

"Make a note of this," demanded the operator of an LT-154 chokerless skidding machine. "I got this machine a month ago. It took me more than two weeks to get it running and then on the second day of work it had to go in for repairs! Who was the manufacturer? A plant in the Altai, with the suspension equipment made by a plant at Plesetsk. The serial number is 1290. Why didn't they send in a claim for replacement? What would be the point of it anyway?"

There was a sprinkling of new complaints about the quality of equipment. The branch-trimmers have weak hydraulic system valve lids. They came loose right away on an LP-33A with serial number 302. On the

tractors equipped for chokerless skidding made by the Altai plant, the rockers and frames very quickly gave out at the places where they were attached. These sub-assemblies cannot be repaired by welding.

At the production unit office, I put the question to Elin directly: "Well, how are you getting on with the leasing contract?" "We still haven't given it a fair try", he answered. "It's only the third month..."

It's true, that isn't long. But already in October Men'shikov's crew saved 61 roubles worth of diesel fuel, 50 roubles worth of gasoline, 100 roubles in saw chains and another 32 roubles in subsidiary supplies. But they used up too many spare parts, losing 95 roubles there. However, they saved almost as much by reducing the amortization deductions: it has now become profitable to conserve equipment. When a machine has served out its life it is as if it is provided free. The workers quickly caught on to this. There is now no need to exhort them to be careful.

The way they regard the timber has also changed radically. Previously, when they paid for it by the cubic metre, the small-diameter wood was left at the felling site. Every tractor operator strove to grab the stout, most "voluminous" long-logs. No one bothered with the fines. They were discarded, even the coniferous fines. Now the prices govern everything: coniferous small-diameter wood is worth much more in financial terms than large-diameter aspens.

However, it makes no sense either to use heavy-duty, chokerless skidding tractors to pick up the fines: it reduces their output per shift. So they decided to clean up the developed coupes using manual gasoline power saws and TDT-55 tractors.

In general, the problem of collecting and utilizing felling debris is becoming very acute now. Not only for economic, but also for ecological reasons. Logging "waste", of course, is an excellent raw material for special-purpose chips and coniferous-vitamin flour. But it is not easy to get it: there is no equipment.

If only we had a self-propelled chipper!" sighs D. Bigel', the chief of the production-technical department. "'And a few chip carts. We would send the chips to the Shar'ya wood-particle board factory. But now what is to be done with the branches and long-log fragments? They can only go for burning! We are burning up real money... Just look at how much wood is lying alongside the road. The signalmen have trimmed that wood for their lines. And nobody will take that wood, even for fuel. But if we could get a caterpillar-track chipper in here, what a saving we could make!"

Where next?

Yes, the leasing contract changes a man's thinking and teaches him assiduity and carefulness. But not everyone welcomes this lesson. For some, to sit behind a desk or in a warming-up shack for a modest, though guaranteed wage is preferable to feverish activity. But these are not the kind of people who now dictate economic policy. The new opportunities have shaken up even those who are used to being guided by the shopworn phrase that initiative is punished, and who prefer to bide their time.

A case which occurred quite recently with one of the crews made a strong impression on people. Wages here suddenly jumped to almost a thousand roubles a month. There was alarm in the office: how could this be? You know it won't be long before we go broke in this way. It turned out that an omission had been made in the coupe inventory: there was more of one of the valuable species than was shown in the documents. As a result, this crew turned out considerably more commercial output than the others. Its revenues were correspondingly greater.

The management considered this question in conjunction with the advice of the crew's labor collective. A decision was taken in accordance with the familiar proverb: "Agreement is dearer than money". The crew was paid in full. Need one say how favorably this affected the authority of the leasing contract...

In a word, they have come to believe in the lease completely. However, many difficulties still lie ahead. The managers of the enterprise are of course disturbed by the prospects. There is no going back, the profits must be increased every year. How is this to be done? Although the haulage distances are constantly increasing, it would seem that the reserves for efficient cross-cutting are already exhausted. There is only one way out: to develop secondary conversion of the wood that has been logged. But only long logs and timber are demanded from the logging enterprise.

At the same time, the Mezhevaya logging enterprise itself is in dire need of lumber for residential construction and provision of social amenities. Where to get it? You can't single out a particular order, since everything goes for centralized deliveries. So there you are - in the forest with no wood. But you see, without housing you cannot keep the workers, who even then are in short supply. How can this vicious circle be broken?

And still we have visitors here. They keep on coming to get the experience.

"We should build a hotel". The director spreads his arms. "But what is there to see here? You can't put attitude to the job on display. And in general we cannot take the credit for these changes. It is the leasing contract that got things moving..."

I cannot agree with this. It is true that the leasing contract is a mighty lever of perestroika. But the director is being cunning: the people at the logging enterprise are hard-working and thoughtful, ready to extend the new as far as it will go. We can therefore say quite definitely: the collective is on the right path. And here there is something to learn.

Lesnaya promyshlennost'

December 2, 1988

Page 2 (Slightly abridged)

Translated by the Secretary of State Translation Bureau,
Multilingual Services Division

Introduction of Leasing Arrangements and Setting Up of Cooperatives
Causes - Turnaround in Furniture Production at Simferopol

The furniture shortage in the USSR is currently estimated at a billion roubles worth. And a shortage, as everyone knows, creates fertile ground for speculation. In Moscow there are more than 70 furniture stores. Nationwide, they number in the hundreds, and at every one there is a line-up. Nowhere is a simple three-door wardrobe offered for sale. To grease the palm of the extortioner a purchaser is forced to overpay 30 roubles. A set of upholstered furniture costs two hundred extra, a wall unit - five hundred.

The only way to put an end to speculation is to saturate the market with the articles in demand. But how is this to be done? Do the furniture manufacturers of the USSR Ministry of the Timber Industry have access to reserves in order to curb the continuing shortage? An experiment conducted by the Simferopol'-based Association "Krymmebel" (Crimean Furniture) indicates that they certainly do, and in no small measure!

Its workers' collective, having initiated a search for non-standard solutions, is the first in the country's furniture making industry to have introduced on its premises a cooperative-leasing contract, which is a kind of third model of the profit-and-loss system of accounting and self-financing (khozraschet).

Simultaneously with the transfer of the entire collective to a leasing contract, three production cooperatives were formed: "Universal", to which 27 workers of the cutting sector went; "Makhagoni", consisting of 55 workers from the lining assembly shop; and "Kipais", for the production of polished panels.

The entire material and technical supplies service was transferred to the cooperative contract.

The cooperatives opened their own clearing accounts at the bank.

The combination of a leasing contract and a cooperative mode of production has already yielded startling results in this, the first year.

The Association is successfully meeting the State order and making deliveries as planned, for which it receives in the form of a bonus a 15 per cent gratuity to be paid into the material incentives fund. Also, it has settled in full with the consumers for contracted deliveries.

