NOTE

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

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

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

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

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.


Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.
EAST EUROPE REPORT
ECONOMIC AND INDUSTRIAL AFFAIRS

CONTENTS

INTERNATIONAL AFFAIRS

Briefs
Yugoslav Crankcases to USSR 1
Yugoslav Units for Soviet Atomic Power Plants 1
Yugoslav Reduction Gears to USSR 1
Yugoslav-USSR Trade 1

BULGARIA

Smolyan Okrug Council Modernizes Small Enterprises
(Mikhail Kulishev; BULGARSKI PROFSOYUZI, No 6, 1985)........ 2

Sad State of Housing Industry Described
(Zoya Zakharieva; ANTENI, 5, 12 Jun 85)...................... 5

Poor Quality of Locally Made Refrigerators Deplored
(Virdzhiniya Stefanova; OTECHESTVO, 25 Jun 85)............. 15

Economic Use of Raw Materials, Energy Urged
(Editorial; RABOTNICHESKO DELO, 1 Jul 85).................. 18

Editorial Calls for Rapid Implementation of Inventions
(RABOTNICHESKO DELO, 1 Jul 85)............................... 21

Comment on Efforts To Improve Quality of Shoes
(RABOTNICHESKO DELO, 4 Jul 85)............................... 24

HUNGARY

New, Joint Interest Enterprise Held Exemplary
(Katalin Bossanyi; NEPSZABADSAG, 24 Jun 85)................. 28
POLAND

Prospects for Polish Debt Payment Reviewed
(Jacek Mojkowski; ZYCIE WARSZAWY, 10 Jul 85)................. 31

Latest Issue of Economics Society Journal Reviewed
(ZYCIE GOSPODARCZE, No 27, 7 Jul 85).......................... 35

Aircraft Industry Exec on New Products, Growth Plans
(Jan Czerniecki Interview; SKRZYDLATA POLSKA, No 26, 30 Jun 85)......................................................... 37

Factory Accountant Interviewed on Wage Increases
(Warsaw Television Service, 26 Jul 85)............................ 41

Chemical, Light Industry Reports on Progress
(TRYBUNA LUDU, 28 Jul 85)........................................... 43

New Energy Lines Open in Southern Poland
(TRYBUNA LUDU, 28 Jul 85)........................................... 45

ROMANIA

Shortcomings in Quality of Protective Equipment for Workers
(Claudia Dumitrescu; MUNCA, 21 Jun 85)............................ 46

Need To Modernize Structure of Economy Stressed
(Constantin Grigorescu; ERA SOCIALISTA, No 13, 10 Jul 85).. 50

Manpower, Electric Power Shortages Plague Irrigation Efforts
(AGRICULTURA SOCIALISTA, 8 Aug 85)............................ 59

YUGOSLAVIA

Problems in Tax Reform, Budget Discussed
(T. Dumezic; EKONOMSKA POLITIKA, 15 Jul 85)..................... 61

Tax Discrimination Against Private Sector Deplored
(PRIVREDNI PREGLED, 3-5 Aug 85)................................. 67

Benefits of Large-Scale Private Versus Socialist Enterprises
(Vladimir Gligorov; EKONOMSKA POLITIKA, 15 Jul 85)........... 70

Data on Irrigated Land Areas as of 1981
(EKONOMIKA POLJOPRIVREDE, No 3, Mar 85)....................... 72

Nonferrous Metallurgical Plans to Year 2000
(EKONOMSKA POLITIKA, 24 Jun 85)................................. 74

Excessive Personal Earnings in Oil Industry
(Milorad Urosevic; PRIVREDNI PREGLED, 19 Jul 85).............. 76
BRIEFS

YUGOSLAV CRANKCASES TO USSR—The "Ivo Lola Ribar" Machinery Industry in Belgrade has signed an agreement with a buyer in the USSR to deliver 1,000 tons of castings. By the end of the year it will be delivering 26 crankcases per month, valued at a total of $1.5 million, to this buyer. [Text] [Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 15 Jul 85 p 34]

YUGOSLAV UNITS FOR SOVIET ATOMIC POWER PLANTS—The "Jugoturbina" enterprise in Karlovac will deliver to its business partner in the USSR another two diesel electric power units for atomic power plants, on the basis of an agreement with "Atomenergoeksport" in Moscow. The units to be delivered have [a total of] six diesel engines, and the "Jugoturbina" factory will export them to the USSR in the second half of 1987. At the beginning of this year "Jugoturbina" signed a contract with the Soviet partners on delivering three diesel electric power units. On the basis of this contract two diesel units with six engines will be delivered during 1986, while one unit with three engines will be delivered in 1987. In this way advancement in production has been achieved, because these are specific high-quality products. The workers in the "Jugoturbina" diesel engine factory and in the "Rade Koncar" generator factory in Zagreb have designed and produced the generators and units consisting of three 6,000-kilowatt diesel engines with 500 revolutions a minute. [Text] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 18 Jul 85 p 2]

YUGOSLAV REDUCTION Gears TO USSR—The conveyer and installation plant of the Djuro Djakovic Combine in Slavonski Brod has signed a contract with the Soviet "Metalurgimport" for export business in 1986 and 1987. Next year the combine will export $7 million worth of goods, especially reduction gears and geared couplings, including 6.5 ton reduction gears. The plant has produced over 200 reduction gears for this Soviet buyer over the years. At the same time negotiations are underway for new deliveries of $4 million worth of reduction gears and geared couplings to this Soviet buyer. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23 Jul 85 p 2]

YUGOSLAV-USSR TRADE—As of 26 June 1985 47 percent of the 1985 trade volume had been achieved ($1.387 billion in Yugoslav exports and $1.617 billion in Yugoslav imports). Also by the end of May 96 percent of Yugoslav export business was contracted for and 94 percent of the anticipated import business. [Excerpt] [Belgrade PRIVREDNI PREGLED in Serbo-Croatian 17 Jul 85 p 2]
SMOLYAN OKRUG COUNCIL MODERNIZES SMALL ENTERPRISES

Sofia BULGARSKI PROFSOYUZI in Bulgarian No 6, 1985 pp 10, 11

[Article by Mikhail Kulishev: "High Profit for Small Enterprises"]

[Text] During recent years, economic organizations and administrations, the tendencies of material production, trade, and other sectors have paid special attention to the construction of small enterprises, workshops, and other sites with a limited capacity in the Mid-Rhodope Kray; these have been primarily oriented toward the production of mass consumption goods and to expanding domestic services to the populace.

The movement made in this direction and activity were responsible tasks set by the 12th Party Congress. In accordance with the party's requirements, the Executive Council of the Okrug People's Council in Smolyan and the economic organizations and enterprises in the okrug carried out significant work in expanding the production base, in the reconstruction and modernization of existing capacities, and in opening up new worksites and new industrial productions.

A very important precondition existed in the okrug that helped in carrying out this task. We are talking about the successful realization of the 43rd decree of the Central Committee of the Bulgarian Communist Party and the Council of Ministers from 1970 on the rapid socioeconomic development of the Smolyan Okrug. Thanks to this, in nearly ten years, workshops and branches of larger enterprises for the textile, knitwear, foodstuff, reprocessing, and other industries were built and came into use at some 30 border villages.

At the same time, according to a program worked out by the Okrug People's Council, at another 36 villages production activity was organized, based on local industry, at existing economic and other sites, which were essentially reconstructed and modernized. An additional 4 thousand jobs were opened up at them. With this, the volume of industrial production in the Okrug increased to around 30 million leva.

Gathered into workshops, shifts, and brigades at the Katya Vancheva, Kostadin Filipov, and Shina Angreeva factories, and their workshops and branches in the distant villages of the okrug, the women and a not
insignificant portion of the men were led away from the stultifying atmosphere of familial and domestic conservatism and religious fanaticism, which had been planted deeply in the lives of Rhodope villagers by the 5-century-long slavery of the Ottoman Empire. The small and mid-sized enterprises built stopped the migration processes and the tendencies to move around. Conditions were created for raising the living standard. Opportunities for providing public services and better sanitation for the villages, for improving road and transport links with the centers of the village systems, with the okrug city, and the interior of the country expanded.

One can say that the program for building small and mid-sized enterprises, developed and affirmed by the Okrug People's Council in 1984, ensures the expansion and the lift in quality, so that it is better than previously. Thus, the new directions of the party and the 97th resolution of the Office of the Council of Ministers, of July 1984, found the okrug prepared to a certain extent, with a fund of experience.

What is contained in the program adopted for the construction of new production lines and small enterprises, which the Okrug People's Council is carrying out through the Bulgarian Industrial-Economic Association (BIEA) in 1985 and the Ninth 5-Year-Plan?

The program foresees building 14 small enterprises, workshops, and technological lines. Nine of them have been approved by the Council of Ministers and construction of some of them has already begun; the realization of the remaining five is in the process of being established.

Refined nomenclature for the new capacities and technological lines shows that the basic goals are to attain even greater variety in the production of mass consumption goods, and to realize a drastic improvement in the quality indicators of the newly produced items. The planned technological lines and the equipment, which has already arrived and been distributed according to local needs, are the fruit of contemporary scientific-technical thinking, and the fashionable and luxurious nature of the goods being produced is a guarantee that the aims and tasks are real, that they will be achieved by the stipulated deadlines. The Purvi May Labor Productive Cooperative in Smolyan has already built a new building, in which the production of various attractive models of children and young people's clothing will be organized. The task posed for the Sluntsse Industrial Enterprise, for the construction of a new assembly line and the production of women's dresses, skirts, and blouses, is being carried out. It is estimated that production will take place quickly and will be reorganized for fashion and seasonal tendencies and with constantly growing taste for the consumers.

The new workshops of the Katya Vancheva Factory in Dospat and the Shina Andreeva Factory in the village of Banite, which are being equipped with the latest model technological lines for the production of luxury sportswear, have the task of responding to the growing desire for these clothes in the Central Rhodopes, the site of domestic and international tourism. This is
the tendency of the new technological lines of the Rodopa Enterprise in Chepelare for the production of fine women's underwear, of the workshop for the production of licensed soft drinks for the Okrug Cooperative Union, of the small sites which the Tyutyuneva Promishlenost State Enterprise in Smolyan is installing, and of the Instrumental Equipment Plant in Zlatograd.

With this new style, an opportunity is created, with a relatively small capital investment, to apply rapidly and effectively the achievements of science and technology from here and abroad, to increase rapidly the production of goods in demand, and to raise dynamically the export possibilities of the producing enterprise.

The data reported show that with an investment of 17.5 million leva for small and mid-sized enterprises, around 900 new jobs will be created, and they will create an annual commodity production of 42,350,000 leva. The period for implementation of the new small capacities is foreseen as 11.3 months, and the average period for starting up the sites is 23 months. Extremely significant is the fact that based on the planned level of the okrug, the productivity per engaged person, measured by total industrial output, will increase 4.45 times, the social productivity of labor by a factor of 2.42, and the profitability of 100 leva of basic funds will increase.

The successful realization of the program, carrying out everything that is connected with it, requires comprehensive influence on the units and organizations which are working for its realization. Efforts and the attention of the okrug section of the BIEA and the Okrug People's Council are needed, as are those of its specialized organs, and a number of other okrug and central administrations which have some bearing on the fulfillment of this great task, which has political, economic, and social resonance.

12334
CSO: 2200/179
SAD STATE OF HOUSING INDUSTRY DESCRIBED

Sofia ANTENI in Bulgarian 5, 12 Jun 85
[5 Jun 85 pp 1, 8-9]

[Article by Zoya Zakharieva: "Rage At Someone Else's Fault"]

[Text] "The comprehensive approach calls for a systematic policy of enhancing the level of settlements and the residential environment in which the people restore their forces, develop and improve themselves and raise and educate the growing generation." (From the party's long-term quality improvement program)

In its issue No 18 for 1984, ANTENI published under the overall heading "What Else Is Plastering Unable To Conceal?" the articles "Before Laying the Foundations," "Compromised in Front of Everybody," "Closing the Barn Doors After the Horse Has Escaped" and "Are We That Rich That We Can Build Cheaply?" They discussed the quality of housing construction, a problem which affects millions of citizens in our country. Once again the editors are raising this exceptionally important social problem by analyzing the difficulties, errors and weaknesses from a variety of viewpoints. We hope that our numerous readers will respond with opinions and suggestions by new house occupants, construction workers, engineers, architects and investors....