In all, 43 items of furniture are being produced here, with no deviations from the assortment programme permitted, nor the elimination of inexpensive articles.

During the first six months more than a million roubles in net profits have been earned, with a figure of about 2.5 million roubles anticipated for the year as a whole. Since the start of the year, almost a million roubles worth of above-plan goods have been produced, and the collectives have been given a free hand in deciding on the use of these funds.

Important economies in the consumption of raw materials and products have been achieved. For example, almost all of the boards have been put to use in manufacturing. The output of facing materials - veneer from imported wood - has been raised to 62 per cent instead of 55. In essence, by bringing into service previously unused reserves, the collective is operating waste-free. The entire economy is shifting in the direction of income derived from self-financed activities. It has proved possible to reduce the number of employees by 20 per cent. The lessees were prepared to reduce the number of managerial staff by 60 per cent but have been forced to keep them on strength due to the abundance of bookkeeping and other paper work emanating from "on high".

As a result of the economy resulting from the various tasks being performed by a smaller number of personnel, on average the salary of each employee has increased by an amount ranging from 30 to 100 roubles.

The collective has been channelling the earned income into housing construction and the technical reequipping of the enterprises. The construction is being done by its own resources, for which purpose a building sector has been formed. Its two teams work in alternate shifts. The collective is willing, on the basis of shared initiatives with other Simferopol' enterprises, to step up the implementation of the social amenities programme, and to arrange on cooperative principles the production of locally derived building materials.

In the interest of improving public services and meeting the needs of the population, a workshop affiliated to the Association is accepting individual orders for the manufacture of furniture. It is also intended to open some small workshops for the restoration of antique furniture and the production of frames for doors and balconies.

Lesnaya promyshlennost'

December 20, 1988

Page 1 (Full text)

Furniture Production in Armenia to be Boosted

A report on restoration work underway at timber industry enterprises affected by the Armenian earthquake was given by Deputy Minister of the Timber Industry, V.A. Sentyushkin. Renovations were in progress in Leninakan, Kirovakan, Stepanavan and other centres. Output of commodities was to begin in the first half of 1989 at furniture manufacturing enterprises where there had been only moderate damage from the quake. New capacities are to be introduced in 1990 to provide for the production of 20 million roubles worth of goods annually at the Leninakan furniture plant.

New capacities are also to be created in Armenia for the yearly output of a million square metres of joinery articles. Furthermore, a large quantity of windows and doors will be sent to sites of new building projects

in Armenia by enterprises in other parts of the country. The USSR Ministry of the Timber Industry is to allocate more than 30 million roubles for the erection of housing for woodworking and furniture manufacturing personnel.

Lesnaya promyshlennost'

January 7, 1989

Page 1 (Excerpts)

Acute Shortage of Housing for Workers in Forestry and the Timber Industry

Delegates at conferences and meetings of trade union organizations spoke very sharply on the question of exercising the constitutional right to have a roof over one's head. At the present time, 270,000 individuals within the system of the USSR Ministry of the Timber Industry and a further 95,000 at enterprises of the USSR State Committee on Forestry (Goskomles) are waiting to receive housing or have their living conditions improved. Add to this three million square metres of dilapidated houses and it immediately becomes clear how important openness (glasnost') and fairness (spravedlivost') are when each apartment is being allocated.

This is precisely what was demanded by the workers of our sectors who spoke at the meetings. But, for housing to be allocated it is first of all necessary for it to exist. This is why, in conformity with the CC CPSU decree of April 17, 1986. "The Main Approaches in Accelerating the Solution to the Nation's Housing Problems", a housing construction programme for the 12th Five Year Plan was drawn up by the Central Committee of the Trade Union, jointly with the USSR Ministry of the Timber Industry (Minlesprom) and USSR Goskomles. The programme is being further developed by Minlesprom enterprises, to cover the period

from now until the year 2000. The RSFSR Ministry of Forestry has already approved it. It calls for implementation of the directive issued at the 27th Congress of the Party regarding the allocation of a self-contained apartment or house to every family by the year 2000.

Lesnaya promyshlennost'
December 1, 1988
Pages 1 and 2 (Excerpts)

PULP AND PAPER

Heavy Losses Cited for the Novaya Lyalya Timber Industry Complex

The economy of the Novaya Lyalya district consists essentially of a large timber industry complex, where wood from the Urals is both harvested and converted. Operating here are such enterprises as the Lobva Integrated Timber Industry Combine, the Novaya Lyalya Pulp-and-Paper Combine, a hydrolysis plant, the Novaya Lyalya Integrated Logging Enterprise, and the logging enterprise of the fuel industry administration. How goes perestroika in the district? What sort of problems are troubling the Novaya Lyalya Communists?

Replies to these questions should have been provided at the District Party Conference.

* * *

On the eve of the conference the phone rang in the correspondence unit of the newspaper. The First Secretary of the Novaya Lyalya District Committee of the CPSU was on the line. After extending an invitation to attend the conference, he added significantly, "Your newspaper must help us..." It didn't take much to guess what sort of help was meant. The mills, above all the pulp-and-paper combine and the hydrolysis plant, are operating on "Demidovskii" equipment and the reorganization of manufacturing is proceeding slowly, due to lack of funds. The social problems in the district are also dragging on interminably. As to the misfortunes of the pulp-and-paper combine, the annual losses of which are counted in the hundreds of thousands of roubles, I have already written about them.

Exactly three years have elapsed since then -- the period for which the combine was due to report back to the District Committee.

What if anything has changed at the pulp-and-paper combine? Very little. A saw shop has been built - replacing the burned down cross-cut saw dolly way - and two automated lines for producing paper

bags have been assembled. But the main needs: reorganizing pulp manufacture and rebuilding the paperboard and paper manufacturing shops have still not been met. In addition, construction of the industrial wastes purification system is virtually at a standstill.

The Novaya Lyalya papermakers are inclined to lay all of the blame for this on the USSR Ministry of the Timber Industry and the other ministries and departments which, after repeatedly adopting resolutions "On the Long-Term Development of the Combine for the Period..." have done almost nothing to help bring this about. This is precisely the position that their delegates took when speaking at the conference. After admitting that the workers of the pulp-and-paper combine have given a worse performance with each passing year (during the last three years pulp production has decreased by 3,600 tonnes, paper - by 3,500 tonnes, and paper bags - by 14,500,000), the Secretary of the Party Committee at the Combine put all this down to the technological backwardness of pulp-and-paper manufacture and complained about the poor quality of material assistance on the part of the Ministry and "Sverdlesprom" (Sverdlovsk timber industry). Essentially the same view was expressed by another delegate - paper machine operator G. Lyalin.