Window Bolts

The door to the apartment got stuck. My husband pushed with his shoulder and the lock cracked. Well, this was not the best possible "welcome" but everything would settle with time. The metal frame had leaked rust on the carpets. We shall find a solution. However, we are not about to change the wallpaper with a latex coating, for this would be quite a spackling job: the roughness of the panels is showing beneath the pink coloring. Perhaps in contrast to the bright wall colors, the carpet was dark. Who knows why? There could not even be a question of any harmony. We closed the window in the hall but by the time we returned from the room where a radiator had not been installed, the window had opened by itself and snow was drifting inside. One could put a finger between the door and the frame of a kitchen closet.
One of the doors was half-loose while the other could be pulled open only with complex maneuvers.

Frankly speaking, I am not surprised in the least. I have seen even worse undulating walls and the height of the ceiling to vary on all four corners. Structural steel sticks out of twisted ceilings. Floors are slanted and linoleum and carpeting do not fit. It is common for carpets to overlap. The pipes of the steam radiators have been installed at different angles as are some of the doors. Balconies retain water. Sinks are not level and porcelain tiles and mosaics have broken edges.... This is what shows up immediately. Later the other, the concealed defects, show up, such as cracked panels, joints, monolithic cast units, balcony parapets, unglued washboards, door clearances.... The panel walls reek of moisture and mold ("condensation" is the name given by specialists). Everyone knows what leakage means and hopes that it will not occur in one's house. Is there anything lacking in a new Bulgarian house? What there is, above all, is proper joints.

Replies From the Construction Site

Why are we sometimes late? It is either that construction areas have not been provided or that the land has not been cleared from old underground engineering systems. The moment we start we come across a steam pipe, let us say. We stop and before the designer has made his decision we have fallen behind 1 or 2 months, after which we have to rush. At the Mladost-1-A residential district, the Inzhstroy DSO [State Economic Trust] delayed us by more than 6 months. We enter such so far undeveloped areas without electricity, water or roads. How can a tower crane operate without electricity? How can we cast accurately in the dark? We become squeezed by the plan and the result comes out as uneven walls, which are also due to the quality of the casings and the concrete. We are frequently issued standard layouts only, not specifically adapted to the site. This is another reason for mistakes.

We are given the monolithic part (the foundations) of a panel building in which the basement foundations have been shifted, the walls are uneven, and the panels are without connecting facilities.... Ground construction documents are received with delays. Then the difficulties with the panels begin. We, assembly workers, are accused of setting them at an angle. But then how can a trapezoid connect with a rectangle? Other panels are convex, either on the side or on the surface. The floors are sunk. Some of the panels are too long or too short, with misplaced pins and rough edges. The armature pokes out because it has not been covered with concrete. Cracks develop in various directions. Door and window frames are twisted. The metal casing for the doors is not corrosion proof.

We request one type of panel but receive something entirely different. We pile them up in the warehouse so high that they begin to crumble. The concrete is not delivered on time. By the time it has arrived after lunch, we can pour half of it and throw the other half out.... The sand is filled with impurities. Occasionally, we run short of cement. One cannot build a high structure without installing lightning rods which, until recently, were lacking.
Very rarely are designs for large-scale casing, based on the NOE system, complete. Some blueprints are always late. Furthermore, they come as a package, at which point the foreman must begin to freelance. The investor supervises but it is as though he does not care. He checks.... Meanwhile, he leaves the question of quality last, for the acceptance commission. Supplies of concrete are not steady. The concrete is either too thick (does not vibrate properly) or too thin (hardens with difficulty).

Sometimes it seems as though an entire person could slide through a gap or a hole. This may sound exaggerated but it is a fact. We need double the amount of lime than stipulated if we are to plaster over everything. These iron rods which stick out in the walls are also blamed on the "forgetfulness" of the installation workers. The fact that we are a brigade in charge of finishing operations does not mean that we must correct the faults of those who have done poor work before us. We have enough concerns of our own. We have difficulties with the platforms for outside plastering. Since we have no such platforms, we are forced to use pipe frames, the installation of which makes us lose another 10 days. Kitchen cabinets are delivered in cardboard boxes and come out cracked and twisted.... The selection of wallpaper is very small and comes out in a variety of color tints. The carpets are somewhat better in quality but their colors are poor. The porcelain tiles are twisted and the worst part is the quality of window and door frames. The glass panels make us see double.

The people who enter a new residential block grumble at the foreman who built their home. To a certain extent, they are justified; to the extent to which the foundation, installation and finishing workers have worked carelessly. In addition to neglected labor and technological discipline, there is a dependency on procurements and the result of hasty plans and blueprints....

Labyrinth Before Building on Sofia Territory

The people at the warehousing-assembling and repair base for large-sized casings, which services the entire Sofstroy Trust, manufacture casing sets and wonder how to carry out some projects. Their individual elements come from the Casing Equipment Combine in Plovdiv. There are no particular difficulties in this operation but the rhythm of deliveries is disturbing. It leads to overstocking and cutting or splicing (in order to obtain the precisely needed shapes). From their viewpoint, the Plovdiv people as well are right, for they get from Sofia, in January, orders for the first quarter only, rather than for the entire year (the latest example is that of 1985). In an effort to unravel the tangle, a sudden change in planning is made. Someone somehow decides that Block No 1 becomes Block No 10 which, in turn, requires a new scaffolding set. Up to this point, the trouble is minor. The major trouble is caused by the plywood, which swells, peels off and breaks down from the moisture. A while back a claim was filed with the Stara Planina DSO, after which nothing was received for 3 months....

Engineer Toma Tanguchev, deputy general director of the Sofstroy DSO, pursued the discussion on large-scale scaffolding:
"We received our construction program from the Sofia People's Council last November, in a most unspecified fashion. We made a second draft in January, a more specific one (according to the Capital Construction Regulation the deadline is 30 June—author). Actually, according to the regulations, the construction administrations should have received their specific construction projects by the end of November. Frequent corrections to the plan are made because of urgent projects. The volume of the annual assignment always exceeds possibilities. We argue and clarify matters. We implement the program for a drastic increase in the capacity of the trust. We are currently developing a production base and recruiting additional manpower. The reason for the unrhythmical completion of projects and for rushing during the fourth quarter rests, in addition to subjective reasons, on planning as well. It is high time that our suggestion be considered: that the annual completion target be 30 September, so that finishing work be done under better weather conditions. Furthermore, the tradition has developed that in order to fulfill the plan we must withdraw some of the projects the completion of which is scheduled for the following year.

"We issued two complete orders to the Plovdiv Casings Equipment Combine last November. We then wrote down our construction needs by quarter (does opening a small door not close a big one?—author). We are working with the design institutes in an effort to reduce to a minimum errors in designs, the reworking of which absorbs a great deal of time. We intend to standardize some parameters. This will facilitate the technology. It is a question of optimal rather than extreme standardization, involving the longitudinal and latitudinal axes of the premises, staircases and elevator cages.

"The available technology barely covers minimum requirements. We have only half of the fast tower cranes with a horizontal arm that we need. The situation with lightweight motor vehicles is particularly bad. Idling averages 15-20 days per year per project in cement and quarry material deliveries. Bear in mind that there are some 400 construction sites!

"A great deal has been said about the unattractiveness of the construction profession. More people could be attracted to construction if wages are made consistent with working conditions."

At the house-building combine in Sofia the infirmities of old age (it is the oldest in the country) show up in a variety of symptoms along the panels. Meanwhile, full therapy—a general reconstruction—has been delayed even in terms of the latest blueprint schedule (more specifically that of internal walls and floors). Annual capital repairs keep the patient on his feet but do not provide total cure. There are no modern facilities either for capital repairs or current maintenance. The improved and expanded nomenclature variant at the combine offers new sectional units. However, the technological equipment is virtually the same—obsolete, and already amortized. Meanwhile, the casings which come from the Khimmash SK [Economic Combine] in Haskovo, have nothing in common with the idea of good quality. The arbitrary geometric dimensions of the panels lead to undular surfaces. The panels are further worsened in the course of their transportation to the site:
"The transportation technology has remained the same for the past 25 years," claims engineer Nikola Vasilev, the combine's general director. "We expected 40 new trailers from the Ministry of Machine Building in 1984. We did not receive a single one. Yet we are speaking of assembling parts without taking them off the vehicles. The fact that some types of panels accumulate at some construction sites is not our fault. The production and installation schedule is based on requirements. Such anomalies will appear as long as the construction program keeps being amended. Claims concerning joints have been reduced but I do not think that we have eliminated them. The problem will be resolved when we start using expansion joints, i.e., the moment the subjective factor will not be involved.

Panel Troubles Coming From Various Parts of the Country and Affecting Various House-Building Enterprises:

Errors---technological and design---in the construction of some of the newer or older plants affect sanitation units, flooring conveyor belts and fronts. They also affect joints and heat insulation. They absorb unnecessary production work.

Old concrete centers, lacking automation, do not ensure precise mixing doses.

The steel reinforcement shops have machinery for cutting, strengthening and welding the structures. However, they are worn out and poorly maintained.

Metrological support of production and construction is running out of gas. There is a shortage of geodesic equipment and instruments, instruments for controlling the size of casing shapes and the solidity of the concrete and the steaming procedure, and more....

Warehousing facilities seem to be ownerless. Good and bad panels are piled together. In this chaos, rejected panels find their way to the sites.

Hitches in the First Echelon

Here are statistical and nonstatistical facts which further add to the question of quality and the rhythm of procurement of construction materials:

The 1984 balance shows that instead of more than 2,000 tons of exterior paint, the sites received about 1,000 tons (80 percent of them were used in housing construction); almost 50,000 cubic meters of stiropor (a basic material for heat insulation!—author) were not procured, or 30 percent of requirements; 2,000 tons of S-200 glue were procured instead of 3,000. So far, this applies to the enterprises within the system of the Ministry of Chemical Industry. The Ministry for Production and Trade With Consumer Goods provided 1.1 million square meters of carpeting instead of 1.3 million. Within the same ministry, the Kvarts S0 is offering third-grade porcelain tiles with all sorts of glazing and size defects. Although approved standards forbid the use of third-grade glass panels for housing (for hygienic as well as ergonomic considerations), toward the end of the year they are the only ones available. Therefore, the construction workers are given glass panels suitable for greenhouses only.
We hear almost everywhere that window and door panels should be a dissertation topic. There is a need for such scientific interference. However, briefly, what are the difficulties involving this product of the Ministry of Forests and Forest Industry? They are cracked, loose and unglued. "Glued" windows allow a leakage of 330 cubic meters of air per hour whereas the norm is 2 cubic meters, i.e., between 50 and 60 percent of the heat in the room disappears for this reason. The metal casings (of the Metal Structures NPO [Scientific-Production Trust]) have rather relative right angles.

Negligently ground mosaic tiles appear with broken edges. The voalit material, used for waterproofing, comes in fluctuating thicknesses. As it sits at the construction site, the sun melts the resin and the rolls crack. Keramzite gravel (a component of concrete) is nonstandard and does not fit the concrete mixing recipe used by the house-building enterprise. The two installations where it is produced—in Aleksandur Boykovo and Krumovo village, Varna Okrug, are quite old from all viewpoints. That is why their output is insufficient. As we object to the quality of plastering, let us not forget the gypsum produced at the Koshava MPK [Mining-Production Combine] in Vidin Okrug.

Explanations which affect both those responsible and their victims:

The construction materials industry continues to use worn-out machinery and equipment; some types of equipment are lacking entirely. Spare parts are scarce. Measuring equipment at the enterprises is anemic. Yet this industry—which is the first echelon—should be ahead of the entire construction process!

Are the stipulations of the intersectorial programs of the Ministry of Construction and Territorial-Settlement Organization with the other ministries sufficiently strict, considering such extensive deviations in performance standards?

Which one, monopoly or the contract, prevails when it becomes a question of procurement quality and rhythm? The answer is quite easy. There is a plan which categorically stipulates the number of apartment units to be built by the enterprise. This plan is firmly related to specific quantities of cement, sand, carpeting.... How can the construction worker return a defective shipment when, in addition to everything else, it has not arrived on time? We already mentioned patiently waiting 2 or 3 months precisely because of "claims." Contracts are signed as well. Penalties are paid by those who violate them. This is so. However, paper money cannot be used to make kitchen cabinets. This misunderstood monopoly of some production facilities is turned loose. There is no fear of arbitration cases. The customer prefers to compromise. Actually, that is precisely what he says, while carefully explaining what is wrong with construction materials: "We better not make them angry, for...." Should the system of penalties in violation of contractual discipline not be consistent with practice?

Editors' note: The article "A Generous Visa," which deals with house planning, will be published in the next issue.
[Article by Zoya Zakharieva: "A Generous Visa"]

[Text] In our previous issue we started a discussion on the quality of housing construction. The article entitled "Frustrations Caused by Someone Else" drew the attention of the public to basic aspects of this important problem. The specific topic of this article is house design quality.

Design documentation for large-panel construction systems has major gaps. Hence the frequent changes in standard layouts, in terms of the technology for electrical installations, assembling and the architectural appearance of the building... However, new developments are not included (i.e., not reflected) in the basic designs of the respective system. In such cases, some okrugs do something. However, there is no total improvement. This is a question of the "Instructions on the Implementation of Standardized Design Documentation" of 1979, which absolutely clearly stipulate that standard designs must be catalogued with all their amendments and supplements. Some catalogues are available. However, no improvements are visible in them. Gaps exist also in complementing the standard designs themselves. The cost documents include types of work made unnecessary by the amended variant. We can legitimately ask the following: "Why is the expert authority of the MSSU [Ministry of Construction and Territorial-Settlement Organization]--the Supreme Council for Territorial-Settlement Organization, Construction and Architecture--issued a permit despite all this?"

What else have our designers not accomplished? If we settle this, the notorious problem of joints leaks will stop as well. The people call it mold. The specialists call it condensation, as we pointed out. Whatever its name, its origin is more important: insufficient insulation of the panels. The designer accuses the builder and the builder accuses the designer. Meanwhile, the roofs are leaking. If your neighbor in the apartment next door sneezes, you will hear it in your own and say, "Bless you!" and the neighbor will thank you politely from his own apartment. I am referring here to soundproofing. The situation with garbage chutes, power switches, noisy ventilators, and the "tightening" which takes place between layout and logical design is no better.

The acronym RPOIS stands for blueprint for construction organization and implementation. Strange though it may seem, so far buildings have been completed without it. Naturally, therefore, they go up poorly, although willy-nilly the people occupy them. This, however, is a different topic. Our topic is to check on the design at the site itself. To begin with, in most frequent cases, the individual specialized areas are either coordinated on paper or not coordinated at all in terms of architectural-construction, electrical system, heating, ventilation, etc. The builders tear down parts to provide additional openings. This is what happens when there is no coordination in design. No details are provided for important parts, such as the heat insulation of the first layer, draining the loggias, or assembling kitchen cabinets.
The standards are strict, the Main Standardization Administration claims, and our housing design standards are superior to CEMA requirements. This is to protect the interests of the citizen. Very well, but the construction worker demands buildings without garbage chutes, fewer chimneys and more stories without elevators.... He insists on features which will enable him to build and settle accounts quickly. This is not approved, but the construction workers may do without approval as well!

"We wish to make it clear," the people here say, "that we do not wish to dress Bulgaria in a uniform. Standardized solutions help designing. With sufficient imagination, a standardized element could lead to construction miracles. It is a question of combination and flexibility. Usually, the designs violate requirements in the area of sanitary installations."

Looked at from the viewpoint of the bank, the investor drags out the completion of projects and delivery of cost documents long after the governmental deadline has expired (30 June of the preceding year), and even during the year scheduled for construction. On Sofia territory, 80 percent of such documents are received with varying delays. This is one of the troubles. The other is that they are submitted in disorderly fashion and actually they are not completed.

The answer of the investor, who should check the project and, in the case of omissions, refuse to pay the designer, is that he compromises. Why? Blueprints and documents are received in a disorderly pile toward the end of June and, some documents, much later. The technical department specialists are unable to check everything and let go.

Here is a statement by a construction worker: "We frequently sign contracts for construction without secured financing" (!?).

A Dialogue In Which the Japanese Are Also Mentioned

Senior Scientific Associate Engineer Khristo Rashenov, head of the Sectorial Catalogue Construction System Center:

"It is here that we keep track of the pulsebeat of mass housing construction and can detect worrisome signs. Whatever one may say, the design is a determining factor in the quality of the building. If something is omitted, do not expect to have it later. The construction worker may spoil something but can never improve on a poor design. Poorly prepared documentation further contributes to such failures.

"Some colleagues believe that they should be designing for the year 2000 and others for the present. The optimal solution is to meet current requirements with a view to the future, to the extent to which we can anticipate it.

"The catalogue system provides information on available designs, their quality and the possible combinations among them. It provides a choice but not a method for designing. It is expressly stipulated that each new design should be compared with the catalogue and, should its indicators be better, adopted. No one pays attention to this instruction—neither the design
organizations, nor the investors, nor the councils which pass on the designs. We proclaim efficiency yet avoid it."

Standardized developments should be comprehensively tested, naturally, in areas which cannot be proved. What do we do? We look at the design hastily, after which, at the site, it begins to crack at the seams. The Japanese, for example, take years to make a design and take months to build, only after everything has been reviewed, to the last comma. Then the construction work flows. It is precisely at that stage that in our country changes and additions are made and...the defects naturally follow. We speak of a scientific organization but undertake tremendous projects in a most primitive manner. We make decisions on the spot. The system offers us a number of opportunities which we wreck.

A designer who adapts a standard design to a new lot is in a hurry to earn his fee. He designs the foundations and that is all. He makes no changes in balconies, doors, colors.... He does not change quantities and costs based on the new circumstances.

In our country, the designer must obey the construction worker who will cut down the designer's ideas to the limit or else will reject them in their totality. For example, we have converted a flexible system such as the large-size scaffolding, into an entirely rigid one.

In the Space Between the Law and the Rock

"What else could happen," says architect Apostol Bozhinov, director of the Construction Standardization Directorate, Glavproekt KNIPIAT [Complex Scientific Research and Design Architectural Standardization Institute].

"There is a law. There are standards in which all investment deadlines are coordinated. However...what can we do if the investor is slow? Again according to the law, he should provide us with all starting data. We lose time in collecting information on geological studies, securing the permission of different bodies, etc. This is no insurmountable obstacle but, on top of the delay with the order, the result is that the organization of the design process has been disturbed. We must work with shorter deadlines. We find it difficult to coordinate the various areas.

"The construction workers do not coordinate with us changes made in the project itself. They lower some costs and it is such 'organizational-technical' changes which worsen the quality."

"The house-building enterprises want to build various projects with fewer elements. This cannot be. It is hard to introduce new solutions, for the maxim of those who build is "the best technology is the mastered technology." The construction industry offers a poor variety and deprives us of the possibility of doing creative work. In the case of the Gabrovo Experiment, we spent 6 months touring the country to find wallpaper which would match the carpets. The catalogues of construction enterprises are not backed by actually available items. There is a shortage of ceramics and durable
paint... We try to procure graded marble pieces by color for the front of the buildings.

"Furthermore, the designers of house building feel that their interests have been injured. Their fees are smaller."

An Anonymous Occupant Asks

Let us add to this the codification "average." Thus, it is being said that we are designing for the "average anonymous occupant." This may not sound particularly polite, but what can one do? The millions of average anonymous occupants are deprived of a comfortable housing environment with a Bulgarian flavor. Let us look at the latest district in the capital, the Mladost 1-A residential district, with its yellow-tinted and wine-colored loggias. It is now white, but in the course of time it will darken, and once again everything will turn gray. The grayness, however, is not a matter of the paint but of the poor language in which architecture talks to us. In the various cities and villages we visit, we rarely find a local style, as was the case in the past. We are preyed upon by a monotonous style... These ash-colored mounds are depressing.

And thus, as he grumbles, the anonymous occupant asks: when will he be considered as an individual who is able to distinguish between the beautiful and the ugly... He is accused of enclosing his balcony. Some people may do this in a petit bourgeois spirit, that of enclosing their shell on all sides. There are others, however, who measure and measure again yet are still unable to stuff in their little kitchen the range, the washing machine and the refrigerator. What should we throw out, this same occupant wonders, sadly looking at the terrace. The Swedes may like their kitchens without windows but this, no more than such forced ventilation, is not a Bulgarian custom. There is also something else, today described as "social contacts," which is nothing but purely neighborly contacts, which are in the Bulgarian's blood. Where to establish such contacts: along the narrow staircase or on the dark landing? According to the law of life, families change: some grow up, others age, and others again join the household. Yet according to the law of the "fixed" allocation, the interior of the apartment does not change.

These are only very few of the problems of the person in a new residential block.
POOR QUALITY OF LOCALLY MADE REFRIGERATORS DEPLORED

Sofia OTECHESTVO in Bulgarian 25 Jun 85 p 12

[Article by Virdzhiniya Stefanova: "The 'Mraz' Family"]

[Text] Which is the most preferred Bulgarian refrigerator model?

No investigation was necessary. The firm store of the Anton Ivanov Plant, on 51 Dondukov Boulevard in Sofia was welcoming customers with the following expressive announcement: "The 'Mraz 270' refrigerators received today will be for customers through No ..." According to the specialists in two service bases in Sofia (at 3 Indzhe Voyvoda Street and at the Wilhelms Pik Technicum) the new "Mraz" competes with the known AEG firm. Actually, this year the plant will complete 4,000 "Mraz 270" refrigerators, which is the limit of its capacity. In the case of other models, it is customers who are in short supply.... Why?

The household refrigerator familiar to us, which comes in white only, is either not functional enough or quite noisy, or else subject to rust; the only variety in the models is in the dimensions. Yet, it could have been produced with different layouts, a built-in appliance for serving carbonated beverages and could even be set on wheels for the convenience of the housewife... (the "refrigerator of the future" will mandatorily have these and even more features!)

The steel of which it is made is weak, for which reason the doors cannot be affixed firmly and, if loaded, they begin to hang. With such type of items the Leonid Brezhnev Metallurgical Combine in Kremikovtsi may be able to report savings. Actually, however, these are savings which lead to raw material waste! The thinness of the sheet steel used makes the refrigerator noisier.

The electrostatic weldings are weak: they crack when the refrigerator is improperly carried, should the slant exceed 45 degrees, as well as a result of the vibrations themselves.

The heat-release pipes become stuck.

The laquer coating is such that it strips and corrodes after 2 or 3 years' use.
In the majority of cases, the thermostats, the purpose of which is to defrost the refrigerator automatically, do not function. If they functioned, no one would use a knife to remove the ice, which sometimes leads to a puncture.... Apparently, this is not considered essential by ZITA in Ruse, which continues to produce the same items.

The list of shortcomings which compromise the output of the refrigerators plant was submitted by us to Engineer Georgi Rachkov, deputy general director in charge of production problems at the Anton Ivanov Economic Combine for Refrigeration Equipment. Following is his explanation: "Despite our repeated reports and meetings with the management of the Leonid Brezhnev Combine, the ZAO in Pleven, Struma in Asenovgrad, ZITA in Ruse and Narodna Republika in Sofia, the quality of the materials, parts and assemblies they supply remains unsatisfactory. Last year we lost more than 200,000 leva from excessive weight, rejects, cost overruns and unsold items. That is why we are forced to look for new producers who could guarantee the high quality of items they supply. For example, as of the second quarter of this year, all of our wiring comes from the cables plant in Burgas instead of from Uspek in Ruse."

Like many other enterprises, the Anton Ivanov Plant has committed itself to implement a comprehensive quality improvement program for household refrigerators, window air conditioners and various compressors and assemblies. Today the number of people with their own quality seal has increased; groups supervising quality at each stage of the technological process have been set up in the main shops. The period of guarantee of the "Mraz 120A" refrigerators has been extended from 2 to 3 years. The application time has been reduced, and as early as 1985 the stores will be selling "Mraz 205" (which, together with "Mraz 200" is as good as the ZIL and Minsk), the BKHA-80 household bar-refrigerator, and the Mraz 70.1 household freezer. In all likelihood, by the end of 1987 the ZD-120 freezer and the new self-defrosting Mraz 140 refrigerator with a freezer compartment will show up on the market. The comprehensive program includes an originally designed 170-liter freezer with two mobile refrigeration units attached to it, totaling 320 liters.