Lesnaya promyshlennost'

December 8, 1988

Page 2 (Excerpt)

First Soviet-Built Hydrodynamic Headbox in Operation at Kondopoga

The paper shortage is upsetting to all who are connected with publishing. It is also of concern to the readers, who are frequently unable to obtain a book they need. One of the practical ways of combatting the shortage is plant modernisation and the production of domestically designed machinery and devices that meet world standards.

In November, the first Soviet-made hydrodynamic headbox was installed and placed in operation at the Kondopoga Pulp-and-Paper Combine. It is, perhaps, the main component of any papermaking unit and on its smooth operation depends improvement in the quality of the web of newsprint.

The Kondopogans are more than satisfied with the new apparatus. Its use has already made it possible to reduce the concentration of the pulp. The newsprint has become more uniform in thickness and more tear-resistant, as well as being more pleasing in appearance.

The device was manufactured by Petrozavodsk machine-builders over a two-year period, which is the amount of time foreign firms would have needed. It was difficult to stay within the allotted time span: the necessary expertise was lacking, for many of the parts had to be machined to a tenth grade of fit. The inner surface of the box was polished to mirror-brightness. This was done to ensure an even flow of the mixture with no piling up of the pulp.

The main difference between the hydrodynamic device and the boxes that have existed until now is the absence of rotating parts. Since there is nothing to break and nothing to adjust in the new unit, this means that all the dimensions, clearances and correlations are established once and for all. The device requires no special maintenance, except that on occasion, special access holes must be opened and the inner surfaces flushed, which takes from 15 to 20 minutes. It is designed to operate at speeds of 550 to 1,000 metres per minute. The higher the speed, the better the priming of the mesh.

The design and manufacturing of the innovation was the work of a creative action group of workers and specialists from the "Petrozavodskbummash" (Petrozavodsk papermaking machinery) Association headed by designer and Candidate of Engineering Sciences G. Slugin.

"One who was especially helpful to us in the manufacture of the box was worker V. Babkin. He made many adaptations from illustrations and verbal descriptions - a mere hint being sufficient for him to grasp what the designers had in mind", said V. Semenov, Chief Engineer of the "Karellesprom" Association and a member of the creative action group.

The new device meets world standards, which has long been the dream of the papermarkers. The skeptics who had argued that without foreign-made cleaning apparatus it would be impossible for this unit to function in our mills have been proved wrong. The first experimental model is operating successfully at Kondopoga.

The demand for hydrodynamic headboxes is enormous and is not that simple to satisfy. But the specialists are saying that with appropriate help from the Petrozavodsk people they will be able to produce as many as two of the new devices in a year.

Lesnaya promyshlennost'

January 10, 1989

Page 1 (Full text)

FORESTRY

Need for All-Round Forest Utilisation Strategy Emphasised

The real resources

Today the efficient exploitation of natural resources is a problem handled by government. At the same time, the most important part of it - forest utilisation - has until now developed haphazardly, or to put it more accurately, extensively. The same can be said of forestry as a whole. This practice has been and continues to be based on the notion that the potentialities of our forests are boundless. It was precisely on this account that back in the thirties, the principle of sustained non-exhaustive forest use was rejected. And the main emphasis began to be placed on lumber camps. The basic resources in fact went to meet the loggers' needs.

Until now, forestry has been financed by the so-called residual principle which, of course, cannot ensure the renewal of forest resources. More and more timber is needed. Lumber camps have spread over vast areas, including the far northern regions with their extreme natural conditions, even though in principle it is possible to obtain the volume of timber the country needs (400-500 million cubic metres) by intensive forestry involving an area of 100-150 million hectares in the western, southern and central regions of the country where the conditions are more favorable.

But this is just one side of the problem. The other side lies in the fact that in most cases, the forest is regarded only as a source from which to obtain timber. However, according to estimates of scientists and specialists, ecological resources have now become preeminent among all types of forest resources. Incidentally, no one in the country is disputing this. But the economic bodies, while acknowledging in principle the

importance of this factor, forget about it completely when the talk turns to cubic metres. Again, the main conclusion is that we have many forests and that they can be cut down at random and in whatever quantity is deemed desirable.

First of all, let's take a look at whether our forest resources are really so limitless? In fact, if one goes by the official statistics then the area of the general forest lands administered by the State (Goslesfond) comprises 1,259.4 million hectares; this includes 810.9 million of forest-covered lands. The total timber stock in the forests is 85.9 billion cubic metres. The Goslesfond lands occupy 56% of the area of the country. They occur in all of the natural zones, including the deserts, tundra regions, mountain ranges, and other ecologically complex territories. Not all forests are important as sources of raw material. Over large areas, the role of the forest is mainly ecological and in them, large-scale commercial logging is prohibited.

The country's timber industry manages upwards of 792 million hectares of forest-covered lands, of which 385.1 million hectares are commercially exploited. The standing volume of timber is 47.1 billion cubic metres and consists mainly (74%) of conifers. The other lands are occupied by bushes and low-productivity stands with a standing volume of timber per hectare of less than 50 cubic metres. Some of the forests are given over to pastures. Forests which fulfill important ecological functions occupy about 100 million hectares. Principal fellings are prohibited in these by law.

So what is the actual industrial potential? The planned coupe has been set at 636.2 million cubic metres, 400.1 million of which are coniferous stands. In addition, timber can be procured in these forests in improvement fellings and in sanitary, rehabilitation and other types of fellings. So, the total volume of potential timber procurement, with all norms and regulations observed, is more than 700 million cubic metres. A further 30 million approximately can be obtained in forests administered by collective and state farms. Nevertheless, the fact is that in 1987 only 339 million cubic metres were procured at principal fellings, which is little

more than half of the planned coupe. Moreover, only 67.8 million cubic metres were procured in improvement and other fellings. About 15 million cubic metres are being harvested in forests worked by collective and state farms and other agencies.

Thus, the existing raw material resource base, when correctly exploited, does meet the requirements of the economy for wood products.

Whom are we deceiving?

The exhaustion factor is particularly noticeable in regions of intensive development of forest resources and is directly connected with the deterioration in their quality. The cause lies in the over-estimation of planned coupes, overcutting in coniferous forests, where the best stands have been cleared, incomplete utilization of the timber of broad-leaved species, and heavy losses of wood in all stages of its harvesting and processing.

The exploitable stocks of the most productive and high-quality forests in the European part of the country, in the Urals, and near railways in Siberia and in the Far East, have been exhausted and can no longer satisfy the country's increasing requirements for wood. Moreover, the undeveloped resource base is situated in the remote northeastern regions. To integrate these resources into the economic cycle will require heavy capital investments.

Such a situation is the result of an imperfect strategy for the development of the timber industry, directed at establishing temporary logging enterprises with a high concentration of fellings and using only high-quality stands. From 1966 to 1986, 666.8 million cubic metres of timber were cut in coniferous forests, exceeding the planned coupes (mainly in the European-Urals zone). In the process, the forests in Karelia and the Kirov, Kostroma, Vologda, Perm' and Sverdlovsk Oblasts were exhausted, and over-cutting continues there. During this period, extraction capacities of more than 230 million cubic metres in volume were closed down at enterprises of the USSR Ministry of the Timber Industry.