Specialists from the plant and the Refrigeration Equipment Institute, in cooperation with a Japanese company, have developed and applied a new set of hermetically sealed freon compressors and, on their bases, new motors. The new models of room air conditioners, the new windsurf model, and others, which are some of the auxiliary items manufactured by the plant, are of better quality.

What else remains to be done? Mastering the production of colored transparent plastic parts for the internal layout of the refrigerator, undertaking the regular production of lacquer coating in a rich range of colors, and installing automated control and information panels. Production in the future will meet a basic requirement: each model will come in several modifications and colors!

Is there the danger that the beautiful white exhibits submitted by "Anton Ivanov" will remain for a long time in the future locked within the exhibition hall, i.e., that the program will not be fulfilled within the stipulated
time—by 1990? Yes, if the refrigeration plant is not firmly supported by its ministry.

Editorial note: Another problem is that of spare parts! Sometimes, for the sake of a petty item, a powerful refrigerator may become a useless object for an indefinite period of time assuming, for example, that the plastic hinges of the door of the freezer compartment fall off or a relay breaks down.... That is why we shall continue our study of how to maintain refrigerators in working condition.

5003
CSO: 2200/167
ECONOMIC USE OF RAW MATERIALS, ENERGY URGED

Sofia RABOTNICHESKO DELO in Bulgarian 1 Jul 85 p 1

[Editorial: "Turning Point in the Struggle for Economy!"]

[Text] The efficient utilization of material, energy and labor resources is an exceptionally important economic task of great social, ideological and political significance. Its implementation is a major prerequisite for the implementation of the party's strategy of building the material and technical base of developed socialist society. The thrifty use of each gram of metal and kilowatt-hour of electric power and the economical utilization of each second of time and stotinka of funds will determine to the greatest extent the way we shall implement the program for upgrading the living standards.

This year's plan stipulates that one-half of the increase in the national income must come as a result of lowering material outlays. The means to accomplish this objective has been indicated: the accelerated application of the achievements of scientific and technical progress. The results achieved since the beginning of the year, however, indicate that despite the new technologies which were introduced, the trend is toward increasing material resources needed in production. The highest material overruns are in the power industry, metallurgy, the chemical industry and construction.

An investigation conducted by the State Inspectorate on the efficient utilization of materials, recently completed in about 300 enterprises of different ministries and economic organizations, revealed the existence of additional resources worth more than 70 million leva. A total of 31,700 tons of ferrous metals, 2,400 tons of petroleum products and 8,800 tons of coal had been planned over and above necessary amounts. Many more scarce materials and "frozen" raw materials may be found in the warehouses of hundreds of other enterprises!

These facts are manifestations of a number of weaknesses in the activities of individual economic organizations and enterprises. Failures, which have gone on for years, continue to be concealed. Losses are increasing as a result of poor management and obsolete organization and worsened technological discipline. Quite imperfect and substantially below world standards are the standards which allow plants to accumulate surpluses.
The key task is to produce a maximal amount of excellent quality goods with minimal outlays of resources, which is still being underestimated by managers on all levels. Not every worker, technologist, designer, engineering and technical cadre and scientist have been made aware of it. Economy tasks are being formulated in a traditional manner, ranging from the ministry to the enterprise and the brigade, considered as something which also may not be implemented. Overexpenditures are most frequently compensated with price or structural changes and a hard-to-explain kindness, tolerance and liberalism displayed toward the culprits. Incentives and penalties as stipulated by the economic mechanism are applied very rarely, not to say on an exceptional basis. At this stage the true nationwide movement for economy is absent, for which reason the results are symbolic.

What is the solution? What must be done as of now, as of today? Above all, we must decisively change the approach to the thinking and the public attitude toward the thrifty use of resources, surmounting a long-developed inertia. The production programs carried out at the cost of the use of additional raw and other materials and electric power should be considered not a success but an exceptional accident and a failure.

A decisive turn can take place only with the help of science and technical progress, the use of leading Bulgarian experience and world standards. Let us clearly state that our scientific front today owes something to industry. We must radically change the criteria on the basis of which we are currently assessing the contribution of engineering and application organizations and scientific institutes. Designs and new technological developments must be evaluated also according to the material resources invested in them. It would be realistic as a result of the implementation of the plan for scientific and technical progress to achieve material resource savings this year totaling some 600 million leva.

Success is possible if the struggle for the thrifty utilization of resources is waged everywhere. Surpluses at all plants must be checked in the immediate future and anything unnecessary become part of the country's material balance. It is particularly important drastically to lower ceilings in the use of liquid fuels by economic organizations, which must also update their programs for their most efficient utilization. This must be based on the National Program for Savings. We must decisively improve the entire material and technical supply system.

Once and for all an end must be put to waste. Thrift and the sensible use of raw materials must become the law of all economic organizations. It would be expedient to introduce individual thrift accounts for every worker, specialist and manager, detailing their contribution in economy and most strict material liability be sought in cases of waste. A real front must be opened in fighting poor managers and anyone who irresponsibly wastes raw materials, fuels and energy.

A strict savings regimen! This is the target of the initiatives of working people in plants, construction sites and livestock farms. The party members must set the example in this respect. A new approach is needed in the organizational and political work of party organizations. They must intensify
their exigency and be equally strict toward workers and managers who have been careless in protecting valuables entrusted to them.

The frank and self-critical discussions held at the party organizations should be moved to the labor collectives. A collective search must be made of ways to abandon the trodden path of the present attitude toward economy. This must become the focal point of the competition in which all working people must join in order to turn it into a truly nationwide movement for the efficient utilization of energy and material resources.

5003
CSO: 2200/166
EDITORIAL CALLS FOR RAPID IMPLEMENTATION OF INVENTIONS

Sofia RABOTNICHESKO DELO in Bulgarian 1 Jul 85 p 1

[Editorial: "Care for and Support of Rationalizers and Inventors"]

[Text] The February Party Central Committee Plenum called for the accelerated development of science and technical progress and for a new approach in the implementation of the scientific and technical revolution at the stage of building a developed socialist society. Production innovators—rationalizers and inventors—are in the leading ranks of the labor collectives which have ambitiously undertaken to resolve the most important equipment, technology and labor organization problems. Last year alone 138,000 rationalizers and inventors solved 94,000 problems and applied 41,000 of them. Economic results exceeded 400 million leva. Substantial and highly efficient results were achieved by the Ministry of Chemical Industry, the Ministry of Machine Building, the Neftokhim Economic Chemical Combine in Burgas, the Heavy Machine-Building Economic Combine in Ruse, Razgrad and Ruse okrugs, the Electric Materials and Structural Elements DSO [State Economic Trust] in Sofia, the Subi Dimitrov Construction Combine in Sliven and others.

"We must create the type of work atmosphere in plants and farms," Comrade Todor Zhivkov says, "in which every specialist and worker will feel that the task of perfecting technology, developing rationalizations and inventions and increasing labor productivity is the social duty of every socialist working person."

Practical experience indicates that the development of new and stimulating work methods with rationalizers and inventors enhances their activeness and leads to efficient technical and organizational solutions. The public consideration of suggestions and the public defense of those which have been rejected are becoming increasing popular. The development of creative associations and application societies offer extensive opportunities for innovation. These include the Progres Accelerated Application Center and its branches, the Progres Society in Gabrovo, the Avangard Youth Society, and the association of a number of construction and installation combines with headquarters in Stara Zagora.

However, we cannot be satisfied either with the number of participants in invention and rationalization work or the number of submitted developments,
and even less so the number of those which have been applied in production. We must profoundly realize that now, when our country is taking a decisive step toward the implementation of a scientific and technical revolution, rationalizers and inventors could make a unique contribution to the implementation of this strategic task.

In addition to the favorable social atmosphere and the organizational, political and ideological education work, the fast application of approved developments and the social recognition of the labor of rationalizers and inventors is a decisive factor in encouraging their initiative and developing reasons and a social need for creativity. We must admit, however, that the pace at which the percentage of applied rationalizations and inventions is growing is insignificant.

A complex hindering factor is the long delay in making the legal base consistent with the requirements of the economic mechanism and the use of the uniform state-social principle in the organization and management of invention and rationalization activities. The system for scientific and technical information, the purpose of which is to direct the activities of this tremendous national creative potential, is cumbersome. There are few rationalizations and inventions yielding significant economic results and multiplication possibilities, controlled and actively supported until they have been finally introduced on the part of state and public organizations, such as the Institute for Rationalizations and Inventions, and the Councils on the Organization of Technical Creativity.

The main requirement in developing rationalization and invention on a mass basis is its planning and topic guidance. However, virtually all ministries and economic organizations prefer to approve reduced indicators, with no stress and growth, as a result of which, in the final account, they can report overfulfillment. This approach is profoundly erroneous and does not create conditions for the dynamic development of an activity which has tremendous possibilities.

Rationalization and invention must become even more closely related to the organization, conduct and reporting of the socialist competition. We must firmly surmount the obsolete concept that the competition can take place without requirements of collective and individual contributions to the struggle for fast technical progress. The "research-application-world standard" national contest-competition, which was organized at the start of this year by the newspaper RABOTNICHESKO DELO, the State Committee for Science and Technical Progress, the Central Council of Bulgarian Trade Unions, the Union of Scientific Workers, the Central Committee of the Dimitrov Communist Youth Union and the Central Council of Scientific and Technical Societies, has received more than 100 requests for participation by economic combines, enterprises and creative collectives. With this they committed themselves and assumed the responsibility to convert their creative work into a criterion for their participation in the competition. This ambition must be firmly supported by the economic managements and by party, trade union and Komsomol bodies and organizations.
To every manager and labor collective the accelerated use of technological and organizational decisions is a criterion in assessing their business qualities and political and civic maturity. The developments of rationalizers and inventors are a tremendous reserve which will enable us to a great extent to implement our tasks and successfully complete the year and the five-year plan as a whole.

5003
CSO: 2200/166
COMMENT ON EFFORTS TO IMPROVE QUALITY OF SHOES

Sofia RABOTNICHESKO DELO in Bulgarian 4 Jul 85 pp 1, 3

[Unattributed report: "Let Questions Pertaining to the Shoe Industry Disappear"]

[Text] All of us would like to wear lightweight, comfortable and beautiful shoes. Few people know, however, that such qualities greatly depend on the soles. The solution of this key problem of the shoe industry was the topic of our investigation at the Chavdar Plant in Svetovrachane and the Petrochemical Combine in Burgas.

Engineer Emil Spiriev is the director of the Chavdar Plant. He has worked here for 30 years. His view on the problem is the following:

"The Chavdar Plant is the biggest Bulgarian producer of shaped rubber and sheet materials for soles, Lefa artificial leather, textile rubber goods and a great variety of glues. The shoe-manufacturing plants have been reconstructed and modernized several times and new ones have been built. Yet capacities for sole manufacturing remain the same. The variety of soles and their quality are the base of the shoe industry. This is the main reason for which the great efforts we are making to improve the quality of shoes have failed to yield desired results. We have purchased two licenses for the purpose of radically updating soles and sole materials. On this basis, we are planning to increase the number of shaped soles produced by the Chavdar Plant by 4 million pairs. Initially they will be produced in 12 varieties and, subsequently, in 24, for men's, women's and children's shoes.

"Both the shaped and porous and thick sheets for half-soles and heels will be manufactured from local raw materials. The use of the licenses does not require outlays for new construction, other than replacing morally and physically obsolete equipment. Funds will be required only for the installation of the equipment and the reorganization of the buildings. Recovery time for basic capital for the license for sheet materials will be 2 years and 7 months and for the shaped materials, 3 years and 8 months. The equipment based on both licenses has already been procured and installed."

Such are the views of Engineer Spiriev on the way the shoe-manufacturing sector will benefit from the already purchased licenses.
What was the result of our investigation on the application of the licenses at the plant? A number of major difficulties exist: there is no construction and installation organizations, for which reason everything is being done by the plant itself. Construction and other materials must be procured outside the plan. There is a shortage of skilled manpower. The Ministry of Chemical Industry is not entirely ready to produce some mandatory components for the licensed technologies.