In recent years, it is as if the organization of forest exploitation has been frozen in situ. In establishing the most important forestry norm, the planned coupe, the State Planning Commission (Gosplan SSSR), contrary to scientifically validated methods, acted on the basis of current demands for timber and attempted (and is still attempting at present) to raise exploitation norms. Thus, in 1980, at its suggestion a planned coupe was adopted for the 26 Oblasts, Krai and autonomous and Union republics of the European-Urals part of the USSR, the volume of which was not supported by forest resources.

At a number of places, the established scale of principal fellings in potentially exploitable forests has surpassed the mean annual increment indicators: by 86% in the Arkhangel'sk Oblast, by 69% in the Murmansk Oblast, by 56% in the Komi ASSR, by 45% in the Vologda Oblast, by 29% in the Karelian ASSR, and by 22% in the Kirov and Perm' Oblasts. Thus, the existing volumes of mature and over-mature forests suitable for primary conversion and extraction will be used up in only 13 years in Kostroma Oblast, in 20 years in the Kirov and Vologda Oblasts, and in 30 years in the Karelian ASSR! The current maturation rate of the forests, due to the small volume of ripening and middle-aged stands, cannot replenish the volumes of mature forest and sustain utilization at the level which has been attained. Therefore, the time has come to specify planned coupes in all Oblasts and regions and to bring the scale of them into line with existing resources.

The inefficient use of forest resources is in many respects due to the unbalanced state of the plans (State orders). There is an obvious lack of coordination between assignments for forest product deliveries, the resource base structure, and the designated coupe. Thus, in the Krasnoyarsk Krai they are planning to procure 88 per cent of large assortments when only 74 per cent of these are present in the designated coupe. In the Perm' and Kirov Oblasts, the gap is between 8 and 10 per cent. The excessive assignments for supply of large assortments and valuable arboreal species are forcing the loggers to fell the most valuable stands at an accelerated pace, and to leave the low-quality and small timber at clearings, on roadsides, and at lower landings. According to control

inspections using aerial photography, up to 10-15 per cent of the timber marked out for felling is lost at felling sites in the European-Urals zone, 15-20 per cent in the regions of Siberia, and up to 20-25 per cent in the Far East.

So near and yet so far

Although the wood of broad-leaved trees is a major reserve, in the European-Urals part of the country alone about 40 million cubic metres of it are underharvested. These resources are situated close to timber hauling roads, and their development would not require heavy outlays. The only problem is to organize the processing of this timber on a large scale. A government decree envisaged increasing the utilization of soft-wooded broad-leaved timber in the pulp-and-paper industry to 20% of the total volume of raw material consumed by 1975. This decision has still not been implemented. Enormous volumes of timber remain in the stands and are deteriorating in quality. Substantial improvement in the provision of forest products to the economy cannot take place without the extensive utilization of broad-leaved timber. For this, a new strategy of forest use would be needed. Well, this is what is happening: many sectors of the economy prefer to utilize wood of coniferous and broad-leaved species even when they are not required by the specification.

There are also substantial timber resources in the forests of the first group. Even in the European-Urals region their planned coupe is underutilized by 16 million cubic metres. Nine million of these are softwoods. To this I would add that in the forests of all protective categories, including the forest parks, sanitary protection zones for water supply sources, protective stands and others, moderate forestry fellings to remove the current increment can and should be carried out, but only on the indispensable condition that performing such fellings does not run counter to ecological, sanitary or aesthetic requirements. In this way, we could procure at least an additional 20 million cubic metres of timber, including such valuable species as beech, oak, walnut and lime, which are in part, imported into the country.

The main reason for the loss of this substantial reserve lies in the fact that the logging industry is simply not prepared to carry on non-continuous fellings. As they say, so near and yet so far. For many a long year, on the basis of the same concept of the boundless nature of the forest resources, the logging industry has been focusing solely on localised clear fellings. The country lacks the technology for performing selection fellings which would not have a disruptive effect on the ecology. This is particularly true of mountainous regions, where technology based mainly on aerial skidding is needed. We have virtually no cable installations or technologies for either selection fellings or localized clear commercial fellings.

Thus, the shortfalls in the nations's supply of forest products are not due to a lack of forest resources. The latter exist, though they are by no means boundless. The only question is how to utilize them efficiently.

A complex of measures is needed

The forest utilization problem is being widely discussed at present by managers, specialists and scientists. Various ways of solving it are being proposed. Some see the only way out in the creation of integrated forest enterprises. However, as three years' experience shows, their formation within the USSR Ministry of the Timber Industry has so far failed to improve things. Instead of going over to non-exhaustive and sustained use, in 1988 the integrated enterprises in the Karelian ASSR and the Perm' and Sverdlovsk Oblasts increased over-cutting of the planned coniferous coupes, and this threatens the very existence of the enterprises. Logging without a permit is often allowed in them and stands are designated for felling which have not reached the age of maturity; wood is discarded at fellings, undercuts are left; the understory is destroyed and cross-cutting into lengths is done inefficiently. Inspection of the felling sites by the integrated logging enterprises themselves does not uncover all the violations: often it is not done at all. Thus, at the integrated forestry enterprises in the Irkutsk Oblast, the volume of timber discarded in the felling areas has been understated by a factor of three. Improvement fellings are done with serious infractions there. The same picture is

observed at the Kirishi, Volkhov and Oyat' integrated logging enterprises in the Leningrad Oblast. When first and subsequent cleanings were done in the Karelian ASSR, it was found that 120 hectares had been added on at the Ladva logging enterprise and 86 hectares at the Padany logging enterprise.

Thus, the creation of integrated enterprises does not by itself solve the problem. The first thing that needs to be done is to establish scientifically validated norms for forest utilization and removal of the timber by regions and enterprises, in conformity with the existing raw material resources.

Also requiring solution is the problem of improving the forest inventory and making it more objective. The existing system, in which scrub, bogs, tundra and sparsely forested alpine regions covered with intermittent vegetation are classed with the forested area creates an illusory view of the boundless potentials of our forests and when the necessity arises, enables such generalized data to be used for marketing purposes. The accuracy of the forest inventory must be improved. At present, about 40% of our forest land resources were surveyed between 35 and 40 years ago by aerial-visual methods, which were not of high accuracy. Here and there, as repeat survey data have shown, the stand volumes have been overestimated by a factor of one-and-a-half to two. The species composition has been just as incorrectly estimated.

The preparation of precise felling plans which must be strictly adhered to for each raw materials base must become a mandatory condition of correct forest utilization. The marking out of coupes, their forest resource inventory and estimation of material and financial worth should be done by specialists of the All-Union Association for Aerial Photography, Forest Resource Inventory and Forest Regulation ("Lesproekt"), with the participation of the integrated enterprises. Aerospace monitoring of forest resources must be introduced to control the entire process of forest utilization.

No less important are technical considerations: machines that preserve the ecological balance and equipment for the processing of soft-wooded, broad-leaved and not easily marketable timber and waste.

However, it may be that the most important factor, without which the problem of forest utilization cannot be solved, is the attitude to the forest of specialists in both forestry and the timber industry. There is no place for narrow departmentalism here, for what we are concerned with is the most important part of the biosphere, the entire resources of which must serve mankind in perpetuity.

(Article signed by Doctor of Agricultural Sciences V. Sukhikh,
Deputy Chairman of the USSR State Committee for Forests)

Lesnaya promyshlennost'

December 17, 1988

Page 2 (Full text)

Translated by the Secretary of State Translation Bureau,
Multilingual Services Division

Draft Concept of the Effects of Perestroika in Soviet Forestry
Up to the Year 2005

Developing an Economic Mechanism

The need to overcome the stagnant conditions in the industry is the prime reason for the restructuring of economic relations, the decisive departure from the traditionally used spending mechanism, the transfer of the industry to full profit-and-loss accounting (*khozraschet*) and the introduction of management assessments based on end results. For correct control of the economic activity in a forest it is necessary to determine the

financial return on all of the resources being used, rather than on particular types of them. At the present time, it is essentially only the wood that is being paid for, which gives a distorted picture of the economic character of forest use.

An economic system of managing an industry cannot function without clearly established financing. The traditional sources of funding in forestry are: payment for services rendered and resources used; the levying of fines; appropriations from the State budget for nature conservation and other measures.

The foremost resource for meeting the expenses incurred in forestry is the stumpage fee, and this will continue as before. But the existing economic mechanism, which is directed at transferring the whole of the stumpage fee to the State budget and distributing the entire allowable cut among the consumers, separates the benefit deriving from forest use from the interests of the workers' collectives. A new economic mechanism must be created which will protect the interests of the collectives in the results of efforts expended in raising mature timber. It is accordingly necessary for a specific portion of the planned coupe (not less than 15 to 20 per cent) to be placed at the disposal of the logging enterprise collectives. It could be sold on a competitive basis or used for purchasing marketable goods.

An anticipated rise in stumpage fees beginning in 1990 will ensure a substantial increase in forest revenues. This must be converted into a resource that helps the industry to become self-supporting.

Payments for services are the second major source of funds for the economic development of forestry, but they must be collected for all types of services. The most important of these must be the leasing of forest lands to other sectors of the economy, as well as to cooperatives, voluntary organizations and private citizens. It is necessary to ensure the extensive development of leasing arrangements.

For implementing ecological measures affecting more than one industry, e.g. to prevent deserts from forming in the territories of Kazakhstan and the Central Asian republics and establish woodlands there, fortify the bottomset beds of the Aral Sea, etc., special funds must be allocated from the State budget.

Following the example set by a number of foreign countries it is desirable to establish a timber insurance fund and forestry incentive funds, based on revenues from fines, sanctions and penalties.

A profit-and-loss accounting mechanism must be instituted at each of the enterprises. It must be predicated on planned accounting prices, differentiated according to the quality of the end results. The collective contract must be recognized as the leading mode of implementation of such an economic mechanism.

Forestry has the lowest level of capitalisation of all the sectors of the economy. The volume of capital investments in the industry is extremely low and is insufficient for its development.

The industry needs an annual infusion of not less than 10 to 12 per cent of the active portion of the fixed capital. The accelerated development of the machine-building base of forestry is a matter of particular urgency. Our machine-building plants are currently of low capacity and poorly equipped with repair shops. They need to be radically rebuilt.

Reforestation

Every year in the USSR, reforestation is conducted over an area exceeding two million hectares. In the process, on the average up to 2 per cent of the area devoted to forest crops is lost. This includes 1.3 per cent in the European part and 2.6 per cent in the Asiatic part of the country. An undesirable species substitution is occurring over large areas.

A crucial element in the reorganization of reforestation is bound to be forest seed production based on genetic breeding principles. Only the initial steps have been taken in this direction. Breeding centres and heated nursery complexes must be established in order to supply the forestry enterprises with high quality planting material.

A second component in the improvement of reforestation is of necessity achieving a dramatic rise in the quality of the planting material. Every year, between 5.5 and 6 billion seedlings and saplings are grown in this country, a figure which is sufficient for the establishing of forest plantations. At the same time, the industry frequently experiences a shortage of planting material and is often unable to meet the requirements of sub-contractors. Material for planting out should be raised in forest nurseries in which integrated mechanisation ensures the use of seeds from forest seed orchards and seed stands, with only elite sources used in the long term. Mechanised production lines for containerised tree seedlings are to be introduced and by 2005 the output of these will have reached a level of 8 to 9 million seedlings.

At the consumer bases of pulp-and-paper mills, the raising of forests in plantations is to be expanded.

In all, 315 million hectares of the country's agricultural lands are in need of forest shelter. The existing protective stands constitute only a quarter of the quantity needed. Few complete systems have been established. By the year 2005 a total of 3.9 million hectares of protective stands must be planted. This figure includes 660 thousand hectares of field shelter belts. They must be planned in the form of a State order, since prompt sequestering of lands for the implementation of this work is essential.

Reforestation must be linked with forest dewatering and reclamation if the productivity of the forests is to be raised. Here, the problem of repair and restoration of the existing drainage system will be

pushed to the fore. For this purpose, a scientific base will have to be established, as well as a new machinery complex. The volume of forest drainage work must reach a figure of 200 thousand hectares.

Forest Management

The restructuring mechanism in forestry is set in motion by forest management.

The functions of forest management will include the marking out of coupes for principal felling in the forthcoming ten-year period and estimating their monetary worth and material yield.

The Comprehensiveness of Forest Utilisation

Forest utilisation must encompass all types of forest resources: wood, non-ligneous raw material, and the useful properties of the forest. It is necessary to ensure that the maximum quantity of useful end product is derived from each cubic metre of harvested wood, as is already being done, for example, in the Kama timber industry enterprise.

Forestry adaptations of automatic and semi-automatic lines for wood conversion must be devised. These lines will have to be based on serially produced machinery and there must be a phasing in of technology for producing new types of materials such as waferboard.

All possible measures must be taken to expand the use of the nutritional and forage resources of the forests.

Recreation is becoming an important component of comprehensive forest use. The intensification of scientific forest use necessitates that the status of nature preserves and national parks be accorded to certain forests in accordance with the functions assigned to

them, that they be centrally managed and accordingly, that provision be made for the realisation of a unified scientific-technical policy, with the principles of conducting forestry operations in specially protected territories clearly defined.