The most severe failure, however, may originate at the Petrochemical Combine in Burgas. We spoke with its general director Ganchev Nedelchev:

"A new type of synthetic rubber, Buleks 1502, is needed for the production of shaped soles by the Chavdar Plant according to the license, a material which does not change its color as it ages. So far we have not produced this type of rubber. The question has been considered and we are doing everything possible to fulfill our pledge to the management of the Chavdar Plant. Stoyan Sharapanov, director of the Polymer Complex, is specifically in charge of this."

Here is Stoyan Sharapanov's answer: "Last month we met with the Chavdar management. The meeting was attended by Rashko Radev from the Ministry of Chemical Industry. We submitted a small quantity of materials for laboratory testing. We hope that in 1 or 2 weeks we shall be able to ship out the first batch of Buleks 1502. The plant should test the materials and submit to us the results within a week. If we are allowed 20,000 to 30,000 foreign exchange leva to import the raw materials for the new rubber, we shall be able to provide the necessary amounts needed by Chavdar. This will take at least 3 months....""

Contributed by Engineer Georgi Zlatev, chief specialist at the Main Standardization Administration, and Lilyana Lozanova, RABOTNICHESKO DELO special correspondent.

Answer

We asked Engineer Todor Manolov, general director of the Pirin Industrial-Trade Trust to respond:

It is extremely clear to all shoe manufacturers that this problem is of exceptional importance in upgrading the quality and variety and improving the comfort and appearance of such items. In order to attain the desired indicators, we need strong, lightweight, comfortable and good-looking soles. The Chavdar Rubber Plant, which supplies the main raw material for the shoe industry, has fallen seriously behind in its development and is unable to meet increased requirements. The sheets and shaped soles produced here are below world standards. One-half of our shoes are made of Duropor and microrubber, which have long become morally obsolete as materials. The faster utilization of the two licenses by the plant will result in the high quality of rubber materials for shoe manufacturing.
According to the estimates of the State Committee for Planning, by 1995 shoe production must reach 27 million pairs. Along with the other types of soles we shall need sheet soles—10 million for the Pirin plants and 6 million for the Mladost DSO [State Economic Trust] and the local industry enterprises.

In order to be able to produce a variety of high-quality shoes, the general structure of the soles should be the following: 4 percent, polyurethane; 4 percent, imported thermorubber, polyurethane and others; 15 percent, based on licenses; 30 percent based on direct and indirect casting; 8 percent made of natural leather and 30 percent made of sheet materials based on the license. The development of this structure is in the hands of the chemical combine in Burgas. The Chavdar management has built the necessary installations and buildings and has found the necessary equipment for the use of the two licenses. We are awaiting the new Buleks 1502 rubber. Without it the work stops and we must pay fines. The implementation of decisions taken at joint conferences should be supervised also by the general directors of the trusts and the ministry leaderships. We have already committed ourselves and will not abandon the project.

Editorial Comment

Following the 12th Party Congress and the National Party Conference on Quality, capacities for the manufacturing of children's shoes were totally reconstructed and updated. A number of new models and designs were introduced for men's and women's shoes.

It has been frequently been pointed out that in order for a shoe to be beautiful and comfortable the soles and face leather must meet world standards. Nevertheless, for years on end the efforts to update the sector were focused directly on the shoe plants, which are the second echelon in such production. This resulted in a disproportion and unless steps are taken, it will continue to worsen. That is why such great emphasis is put today on the faster application of the two licenses purchased for the production of shaped and chic materials for soles at the Chavdar Plant. According to the specialists, this will be a tremendous step forward in improving the quality of the shoes. However, these are still only plans and hopes. Unless the Petrochemical Combine in Burgas is able to supply the new Buleks 1502 rubber in the next 2-3 months, the licensed technologies at the Chavdar Plant cannot be applied. The initial promise was for the end of June. It would be wrong to say that no thought has been given to this problem. This is confirmed by the letters dated 8 August 1980 and 16 August 1982 addressed to the Higher Chemical-Technological Institute in Burgas. On 4 December 1980, Docent Candidate of Technical Sciences Marko Markov answered the management of the Chavdar Plant stating that a technology has been developed for the production of a new rubber with an anticoloring agent. The Buleks 1502 rubber is also mentioned in Letter No 1056 of August 1982 addressed the Ministry of Chemical Industry. Therefore, the study of the problem was undertaken promptly although no real results have been achieved as yet.

The personnel of the Chavdar Plant is to be commended for having done a great deal of work with its own forces and is continuing to work on the application of the license. There are things, however, which exceed their possibility.
Twelve hydrophore systems must be procured from the Chemical Machine-Building Plant in Khaskovo and six water-cooling towers from the Zora Plant in Turgovishte. The Klokotnitsa Plant in Dimitrovgrad must deliver six Khemus-type air-conditioning systems.

Therefore, what must be accomplished in connection with the two licenses for soles at the Chavdar Plant is known. All that remains is to do it, so that this very next September, we may see new, beautiful, strong and comfortable shoes in the stores.
NEW, JOINT INTEREST ENTERPRISE HELD EXEMPLARY

Budapest NEPSZABADSAG in Hungarian 24 Jun 85 p 3

[Article by Katalin Bossanyi: "Practical Industrial Policy"]

[Excerpt] Seventeen agricultural machinery and food processing machinery manufacturers have created a new, joint interest enterprise the other day. Named INNOCOORD, the new firm replaces Mezogneptroszt.

Interest Missing

One could have assumed that lack of capital and the effects of world market constraints in the early 1980's, sooner or later would force economists to do some joint thinking. An inclination for joint enterprising, however, did not really come into full swing. Only a few entrepreneurs joined forces to resolve problems, but only in limited fields, such as technical development, research or management. Most of this cooperation occurred in cases in which the bulk of funding was to be provided by the OMFB or some government agency. Joint enterprises have also been organized for purposes of procurement of material, including procurement for foreign export trade, primarily within the light industrial sector. But the machine industry remained unresponsive, even though joint enterprising could have been the obvious answer to the problem of supply shortages, to mention just one of many possible benefits. The advantages offered by joint enterprising may be exemplified by the common need for castings and wrought iron components within the transportation machinery manufacturing or in the energetics machinery [sic] manufacturing industries, or with respect to the instrument engineering industry, where standardization could yield economies through diversified component unit production. But examples serve no purpose. Heretofore such endeavours have failed because of the individualistic perceptions within various enterprises -- perceptions that incorrectly reflect their self-interest.

Present day regulations encourage the strengthening of ties between enterprises in many ways. They support the acceleration of capital flow and the sharing of resources by providing tax advantages, organizational solutions and favorable credit terms. In this respect the overall industrial policy has also changed. It has become more foresighted, insofar as the various methods of joint enterprising have been designated as passable.

28
ways for realizing long-term interests, and for achieving selective technical and marketing coordination in various industries. This conception emphasizes that in the future, the encouragement to join efforts must be viewed comprehensively rather than for the individual, limited purposes of development only, production only, or marketing only. Whether it serves a group of enterprises or an entire industry, the realization of joint enterprising at its full potential -- in the interest of developing manufacturing strategy -- is part and parcel of the idea of organizational flexibility and the ability to adapt to market conditions. Today, this offers not only an opportunity, but provides the key to, and a significant resource reserve for structured change and industrial renewal.

It is for this reason that the approach taken by the agricultural machinery manufacturers must be distinguished from the small number of other pioneering attempts in joint enterprising. The agricultural manufacturers' effort is consistent with present day industrial policy efforts. For INNOCOORD is not just one joint enterprise, it embodies at least five joint enterprises. But even at that, the sheer number of enterprises within INNOCOORD may mean little. It is INNOCOORD's breadth of approach, functional scope and sphere of influence that deserves recognition. In its name the letters "COORD" signify the intent to cultivate international relations and to pursue joint managerial, organization-computer engineering and marketing activities. INNOCOORD applies innovative approaches to these endeavors -- but the letters "INNO" hold an even larger promise. "INNO" means comprehensive innovation, an enterprising management concept that is unique in our domestic practice.

To start out with, the founders of INNOCOORD felt that their entire way of thinking, and specifically their marketing strategy must transcend the narrowly perceived divisions within industry, in order to satisfy the needs of domestic agriculture in ways better than before, and in order to join the international distribution of labor more effectively. It is precisely for this reason that the founders of INNOCOORD intend to expand their joint enterprising efforts so as to cover the entire industrial scope of the food industry. Beyond traditional farmers, they intend to cover the applicable primary and allied industries, the various organizations within the chemical and the packaging industries, environmental protection concerns, as well as various research, planning, management and marketing enterprises concerned with biotechnology. They intend to accomplish this not by creating one super organization, but rather by forming a number of flexible, functionally specialized engineering offices working within the joint enterprise. From among these, innovative groups concerned with the manufacture of agri-cultural and food processing machinery, with biotechnology, and with bio-energy have come into being already. The engineering offices are developing various plans on an entrepreneurial basis. Marketing and sales will be accomplished through the informal integration of all groups concerned with program fulfillment. This integration takes place pursuant to contracts that stipulate the extent of interest held by each concerned group. Thus each group can follow the entire innovative process from its inception to its final application.

It is significant to note that INNOCOORD does not seek advance program funding from its participants, in the form of initial investment or otherwise.
To the contrary. Various tasks will be established in response to market needs. The various marketing and user organizations will become interested as program outlines take shape, thus providing continual financing. Consequently, the various participants accrue income only if their initial perceptions are actually proven correct. This too shows the innovative nature of INNOCOORD, and suggests a fundamental change in economic approach.

A Statue Come to Life

It was the purpose of this lengthy presentation to prove that the interests of individual enterprises, industries and groups of industries can be harmonized not only by virtue of organizational structure, but also on an entrepreneurial basis. Further, this is the first attempt to prove that different knowledge and skill sets can be integrated in order to achieve well defined objectives. Stated differently: having witnessed managerial uncertainty and a lack of enterprising, INNOCOORD has found a solution. It removed the rigid statue of industrial policy from its marble pedestal and is now attempting to reerect it on more practical grounds.

12995
CS0: 2500/448
PROSPECTS FOR POLISH DEBT PAYMENT REVIEWED

Warsaw Zycie Warszawy in Polish 10 Jul 85 p 3

[Article by Jacek Mojkowski: "The Polish Debt"]

[Text] Someone once said that in general a loan is an unpleasant matter, and he was correct. You borrow someone else's money and repay with your own. When this involves tens of billions of dollars then the matter really becomes unpleasant.

It is estimated that as of the end of 1984, our hard currency debt totaled 26.8 billion dollars. In order to repay the debt we must earmark 5-year exports without at the same time importing anything. This concept can only be considered in theory, because in practice it would lead to economic death for Poland.

As a matter of fact, our debt is not the largest by far. Other nations have borrowed more, for example: Argentina, Brazil, and Mexico. In addition, if one calculates the per capita debt even then we are not the worst debtor. It is higher in Yugoslavia and Hungary.

The amusing point is however, that if their per capita exports are calculated the indicator will be twice or thrice greater than ours. Herein lies the essence of the Polish debt: the problem is not that we are excessively in debt, but that we have insufficient exports which would enable us to repay not only the debt but also the accrued interest.

If Poland's annual exports to the West (so-called hard currency exports) totaled 8 to 10 billion dollars there would be no talk of the Polish debt. Yet, at the same time our 1984 exports barely totaled 5.8 billion, or almost one-half of what we would desire. This year, exports are planned at 6.3 billion dollars, but this is still inadequate.

Together with a 27 billion debt our annual debt servicing totals 2.7 billion (10 percent of 27 billion). In this case, exports (5.8 billion) decreased by 2.7 billion would only allow for imports up to 3.1 billion dollars. This amount gives Polish industry and society a very low standard of living, without any opportunity for development and production which would assist in repayment of our debts.
Last year, however, we were able to import 4.3 billion dollars worth of raw materials and goods from the West only because we did not have to service our debt. Specifically, we only paid 1.7 billion of the debt contracted directly with the commercial banks. The repayment of the remaining 1.2 billion for debt servicing of credits obtained from Western governments was suspended. The result is that interest is accruing from unpaid interest due (in this case, this totals approximately 120 million dollars) and increases the total debt by 1.3 billion dollars annually.

Therefore, it is necessary to formulate a minimum plan which we must carry through so as not to increase the debt, specifically service 2.7 billion dollars when payments fall due annually. In truth we will still be unable to repay the debt itself (27 billion) but at least it will not continue to grow.