Preserving the Forests

The current standard of forest protection falls short of future requirements. Moreover, crisis phenomena have been identified in it. In particular, the situation has been sharply aggravated by the use of chemicals. A zone of radioactive contamination has been created as a result of the accident at Chernobyl'.

It is necessary to develop and introduce a system of measures that will ensure the stable functioning of forestry and the use of its products in contaminated territories.

To bring about a dramatic improvement in the standard of forest protection it is necessary to expand the area of the general forest lands administered by the State (Goslesfond), in which regular observations of the condition of the stands are combined with active control measures against forest pests and diseases.

Fire protection arrangements must be instituted in all of the country's forests, based on the formation of a special system for controlling forest fires. This will necessitate extending by the year 2005 the actively protected area of Goslesfond to 1,157,000 hectares, initially by putting a stop to the increase in the number of fires of human origin, and subsequently by ensuring that between 2000 and 2005 these are gradually reduced by 5 to 10 per cent annually, and also achieving a 60 to 70 per cent reduction by 2005 in the amount of damage caused to the economy by major forest fires.

The Acceleration of Scientific and Technical Progress

Although the scientific and technical potential of the USSR State Committee on Forestry (Goskomles) is quite substantial, the results of scientific research have been of little value. In order to increase the effectiveness of science and establish closer links with production, the setting up of scientific-production associations is envisaged. The study of problems relating to the organization and management of the industry in mountainous forests (these amount to 40 per cent of the area of all of the forests put together) will be concentrated at an All-Union Research Institute of Mountainous Forests, to be based at the existing Institute of Mountain Sylviculture. Forest experimental stations will be organized in regions bordering the Aral Sea, in Western Siberia and in zones situated near the Baikal-Amur Trunk Railway.

The status of the experimental stations will be more precisely defined, and they will be converted into scientific-production sub-units engaged primarily in the growing of planting material, including Pinus sibirica, with the emphasis on breeding, and in the introduction of new production technologies.

End results will form the basis on which the work of the research institutes will be assessed. Of special importance is the rapid restructuring of the research institutes and major repair depots in the industrial mechanisation field.

The main shortcomings of scientific research in the mechanisation area are the extended deadlines for development of new machinery, since these lead to only slight increases being achieved in labour productivity. The working up of new ideas continues to be of low quality and there is a lack of interest on the part of scientists in achieving superior end results.

In view of this it is intended to transfer to profit-and-loss accounting and self-financing all of the scientific institutes conducting research on the mechanisation of the industry, and to introduce a system whereby payment for work done at the institutes will be dependent on the

deadlines for development being shortened and fundamentally new solutions found which are in every way as good as the best foreign analogues. Competitions will be held on the drawing up of agreements for the development of new machinery and equipment with pre-set characteristics ensuring a 2.5 to 3.0-fold increase in the productivity of labour in the industry by 2005.

The design bureaus will accept for working up only those scientific proposals which guarantee a major socioeconomic benefit and satisfy stringent ergonomic and ecological requirements. It is important to ensure that the machinery produced is competitive on world markets, preeminently in the COMECON countries. It is necessary to institute a system of financial awards for inventors of new technology whose efforts results in machines of increased reliability that are less material-intensive and energy-intensive.

The industry is to be computerised.

A significant expansion of external economic and scientific and technical ties is envisaged, as well as a transition from preeminently trading relations to a broader based cooperation with the Socialist countries in the production field. Direct links will be formed between the enterprises and the research institutes, and joint enterprises will be created.

The exports structure is to be improved through sales of converted wood and non-ligneous forest products on the external market.

The Social Sphere - Priority to be Given to Development

Social conditions in the industry are in dire need of improvement. In many indices, meeting the needs of forestry workers is 3 to 7 times below the national standard. It is for this reason that people are leaving the industry.

It is anticipated that priority will be given to developments in this sphere, in order that the standard of living of forestry workers will conform to the social norms set by USSR Gosplan. The average monthly wage will have to be increased to 370-380 roubles by 2005.

A radical improvement will be needed in the personnel recruitment situation. By 2005, at least half of the key personnel will be graduates of technical trade schools and training centres.

Under the conditions imposed by profit-and-loss accounting, the mechanical control of production based on the notion "order - execution" will become unacceptable. Between 13,000 and 14,000 foresters will need to be retrained, so that they can engage in original work which will provide for the rapid economic development and technological improvement of the industry.

In the labour protection field the prospects are that industrial injuries and sickness will have decreased from the present level by at least 20 to 25 per cent by 1995, by 30 to 40 per cent by 2000 and by 40 to 50 per cent by 2005, and that the maximum possible reduction will have been achieved in the number of workers engaged in heavy physical labour. The use of female labour in heavy manual work will have been eliminated.

(Draft concept prepared by the USSR State Committee for Forestry, with readers invited to submit comments and actively participate in the discussion sessions).

Lesnaya promyshlennost'

January 5, 1989

Page 2 (Excerpts)

Procedure for Vegetative Propagation
of Schrenk's Spruce Developed

Co-workers of the Forest Culture Department of the Kazakh Agricultural Institute have learned how to grow second-generation spruce from the stumps remaining after felling. The procedure for fast propagation of Schrenk's spruce, as this species of conifer is called, opens wide vistas for the foresters. The scientists have discovered a way to activate the capacity of this tree for vegetative propagation.

Lesnaya promyshlennost'
December 17, 1988
Page 3 (Full text)

APPOINTMENTS

The Council of Ministers of the USSR has appointed Valentin Ivanovich Matveev as Deputy Minister of the Timber Industry of the USSR and Head of the Chief Directorate of Forestry.

The Presidium of the Supreme Soviet of the Ukrainian SSR has appointed Vasilii Fedorovich Kostenko as Minister of the Timber Industry of the Ukrainian SSR. He replaces I. I. Grunyanskii, who is retiring on pension.

Lesnaya promyshlennost'
December 3, 1988
Page 3 (Full text)

The Presidium of the Supreme Soviet of the Byelorussian SSR has appointed Leonid Semenovich Kravtsov as Minister of the Timber Industry of the Byelorussian SSR.

* * *

The Presidium of the Supreme Soviet of the Lithuanian SSR has appointed Kazimeras Boleslovovich Minetas as Minister of the Timber Industry of the Lithuanian SSR.

* * *

The Presidium of the Supreme Soviet of the Estonian SSR has appointed Sergei Fedorovich Sinani as First Deputy Chairman of the State Committee for Industry in the Estonian SSR and as Minister of the Estonian SSR.

Simultaneously, he is appointed Director of the Territorial-Production Association "Estlesprom".

Lesnaya promyshlennost'

December 17, 1988

Page 3 (Full text)

ENVIRONMENT

On the Brink of Disaster...