In order to achieve this we must take care of two general matters. First, we must reach an agreement with the Western governments and banks as to the distribution of our debt payments. Secondly, we must make every effort to develop our export market.

Insofar as business is concerned, the discussion is simple. This is supported by our negotiations with the banks. However, the situation is much more difficult when money matters mix with politics, an example of this can be seen in our negotiations with Western governments. Although, recently even in this area the prognoses appear to be better.

For 4 years Poland has held regular negotiations with the representatives of approximately 500 Western banks and each time we have come to an agreement in the matter of postponing payment for a certain period. For example, in 1981 we were obligated to pay the banks a portion of our debt totaling 2.1 billion dollars. Since we did not have this amount, we negotiated an agreement to defer payment for 8 years with a 4-year grace period. In other words, for 4 years we are not paying anything on the existing debt, while in the next four we will have to repay 2.1 billion. The banks, however, have placed one condition namely that throughout the entire deferment period we must make regular interest payments on the entire debt.

Thanks to the negotiations, an agreement was reached (8-10 year extension with 4-5 year grace period) on repayment of about 95 percent of our entire debt contracted with them and totaling 7.1 billion dollars. We must, however, remember that the payment which we would have had to pay in 1981 must be repaid beginning with 1985 and those from 1982 in 1986, etc.

Therefore, one can venture a guess that in the case of "bank debts" we have a moderately clean slate. The situation is worse, however, with respect to loans contracted with Western governments. Following martial law, negotiations were suspended and in the years 1982-1984 Poland practically made no payments.
At the beginning of this year, the Paris Club, with whose delegations composed of 17 Western governments we are conferring on our debt problems, reached an agreement in the matter of rescheduling our payments due for 1982-1984. This totals 12 billion dollars (principal plus interest), which was rescheduled for 11 years with a 5-year grace period. Also continuing are agreements as to the possibility of deferring the debts which in accordance with previous agreements should have been settled this year.

No matter what has been agreed to, the truth is that given our export capabilities and import needs currently we cannot afford to service our entire debt solely from our own financial sources. Finance Ministry experts believe that with every year the total accrued interest will continue to decline, but until that time the debt will continue to grow.

The debt level will not stabilize itself until some time in 1990-1991, and then at the 34 billion level, after which it will not increase further. Of course, everything is contingent upon the fact that by that time exports will have generated so many dollars that we will be able to pay the interest (3.4 billion dollars), provide the economy with adequate imports, as well as the repayment of a portion of the borrowed capital.

The key to the solution of Polish indebtedness lies in Poland. The deferment of payments through negotiations gives us a temporary respite but does not solve the problem of where to get the money.

As a matter of fact, our debt problem represents an export development problem. However, the paradox of our economy lies in the fact that in order to repay the debt the economy must go further into debt. This is not only due to the fact that total interest from unpaid interest is accruing. Poland also needs credits for imports (especially materials for export manufacturing industries), because it is in fact the main reason for developing the economy in a relatively short time.

For now, Poland continues to be under a credit blockade and in effect our imports are being purchased with a relatively small amount of hard currency obtained through exports (diminished by repayment of some of our debts). At the same time, a majority of the world's debtor nations not only defer their payments but also are able to obtain further credits from their creditors.

Hope for a change in our situation lies in the success of the Paris Club discussions. Perhaps only then will the fact that Poland may become a member of the IMF, where it may obtain additional benefits, become more realistic. Nonetheless, our credibility among international financiers is not only based on what we can negotiate in the immediate future but, above all, on what we can export.
Export development, however, does not represent the entire solution to the puzzle of the Polish debt. Before this can occur, planners must work hard on several problems in the immediate future (problems are our speciality).

In general, it looks more or less this way: if we want to export then we must invest, consequently at what cost are we doing this? It is obvious that consumption is low and in principle, we must guard against its further decline and work for a slight growth.

Another view notes that we can begin repayment at the cost of cutting investments and imports. This would appear to be madness because if in the short term we were cut off from the influx of technology, disinvestment would grow, and we would once again begin our decline.

What should we do with the dollars earned from exports? Repay some of our debts or put off payment while we invest the money into something which will bring in greater revenues than losses suffered from nonpayment of the interest? After all, a hundred or so similar questions can be posed, so basically discussion of our debt is a discussion about the weakness of the Polish economy.

For the planners with their proposals for the "5-year" plan all these dilemmas mean one thing, namely how to find a way to combine investment growth with the simultaneous debt repayment and protection of our consumption level? It is obvious that no one believes that somewhere there exists a list of ready and easy answers. However, the planners believe that during the discussions on the 5-year plan at least some of the questions may be answered.

12229
CSO: 2600/945
LATEST ISSUE OF ECONOMICS SOCIETY JOURNAL REVIEWED

Warsaw ZYCIE GOSPODARCZE in Polish No 27, 7 Jul 85 p 15

[Article by M.: "The Burdens of the Past"]

[Text] The journal WEKTORY is extending an invitation to people to discuss the future. In its opening remarks, the editors of the journal refer to a view expressed by the American economist Peter F. Drucker and affirm that the renunciation of any consideration of the future is an apprehension which demonstrates the difficulties of dealing with the present. WEKTORY is also inviting people to discuss the NPSG for the 1986-1990 time period. Among the articles which are used as a thematic basis for these considerations, the primary one is a commentary by Zbigniew R. Wierzbicki: "Concerning Investments and the Threat of Inflation—With Optimism." The statistics of last year indicate a lengthening of the cycle of central investment realization by nearly 50 percent. The author envisions that 1985 will see a further increase in this spread. Among the things we must also add to the negative consequences of the completion of investments undertaken are: the forfeiture of production successes in the area of the extended cycles of their realization; the frequent worsening of the degree of modern production; the obsolescence of machinery and tools (and often their wearing out as well) and an increase in the costs of credit as a result of the increases in interest rates and financial burdens associated with this. All of this means that in the end, the enterprises and budget have a balance of payments problem. The forfeited production successes associated only directly with an extension of the investment cycle is estimated to be 1.7 billion zlotys.

The author suggest that further reductions in some investments be considered. The article we are discussing additionally affirms that we have to strive urgently to concentrate central investments and a portion of the remaining enterprise investments because of the false qualification of several central investments. This concentration is supposed to create the opportunities for enhanced reinforcement of genuinely fast-returning investments with national and financial resources. Z. B. Wierzbicki suggests achieving this by responsibly directing the cash assets of the enterprises and freed credit assets, as well as a part of the amortization fund, to this concentration.
I will personally add that the banks, however, have to be real banks in order to achieve this goal. The case with many investment projects, however, is that they are not influenced by the financial instruments involved in the investment process. The real problem here is often the lack of sureness and decisiveness of central investments.

Jerzy Bogdanienko has written an article entitled: "Concerning Polish Electrical Engineering at an Impasse." He forecasts that already after 1987, distinct power shortages will occur unless radical measures to reduce the consumption of energy are not undertaken.

An article by Horst Albach also contains some interesting ideas on the restructurialization of industry against the backdrop of the experiences of several Western European countries.

Many of the articles in the issue of WEKTORY under discussion take aim at various problems associated with the economic reform. Maciej Miszewski writes about the relatively most favorable conditions for activating workers' self-governments in enterprises employing relatively small work forces. When work forces have more than 200 members, tendencies towards an alienation of the self-governance agencies from the rest of the plant's people appear... Perhaps the forms of self-government in use are not effective or realistic? We also gain an insight into the success of small firms in modern business from the article by Stanislaw Skowronski entitled: "Mini-Computers and the Mini-Enterprise." On the other hand, Hans Joachim Beyer and Hilmar Schmidt present the ongoing advantages in the FRG with the improvement of tools used in the framework of large associations, employing from 60,000 to 70,000 people and in which, nevertheless, people are striving to apply the principle of responsibility for the results of individual plants in each association, as well as for the results of collectives of operational plants.
AIRCRAFT INDUSTRY EXEC ON NEW PRODUCTS, GROWTH PLANS

Warsaw SKRZYDLATA POLSKA in Polish No 26, 30 Jun 85 p 3

[Interview with Engineer Jan Czerniecki, chief director of the PZL Transportation Equipment Plant in Krosno, by Julian Wozniak; date and place not given]

[Text] [Question] I suggest that our discussion begin with a brief history of how Krosno's PZL [Polish Aviation Plant] WSK [Transportation Equipment Plant] came into being.

[Answer] The origin of our plant goes back to 1945, when Krosno's aviation enthusiasts -- after several years of occupation and very eager to fly again -- began to repair the severely devastated or damaged gliders and airplanes. Before the war, Krosno was a vibrant aviation training center. The Noncommissioned Officers School of Aviation for Juveniles operated here. In the Krosno area, in Bezmiechowa and Ustianowa, there were glider schools that were famous all over Europe. Thus, there were many people in our area with an aviation background. In the repair shops located near the railroad station, they began to restore aircraft in order to fly. Thus, the embryo of aviation repair plants arose which provided employment for those people, including those who worked in the school's aviation laboratories before the war. Therefore, a properly trained cadre existed, and the news that gliders and airplanes were being repaired in Krosno spread quickly throughout the entire country. The initiative of Krosno's people won the approval of the authorities and engendered much interest. Orders began to be received from different parts of Poland to repair aviation equipment. Thus, the creation in Krosno of aviation repair plants became an authenticated fact. And when the postwar stabilization permitted the organization in Poland of the Sports Aviation Equipment Plants, Krosno became an important branch of this enterprise.

[Question] In time, however, the Krosno plant not only did repair work but, above all, it started producing gliders ...

[Answer] Yes. The Bielsko plant was involved with designing and producing prototypes of gliders for sports aviation and export, while the gliders were mass-produced in Krosno. Krosno's gliders were exported to all the continents.
[Question] Yes, but eventually your plant's production profile changed.

[Answer] The 1960's were not good for Poland's aviation industry. We were obligated to produce an extensive assortment of refrigeration equipment. In the years that followed, our machinery, which was designed to produce refrigeration equipment, did not permit us to manufacture final products as was done previously; it made it impossible for us to return to our era of glider splendor. Instead, we were tasked to specialize in the production of aircraft landing gears, a program we are now realizing.

[Question] For what aircraft are you producing landing gear, and are you producing landing gear only?

[Answer] For the Okocie WSK PZL, we are producing landing gears for the PZL 104 Wilga, the PZL 106 Kruk and the PZL 110 Koliber. For the Mielec PZL WSK, we are producing the main landing gear for the M-18 Dromader and the M-20 Mewa aircraft, and the rear landing gear for the An-2 aircraft. In addition, we are producing a number of other airframe components, including the airframe fuselage and engine frame for the Dromader, the cockpit and pilot seat for the An-2 as well as other components for the airplanes and helicopters produced in Swidnik.

[Question] Recently Krosno has cooperated in the production of the An-28 passenger airplane that is being manufactured by the Mielec PZL WSK.

[Answer] Our plant's workforce wants to produce finished aviation equipment. We are subject to certain factors that were brought about by our departure from aviation production. In other words, the plant was financed to develop in such a way that it departed from aviation. Unfortunately, this has taken its toll. As a result—and I want to be completely honest in this discussion—we still are not in a position to execute on our own the tasks assigned to us. We were not completely successful in developing our machinery resources under the planned production performance. Thus, we are forced to make use of so-called technological cooperation with other plants. And in this period of economic reform implementation, this is not the best solution.

[Question] Do you see a possibility for resolving this problem?

[Answer] Yes. The solution is to buy proper equipment to supplement our existing machinery resources.

[Question] Is not accepting an order to produce landing gears for the An-28 somewhat hasty? After all, this task requires an extensive knowledge of new technologies, including the machining of titanium and totally new manufacturing technologies. Will you be able to do it?

[Answer] The landing gear for the An-28, or I should say the landing gear because there is the main landing gear and the front landing gear, in fact does require special effort on our part. To date, some of these technological processes for manufacturing these parts have not been used by Krosno or by our industry. We can only be pleased about this because we will learn something new. We will not lag in technological progress. Last year, we produced a pre-
production lot of these landing gears. This year we will fill additional orders. So far Mielec has had no late deliveries on our account, and I believe they never will.

[Question] You have no complaints about your partners?

[Answer] Absolutely not. If we complained, it would be even worse.