(Notes from an All-Union Conference on Ecology)

The chief engineers of enterprises belonging to the wood-chemistry complex met last Saturday in the assembly hall of the USSR Ministry of the Timber Industry to discuss the ecological problems in their respective fields. There has been a sizeable accumulation of these and solving them has become a matter of urgency. There was some straight talk about this from V. K. Gusev, Deputy-Chairman of the Council of Ministers of the USSR and Chairman of the Council's Bureau for the Wood-Chemistry Complex, who gave the opening address.

Also taking part were F.T. Morgun, Chairman of the USSR State Committee for Nature Conservation (Goskompriroda), and representatives of the USSR State Planning Commission (Gosplan), the USSR Academy of

Sciences, the State Committee for Science and Technology, the USSR Ministry of the Chemical Industry, the USSR Ministry of the Timber Industry, the USSR Ministry of the Biomedical Industry (Minmedbioprom), the USSR Ministry of the Oil Industry, the USSR Ministry of the Fertiliser Industry, the USSR Ministry of Health and the USSR Ministry for the Utilisation and Control of Water (Minvodkhoz). The industrial activities of enterprises belonging to these ministries have resulted in some regions of the country being on the brink of ecological disaster.

During the last 15 years there have been plenty of resolutions on the subject of nature conservation, with considerable sums of money set aside for these purposes. Specialists estimate that total disbursements on nature conservation during the last decade have approximated to 60 billion roubles. What is happening? Why have these huge appropriations not had the anticipated effect? Why is it so difficult to breathe in Bratsk and Angarsk, Kemerovo and Novokuznetsk, Surgut and Salavat, Ufa and Volgograd, and dozens of other industrial centres? Why is it impossible to drink the water from hundreds of rivers and streams without detriment to one's health, and why are vast areas of extremely fertile farmland being irretrievably lost?

A few figures will help to complete the picture. More than 60 million tonnes of harmful substances are discharged into the air every year by a variety of industrial sources and by motor vehicles. At almost all of our industrial centres the sanitary norms for air pollution are being exceeded. For in more than a hundred towns with a combined population of 50 million the gaseousness of the air is often ten times higher than the maximum permissible level. And what is happening to the water? In 1986 alone, hundreds of millions of cubic metres of raw sewage were discharged into the rivers, lakes and seas. How serious this is can be judged from the fact that a single cubic metre of untreated effluent is capable of ruining 60 cubic metres of pure water.

The reasons will long have been known to all: antiquated production technology, poor performance of purification plants and automated monitoring systems or the lack of them, and what can only be

termed gross carelessness. To this must be added the improper handling of toxic substances, which frequently leads to leakages, sudden discharges and contamination of soil and water. Elementary observance of the prescribed regulations will reduce pollution levels by 25 per cent, said E.A. Sizov, Head of the USSR Ministry of the Timber Industry's Directorate of Nature Conservation and Water Use, in a speech delivered at the conference.

V. K. Gusev came up with an astonishing figure: no less than 90 per cent of all harmful emissions are the result of lax discipline on the production line. Last year, as a result of errors in calculations by the engineering services, the Astrakhan gas condensate complex discharged about a million tonnes of sulphur dioxide into the atmosphere. How could the Volga and its fish stocks not have been affected by this?

The unwarranted rush to build giant enterprises has led to an excessive concentration of industry in many regions and to an unacceptable stressing of the environment. The outlook for nature-intensive (and hence energy-intensive) production is clearly bleak. The lion's share of our petroleum, gas and coal is being used expressly for the generating of electricity. The extensive development of the economy, that is, putting all of the emphasis on volumes, kilowatts, cubic metres and tonnes must be relegated to the past. Speaking in Tyumen', M. S. Gorbachev said that we shall not and cannot support those directors who are orientating themselves by outmoded attitudes and outdated norms, and associate increases in growth rates of production with the acquisition of additional material resources.

For now, instead of counting on the final product directly meeting the needs of the population, the emphasis will be on the intermediate product, especially in the extractive industries, that is, on the tonnes of coal and oil, cubic metres of timber and gas, and so on. This will continue so long as the environment is in danger: for the economy will "feed" on itself, destroying without any benefit the sphere of our habitation. At the same time, behind every instance of Nature being

violated there stand real people - the scientists, builders, administrators, planners, and members of State committees accepting installations in "truncated" form - with unfinished purification plants. And finally, there are the people who work in these enterprises - all the way from the director to the labourer. That is why what was said at the conference about the need for maximum firmness when calling for interferences with production cycles at enterprises of the wood-chemistry complex sounded so topical. Here also the most important task becomes the training of qualified personnel, for incompetence at times leads to serious damage being sustained with an irreplaceable loss to the environment. Consider the cost of the damage at Cherepovets alone, where almost a ton of concentrated sulphuric acid has entered the river!

At large enterprises we evidently need our own kind of monitoring, for then the actual ecological situation will be brought to the attention of the workers and the administration. The lack of such information, shortages of measuring equipment, and irregularity in the monitoring process itself will inevitably have some influence on the effectiveness of nature conservation activity.

All these measures - especially the accelerated construction and rebuilding of purification plants - need to be implemented immediately, for it will be five to seven years before any radical changes can be expected, by which time waste-free technology will have replaced the system now in existence at many enterprises, and new methods will have been found and introduced for purifying and utilising the waste products of this evil of large-scale chemistry.

For the time being, however, as was mentioned by V. K. Gusev, it is necessary to foster the growth of the chemical industry while ensuring strict observance of all ecological norms. Production for export must be given special emphasis, for this will provide the funds for purchases of sophisticated equipment, and accelerate the rebuilding and technical reequipping of the enterprises. In a number of ministries - and this

includes the Ministry of the Timber Industry - in most respects they will have to rely solely on their own resources, since they will soon be making the transition to self-financing through earnings of currency.

From the outset of the next Five-Year Plan the wood-chemistry complex must introduce only ecologically clean technologies, and by 1995 none of the production processes must be causing damage to the environment. Not an easy task, to be sure, but judging from the mood of the participants in this unusual conference, it is one that is fully achievable.

Lesnaya promyshlennost'

December 20, 1988

Page 2 (Full text)

Non-Governmental Ecological Fund Established in Moscow

Restoring harmony between man and the environment and striving to ensure that industry and power engineering projects, the extraction of mineral deposits and the burying of wastes will not destroy the biosphere -- these and many other goals are confronting a new non-governmental, voluntary organization: The Ecological Fund of the USSR. It has been founded in Moscow on the initiative of voluntary organizations concerned with problems relating to ecology, and will accomplish its activities in close concert with the USSR State Committee for the Environment (Goskompriroda).