[Question] Let us change the subject. There is increasing talk about the new Polish glider being created in Krosno, the Puchatek. What can you tell us about it?

[Answer] Of course. There is a great need for a basic training glider for aeroclubs. Work on this is already quite advanced. A prototype has been produced for static tests. (I ascertained this personally in the assembly room; the Puchatek's profile was beautiful--J.W..) We will ship it to the Rzeszow Polytechnic Aviation Institute for testing. We will provide additional information about this glider only after the initial flight tests are completed.

[Question] Can you provide any more basic details for the readers of SKRZYDLATA POLSKA?

[Answer] It will be a metallic, two-seat glider having a lift-to-drag ratio of 23, that is, it is a basic training glider.

[Question] In truth, are you satisfied with the results thus far?

[Answer] Thus far we are satisfied, except for the terms which did not turn out too well for us because of employment problems at the plant. But these problems are now behind us. I should also add that our initial appraisals confirm our assumptions regarding the design of this structure.

[Question] Over 3 years ago I saw at the Mielec airport a small airplane built by Magister Engineer Stanislaw Kustron and Engineer Kazimierz Jarzab of the Krosno PZL WSK. Why have we not heard more about this airplane?

[Answer] The Puchatek project turned out to be more urgent, and it became necessary to discontinue work on that airplane, which was already quite advanced and which we call KR-02 (see the upper photo on the cover -- the editor). In fact this airplane was flight tested. I do not deny that we had a minor problem obtaining a proper engine. Work was stopped, but this does not mean that the project has been discontinued completely. After we start producing the glider, we will return to the KR-02. Such a small, economical and inexpensive airplane is needed for the economy and for sports aviation.

[Question] What is the most urgent task at the Krosno plant?

[Answer] Above all we hope to expand aviation production, completely mastering the production of landing gear for all types of aircraft produced in Poland and, in the future, mastering the production of landing gear for helicopters in order to become independent of our partners to the greatest
extent possible. We also want to improve systematically the quality of our manufactured products. And in the future we would like to manufacture gliders and mini-airplanes.

[Question] This year the Krosno PZL WSK will be celebrating its 40th anniversary. What will you be emphasizing on this anniversary?

[Answer] A successful Puchatek test flight, which will enable us to produce complete aircraft having the KR (Krosno) symbol. In a way this would be a return to our roots when our gliders flew out of Krosno to the far corners of the world.

[Interviewer] We sincerely wish you success.

11899
CSO:2600/906
FACTORY ACCOUNTANT INTERVIEWED ON WAGE INCREASES

LD261902 Warsaw Television Service in Polish 1730 GMT 26 Jul 85

[No video available]

[Excerpt] According to the data for the first 6 months of this year, wages increased considerably in a number of work enterprises and the productivity increased only slightly.

[Begin recording] [unidentified reporter] We have arrived, unannounced at the Unitra-Unimor works in Gdansk, to ask about the implementation of the plan for the first 6 months. The director who, at this time, was in charge of the works, refused to be interviewed, but we managed to persuade the deputy chief accountant to make a statement.

[Reporter] What about the results achieved by Unimor in the first 6 months, to be specific, the increase in wages. Could you give us a percentage for wage increases?

[Unidentified accountant] If we compare it with the same period last year, the increase is considerable, amounting to several dozen percent.

[Reporter] Could you be more specific?

[Accountant] Thirty or forty, more or less...

[Reporter] My information is that it is 46 percent.

[Accountant] That is correct.

[Reporter] What was the percentage of increase or decrease in productivity?

[Accountant] It remains at the level of last year's, however...

[Reporter, interrupting] My information is that productivity fell by 4 percent, is this true?

[Accountant] Well, uh, this is so.

[Reporter] How can you explain this?
Accountant] This can be explained by several facts. We employed several hundred employees over the past 6 months who are to work on the production of goods made on licence. These employees have not yet produced anything that can be sold. The main reason for the worsening of the wages-productivity ratio was the fact that the Polkolor [TV tube producer--Fbis] failed to supply about 7,000 TV tubes, which caused a production loss of 1 billion zloty. [passage omitted] [end recording]

CSO: 2020/195
CHEMICAL, LIGHT INDUSTRY REPORTS ON PROGRESS

Warsaw TRYBUNA LUDU in Polish 28 Jul 85 p 2

[Article by (MS): "Much Depends on Enterprises"; passages in slantlines printed in boldface]

[Text] /A meeting of leading officials of the ministry, directors of associations and a dozen enterprises took place on 27 July at the Ministry of Chemical and Light Industries. Deputy prime minister Zbigniew Szalajda and representatives of central authorities also attended the meeting./

/Evaluation of the work of the ministry in the first 5 months [of 1985] and, against this background, the fulfillment of quotas set by the CPR [Central Annual Plan] were the topics of the meeting./

Despite production losses in winter, the Ministry of the Chemical and Light Industries achieved sales in the amount of 1,003.6 billion zlotys, accounting for 42.3 percent of the annual plan. This is somewhat more than the elapsed calendar time calls for. /The highest shares of annual plans were achieved in the production of pharmaceuticals, polyethylene, tires, fuel oil, woolen and woolen-type yarn and footwear (excluding rubber)./ However, in 10 product groups included in the CPR production over the 5 months is well behind the plan. This is the case with nitrogen fertilizer, sodium hydroxide, sulphur and PVC.

The implementation of operational programs (health care and clothing for children under 15) in the ministry is looking good. However, there are difficulties with some government orders (for example, chemical fiber, glues, print film, soap, nitrogen fertilizer).

/All of the shortfalls were caused by the severe winter. Unfortunately, not all of them can be compensated for because chemical plants (mainly these are the ones having the problem) work around the clock and have little leeway for a maneuver./ At this point, it is already known that there will be less sulphur, sodium hydroxide, nitrogen fertilizer and PVC than the plan calls for.
Also, a new barrier to the increase of production has arisen, namely imports. We are importing much less oil, phosphate, rubber and cotton. These are only some of the examples. On the whole, the plan of imports was only 33.9 percent fulfilled after 5 months. Exports are also trailing behind the provisions of the plan (35.5 percent).

In the opinion of leading officials of the ministry, in this situation it is imperative that the enterprise fulfill on time both the plan and the contracts for additional production/ (merchandise worth a total of 25.8 billion zlotys will be placed on the market in exchange for a partial exemption from transfers to the FAZ [Fund of Professional Activization]) /and make up for the winter shortfalls more vigorously. As deputy prime minister Zbigniew Szalajda stressed in summation, eliminating negative phenomena in the economy, that is to say averting the danger of failing to fulfill the CPR, an improvement in wages to productivity ratios and a rise in exports hinge primarily on the good and diligent work of enterprises.
NEW ENERGY LINES OPEN IN SOUTHERN POLAND

Warsaw TRYBUNA LUDU in Polish 28 Jul 85 p 2

[Text] The 400 kV line Rogowiec-Joachimow and Joachimow transformer station designed to carry the output of a 360 MWh unit at the Belchatow power station was commissioned 6.5 months ahead of schedule in the Southern Power District. Also, a transformer station in Tuczna was connected through 500 kV lines with power stations in Rybnik and Belchatow was put on line.

Thus, a 400 kV grid connecting central Poland with Silesia has been set up in accordance with the decisions of the Ministry of Mining and Energy. This grid will subsequently be connected with the Khmel'nitskaya nuclear power station in the USSR through an intertie, a 400 kV transformer station in Tarnov and a station in Rzeszow. Thus a new link has been created in the power system of socialist countries designed for exports and imports of electricity and for the joint management of disposable capacity.

9761
CSO: 2600/876
SHORTCOMINGS IN QUALITY OF PROTECTIVE EQUIPMENT FOR WORKERS

Bucharest MUNCA in Romanian 21 Jun 85 p 8

[Article by Clara Dumitrescu: "The Quality and Judicious Utilization of Protective Equipment"]

[Text] The state is making considerable material efforts to ensure protective and working equipment. In 1975, 924 million lei were allocated from the state budget for this purpose; in 1982, 1.4 billion lei, and in 1984, over 1.6 billion lei. These are important funds that must be judiciously utilized. Along this line, the Bucharest Trade Unions Municipal Council and the State Regional Inspectorate for Labor Protection organized a meeting on the responsibility borne by manufacturers for the quality of protective equipment, and the responsibility of the customers for its judicious utilization.

We report the discussions held in detail, because the problems raised (proceeding from the implementation of the Council of Ministers' program on improving the quality of protective equipment) were of a nature sufficiently general to interest all producers and users of such equipment.

As was to be expected, the discussions began with explanations by the producers on...

Novelties and Modern Equipment

When it comes to protective and working equipment, continuous upgrading is not a whim, but an objective necessity stemming from the emergence of new professions and changes in working technologies in many sectors, as well as from the need to find substitutes for scarce raw materials. Professional mobility and the increasing demands of the working personnel dictate the manufacture of modern and diversified protective equipment. How did the producers meet the demand for renovation of and improvements in protective equipment? From the addresses of Comrades Niculina Andreiana, trade union chairman of the Jilava rubber consumer goods enterprise; Maria Canahai, chief engineer at the Romanian Chemical Plants, and Aurelia Largeanu, trade union chairman of the Flacara Rosie Enterprise, we learned that:

46
Boots destined for use by miners have been made and successfully tested at the Lupeni and Petriila mining enterprises. New antiacid boots are now being tested at the Electroaparataj and will soon be standardized and mass produced.

The Flacara Rosie enterprise is in the process of producing leather-textile combination gloves with 1.2 and 5 fingers and unlined palm, or lined with suede leather.

The above enterprises are also manufacturing new protective equipment such as: safety belts for cable car operators and microporous girdles for the forestry industry. They also produce all types of safety belts with remarkable functional characteristics: comfortable to wear, light, and at the same time highly resistant, thus ensuring absolute safety for people working at a height.

These are undoubtedly noteworthy efforts, but the issue of the quality of protective and working equipment still presents many weaknesses. The producers received well-founded complaints from the customers.

The Difference Between Prototype and Series Products

In one way or another, this difference was noted by all the participants in the discussion: items produced for testing and approval do not resemble the mass produced ones. In other words, once a product is no longer one of a kind, its special features disappear. The examples cited were many; we will list only a few.

"Fireproof overalls have very low wearing resistance; after a few months only they become stiff and uncomfortable, and repeated washing make them lose their fireproof properties, so that they no longer offer protection against drops of melted metal. The lot we had for testing was entirely different." (Septimiu Milea, deputy chairman of the Semanatoarea trade union committee).

"Antiacid suits wear out very quickly, too; as for protection against chemical burns, this property—that must remain effective throughout the life of a suit—disappears after repeated contact with acids." (Paulina Dragusin, chairman of the Viscofil trade union).

"Absolutely all cotton-type overalls and suits have a very low resistance, shrink in the wash, and split their seams after a short period of use." (Engineer Constantin Nita, chairman of the Commission of Engineers and technicians of the Dimbovita enterprise).

But, surprise, surprise! The producers know nothing about these complaints. Why?

"Because that is the custom. Everybody complains and accuses us, but no one calls the attention of the producer. None of the manufacturing units ever received any letter expressing dissatisfaction, although each customer can
write to it directly—the label accompanying the equipment bears the name of the manufacturer." (Engineer Paulina Tuculescu, head of the protective equipment section of the Basis for Material-Technical Supplies of the Bucharest Municipality).

This idea was also mentioned by Comrade Lucretia Nitu, member of the executive bureau of the Municipal Council of Trade Unions: "I have not found any customer notifications about poor equipment quality at any of the manufacturer enterprises I visited. Notifications and complaints go no further than trade union group meetings or general meetings of working people, and are not officially forwarded to the producers. It is the fault of the working people's councils and of the trade union committees in the respective units. The producer must be made aware of the difficulties he causes the customer."

Maintenance Prolongs the Life of the Equipment

The discussions concerning maintenance procedures highlighted the fact that both manufacturers and consumers are interested in ensuring that the equipment made by the former and used by the latter should meet regulation wear and tear norms. Like any other product, equipment that is correctly utilized, regularly detoxified, and cleaned, will live longer. What did the control teams of the Trade Unions Municipal Council find on their inspection of 52 customer enterprises? That despite resolution 304/1979 of the Council of Ministers and the measures established in the program approved by the Council of Ministers, many major enterprises such as Electromagnetica, Vulcan, Tehnica Nova, and the Enterprise for Radiators, Metal Equipment, and Sanitary Articles and Fittings took no maintenance measures such as washing, detoxifying, and repairing equipment. The chairmen of the trade union councils of the respective enterprises paid no attention to this problem and did not try to prevail upon the working people's councils to take the necessary measures.