* * *

"The urgency attaching to the establishment of such a Fund is obvious," said its Chairman, Professor Eduard Girusov. "The ecological situation across the country is far from satisfactory. For example, disputes over problems affecting the Aral Sea, the Baltic coast and Baikal continue to be unresolved. In the summer of 1988 we had to close down a number of traditional recreational centres. There has been a sharp deterioration in

the state of the water in the Gulf of Finland. As before, nuclear power stations are continuing to be built in densely populated areas. The fertility of the soil has started to decline and the chernozems have already begun to be irrigated. In our view, a national Ecofund is essential, since solutions to many of the problems will necessitate funding on a substantial scale. The first thing we should like to do is to begin publishing a special independent journal, in which wide circles of the scientific community will be invited to collaborate. Ecological information often touches on the interests of millions of people. To conceal it is a crime. Our main task today is the engendering and extensive propagation of a modern ecological world outlook."

Doctor of Philosophical Sciences E. Girusov, Doctor of Biological Sciences N. Reimers, Doctor of Juridical Sciences O. Kolbasov and the other Soviet scientists who initiated the setting up of the Ecofund are hoping that the activities of the new voluntary organization will be conducive to the unification of all strata of society in the interests of nature protection.

The scientists envisage its role as the conducting of an independent and highly qualified evaluation of new proposals for parks and park zones, and the assessment of territories where an ecological disaster has occurred. It is not by accident that Yu. Maksimenko, the Deputy-Head of the USSR's Main Ecological Commission of Experts, has been elected to the Board of Governors.

It is the intention of Ecofund to promote the development of ecologically favourable trends in science and technology, primarily of resource-saving technologies and the utilisation of industrial wastes, and to foster searches for alternative sources of energy and ecologically harmless methods of protecting plants and animals.

The Ecological Fund of the USSR will channel a substantial proportion of its funds into the formation of interdisciplinary tactical ecological assistance teams (TEAT). Qualified representatives of various branches of science will serve in them. The teams will travel to sites where ecological problems are arising and make recommendations for their solution.

Included among the plans of the new non-governmental body are the following: the allocation of funds for the establishment of ecologically clean enterprises and transportation facilities (exhaust gases are currently the main source of air pollution), and the financing of parks, nature preserves, tourist attractions and recreational areas, along with the appropriate services and amenities. It is intended that eventually, major ecopolicies and entire ecoregions will be established, in which harmony will be achieved between industry, human habitation and Nature.

The entire programme of the Ecological Fund of the USSR will be financed by voluntary donations from Soviet and foreign citizens and organizations. These are now being accepted at all branches of Zhilsotsbank of the USSR, in account No. 706801.

Lesnaya promyshlennost'

January 7, 1989

Page 1 (Full text)

Levels of Air and Water Pollution from Segezha Paper Mill Rated Intolerable

In late November an ecological movement "For Survival" was started in Segezha. Its organizers included prominent mill workers, physicians, engineers, teachers and journalists.

Why did it come into being? In the town it has become literally impossible to breathe. Every day the local paper mill discharges more than 150 tonnes of harmful substances into the atmosphere. To name but a few of them: methylmercaptan, hydrogen sulphide, chlorine, sulphuric acid, turpentine vapours, demethylsulphide.

Methylmercaptan alone is being intensively "cooked" at 56 sites, with the result that the maximum permissible norms for its concentration in the air are being exceeded almost 10,000 - fold! Its effects are even being felt 70 kilometres away from Segezha.

Within a radius of 30 kilometres our entire countryside reeks of hydrogen sulphide. There is 24 times more of it in the atmosphere than is permitted.

But this is by no means all. In the air which the Segezhanians breathe one notices fluorine from aluminum production, and soot and coal dust from the sawmill and woodworking combine.

In September, for example, accompanied by the directors of the logging enterprises who had arrived at Segezha for their next Council meeting, we paid a visit to the by-products shop of the paper mill. Almost everyone immediately caught their breath.

The director of the mill was not in the least disturbed by this. He even tried to pass it off as a joke. But joking here would be inappropriate. For the people working in that shop are inhaling gas-filled air every minute. Physicians have stated that even low doses of methylcyanide are enough to cause headaches and coughing spells. At higher doses, it may become impossible to breathe at all.

Well, what about the Segezhanians? Could they really have become acclimatised to the point of being unharmed by the mixture of chemicals they are inhaling? Judge for yourselves: in the town there is the highest percentage of sickness accompanied by losses in working capacity in the whole of Karelia, the highest incidence of infant mortality and a progressively worsening situation as regards tuberculosis and oncological diseases. I have no hesitation in saying that in Segezha today there are virtually no healthy people.

No less dangerous to human health and all of life are the industrial effluents from the paper mill. Into potable Lake Vygozero, from where water is obtained for just about all of the communities in the area, one sulphatic soap is frequently dumped in concentrations 1,000 times higher than the set norms. Moreover, the paper manufacturers and woodworking people are pouring resins, petroleum products, lignine, phenols and turpentine into the lake.

In an attempt to quell the sudden fears that have arisen among the population, remove the poison from sight and create a semblance of wellbeing, the paper mill and the USSR Ministry of the Timber Industry decided to install a deep-seated outlet for industrial effluents in the Nizhnii Vyg River. However, the residents of surrounding villages and the town of Belomorsk quickly recognised this cunning manoeuvre and demanded that the republican authorities immediately prohibit the building of it. Otherwise, not only would the river be ruined but also Sorokskaya Bay on the White Sea - the habitat of salmon and White Sea herring.

The emergency that has arisen at Segezha is the fruit of a long-standing skepticism about environmental conservation. Taking advantage of the absence of control and lack of openness, at the enterprises there has been repeated postponement of the installation of nature conservation facilities, slow progress in building those already planned, with the existing ones allowed to break down. At the paper mill, for example, only 18 of the 205 sources of atmospheric pollution have been supplied with gas scrubber units.

Unfortunately, neither the municipal authorities nor the sanitary services of the town and the autonomous republic have taken a stand in this matter. Despite the people's complaints, they have not closed so much as a single workshop or a single noxious factory. This despite all the heart to heart talks on moral themes.

Is there a way out of the situation? Can the shutting down of an enterprise be avoided? Certainly. In the first place it is high time to abandon sulphate cooking of the pulp and convert to the ecologically clean production technology, namely, oxygen cooking. Its introduction has already been delayed by USSR Ministry of the Timber Industry for more than ten years.

Secondly, gas scrubber units need to be purchased and installed at Segezha right away. Given the 80 millions in profits earned by the papermakers, the expenditure of two to four millions on their installation is

not only possible but urgently necessary. Waiting around and economising on people's lives is intolerable. The situation at Segezha today is highly volatile and calls for concrete and decisive action.

Lesnaya promyshlennost'
22 December 1988
Page 2 (Slightly abridged)

In an attempt to quell the protests that have arisen among the population, the authorities have decided to install a deep-seated outlet for industrial effluents in the Nizhni Vyg River. However, the residents of surrounding villages and the town of Belomorsk quickly expressed their disapproval and demanded that the republican authorities prohibit the building of it. Otherwise, not only would the river be ruined but also Sorokskaya Bay on the White Sea - the habitat of salmon and White Sea herring.

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