What correct maintenance means was clearly shown by Septimiu Milea, deputy chairman of the Semanatoarea trade union committee: "Equipment washing, checking, and repairs is done according to a certain schedule, so that each section has its turn. We thus manage to prolong the life of many types of equipment. We have also organized a repair workshop. However, we have difficulties finding leather tailors, for example. In view of that, I have the following suggestion: the Artisans Cooperative, which has the personnel and the equipment, should organize repair workshops for protective equipment in each sector."

This proposal was followed by another related one:

--Equipment should be accompanied by maintenance instructions, so as to avoid the utilization of harmful cleaning materials.

Speaking of proper utilization and maintenance, the producers asked the customers to utilize protective equipment for the purposes for which it was meant. "Using water and mud boots in a grease environment will prematurely destroy them. There are many such situations, and consequently, we want to ask the customers to observe the uses prescribed on the equipment label." (Niculina Andreiana)
Enterprise labor protection sections, trade union committees, and public inspectors must consistently supervise and ensure that equipment is used for the purposes for which it was manufactured.

Unfulfilled Objectives

Some of the provisions of the program on improving protective and working equipment have not been implemented.

---The Ministry of Technical-Material Supplies and Control of the Management of Fixed Assets, the Ministry of Light Industry, and the Ministry of Chemical Industry were supposed to update, by 15 June 1983, the list on the basis of which enterprises file their orders. That was to be a catalogue featuring new equipment and other novelties. However, the catalogue still does not exist! How are enterprises to know what to order and what is new in the area of equipment?

---Contrary to the order issued in May 1983 by the General Secretariat of the Council of Ministers, consumer units do not specify size, number, and colors in the orders they send to the Basis for Technical-Material Supplies. Such enterprises are Metaloglobus, Electroaparataj, Dacia, Dimbovita, and others.

---The program on improving the quality of protective equipment clearly required that (in order to ensure the implementation of domestic standards and norms) as of 1984, equipment should be manufactured in a limited number of units of the national industry. Nevertheless, small manufacturers are still mushrooming. Overnight, workshops belonging to the artisans cooperative or to service enterprises become equipment manufacturers (using inappropriate raw materials). The Ministry of Labor must look into and eliminate this situation.

---As for the obligations of the State General Inspectorate for Product Quality Control—such as inspection visits at manufacturing units and supervision of production prescriptions and working technologies—producers admitted that they were not often "bothered" by such inspections.

The working meeting discussed many "key" issues concerning protective equipment and its handling by manufacturers and consumers. However, some of the people who had been expected to provide answers, were absent. No representatives of the Ministry of Light Industry or the Ministry of Chemical Industry (the two major equipment producers) attended. Thus, many problems remained unanswered. The organizers will now sum up the problems raised and the suggestions made, submit them to the competent bodies, and follow up on their finalization, in the interests of those most interested: the producers and the consumers, to an equal extent.

12782
CSO:2700/185
NEED TO MODERNIZE STRUCTURE OF ECONOMY STRESSED

Bucharest ERA SOCIALISTA in Romanian No 13, 10 Jul 85, pp 9-12

[Article by Constantin Grigorescu: "Modernizing the Structures of the National Economy"]

[Text] Improving the economic structures is one of the essential factors for building the new system and raising Romania to higher peaks of socioeconomic progress. The ninth party congress, which opened up a new era for building socialism in our country, also marked a turning point for the modernization of economic structures. The decisive contribution to scientifically substantiating the policy of improving economic structures was made by Comrade Nicolae Ceausescu, the party secretary general and president of the state.

The process of improving economic structures in our country has been based on a series of economic-technical and social criteria, the importance of which varies from one stage of development to the next. Some of these criteria are: adapting production to continuously increasing and diversifying needs; efficiently utilizing the country's material and manpower resources; ensuring the necessary conditions for long-term economic development; enhancing the contribution of scientific research and of advanced professional training, and efficient participation in the international division of labor. In the final analysis, improving economic structures requires a development of the national uniform and modern economic complex, that being the basis for the development of our socialist nation and for Romania's efficient participation in the international flow of material and cultural assets.

According to the concept of our party secretary general, the process of improving the branch structure of the national economy must follow certain well-defined socioeconomic criteria which in fact constitute the foundation of an intensive economic development and characterize the current process of expanded reproduction. Referring to the directions of development of the Romanian economy, Comrade Nicolae Ceausescu stressed the particular role of "improving the structure of the national economy in keeping with the requirements of the scientific-technical revolution and of the international division of labor, better utilizing the country's material and human resources, raising the technical level of production, improving manufacturing technologies in all economic branches, and increasing the profitability of the
production and of all economic activities, with a view to more rapidly increasing the national income and the well-being of all our people."

As quantitative, and particularly qualitative characteristics of our national economy system, Romania's economic structures have undergone a process of continuous improvement in the years of building socialism, especially after the ninth congress, a process based on the need to increase socioeconomic efficiency and to promote progress in all areas of activity. The policy of improving economic structures was and still is completely subordinated to the objective of building the comprehensively developed socialist society, which requires diversified, harmonious, well-proportioned, and efficient economic structures, and which is opposed to any type of structural hypertrophy apt to generate contradictions, imbalance, and instability.

As is known, the harmonious and proportionate development of all the branches of the national economy; ensuring a correct ratio between industry and agriculture, which are mutually dependent, and rationally and evenly deploying the production forces throughout the country constitute some of the basic objectives of the RCP program on building the comprehensively developed socialist society and advance toward communism. The concept of a comprehensively developed socialist society, developed by Comrade Nicolae Ceausescu, implies a balanced and proportionate development of all sectors of activity, both in the spheres of material and non-material production.

In order to implement the policy of harmonious development of all the branches of the national economic complex, special importance must be attached to the thesis concerning the need to correctly and scientifically estimate the role and functions of each branch and each area of socioeconomic activity, because each sector has its own role and importance for the harmonious development of the society. This concept, of a great theoretical and practical value, was and remains at the basis of all programs and plans for the country's socioeconomic development and constitutes one of the fundamental elements of the strategy of our society's progress in the past two decades.

The main element of the policy of improving the structure of the national economy is promoting socialist industrialization upon scientific and original bases; this is the key factor for eliminating economic backwardness, rapidly developing the entire economy, raising the people's living standard, consolidating the national independence and sovereignty, and ensuring uninterrupted advance along the path of progress and civilization.

In consequence of the implementation of the industrialization policy, Romania, a predominantly agrarian country with a poorly developed industry and a backward agriculture, has during the socialist period become an industrial-agrarian country with a powerful, rapidly developing industry—organized in keeping with the achievements of modern science and technology and based on the socialist ownership of the entire nation—and a state and cooperative agriculture that is continuously being modernized. Our country's unprecedented industrial development has generated significant changes in the structure of the national economy and has been decisive for the establishment of a modern technical-material basis for our socialist society; it was that development
that permitted us to begin building the comprehensively developed socialist society.

Structure of national income and employed population according to main branches

<table>
<thead>
<tr>
<th></th>
<th>1950</th>
<th>1965</th>
<th>1983</th>
</tr>
</thead>
<tbody>
<tr>
<td>National income:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>44</td>
<td>48.9</td>
<td>60.2</td>
</tr>
<tr>
<td>Construction</td>
<td>6</td>
<td>8</td>
<td>7.8</td>
</tr>
<tr>
<td>Agriculture</td>
<td>27.8</td>
<td>28.9</td>
<td>15.5</td>
</tr>
<tr>
<td>The other branches</td>
<td>22.2</td>
<td>14.2</td>
<td>16.5</td>
</tr>
<tr>
<td>Employed population:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>12</td>
<td>19.2</td>
<td>36.7</td>
</tr>
<tr>
<td>Construction</td>
<td>2.2</td>
<td>6.3</td>
<td>7.6</td>
</tr>
<tr>
<td>Agriculture</td>
<td>74.1</td>
<td>56.5</td>
<td>28.9</td>
</tr>
<tr>
<td>The other branches</td>
<td>11.7</td>
<td>18</td>
<td>26.8</td>
</tr>
</tbody>
</table>

Against the background of the achievements attained in the period of building the comprehensively developed socialist society, after the Ninth RCP Congress improving the structure of Romanian economy acquired an unprecedented scope. It was in that period that the industry was consolidated and made into the key branch of the economy. Thus, in the 1965-83 period the industry increased its contribution to the national income by 11.3 percent, as compared to the 4.9 percent increase recorded in 1950-65. Even more significant are the figures showing the increase in the number of people employed in industry, which was 17.5 percent, as compared to 7.2 percent in 1950-65.

The figures show that the development of the industry was more dynamic than that of the other branches of the economy. For example, in the 1965-83 period, the net industrial product increased 5.7 times over, a fact which made a major contribution to increasing the national income 3.8 times over in the same period. As a result of this process, the contribution of industry to the national income increased from 48.9 percent in 1965 to 60.2 percent in 1983.

The original and innovative manner in which the industrialization process was implemented, in keeping with the specific conditions prevailing in our country, constitutes a telling expression of the creative manner in which Comrade Nicolae Ceausescu had elaborated on the general theory of socialist industrialization. "In view of the fact that the industrialization is taking place at a time of major international scientific-technical revolution," the party secretary general stresses, "it is vital that it be based on the most progressive technology, thus ensuring the application of the latest scientific achievements in production; great attention must be paid to the mechanization and automation of production processes, that being a decisive condition for building a modern industry and economy. Industrialization brings about very rapid growth in the production forces, continuous development of the technical-material basis of socialism, extensive introduction of technical
progress in all the areas of material production, increased productivity of socialist labor, and an upsurge throughout the economy."

Within the strategy of industrializing the Romanian economy, increasing emphasis was put on establishing, developing, and continuously modernizing the key industrial branches (metallurgy, machine building, energy, and chemical industry) and the industrial branches that best utilize the material and human resources of the national economy, on promoting branches that generate technical progress (electronics, electrical engineering, automation, precision mechanics, optics, computers), and on proportionally developing and achieving an optimal ratio between the extractive and processing industries and between the production of means of labor and that of consumer goods. For example, in the 1965-83 period, industrial production increased 5.5 times over, electrical and thermal power 4.5 times, ferrous metallurgy 4.9 times, machine building, metal processing, and chemical industry 9.6 times each. Far higher increases were recorded in key industrial sectors.

The current stage of the scientific-technical revolution, the international energy and raw materials crisis, and the changes occurring in the world in the structure of industry increase the demands put on the structure of the processing industry, in the sense of focusing on consistently developing key industrial branches that bear and promote technical progress, and feature an increased share of products requiring complex labor. In view of these circumstances and in keeping with the program documents of the 13th party congress, in the coming 5-year plan—by 1990 industrial production—commodities is expected to be 34-37 percent higher than in 1985—the highest rates of growth are planned in the machine-building and chemical industries, particularly in the fields of electronics, computers (62-67 percent), precision mechanics (48-55 percent), chemical fine synthesis, small bulk products, ultrapure materials, etc. International trends verify the favorable prospects of such industries and products based on intensive labor, design, and research.

In view of the given macrostructure of the industry, it has become necessary to expand modernization, which must reflect on the structure of product ranges and on the manufacture of highly technical and high quality products that can compete in world markets. Thus, a program has been established to raise the technical and qualitative level of products, reduce the consumption of raw materials, fuel, and energy, and better utilize raw and other materials in the 1983-85 period and up to 1990. One of the major objectives of this program is to improve the technical-construction specifications of products and manufacturing structures. By 1990, approximately 95 percent of products are expected to be at a high international level, while 2-5 percent of products should even exceed world performances.

Improving the structure of the national economy in socialist conditions objectively requires consistent and conscious efforts to study, understand, and rapidly solve possible lack of proportion and accordance among the various components of the socioeconomic system, in view of the fact that the dialectical law of conflict and contradiction is present under socialism, too. Referring to the existence of contradictions and disproportion among certain sectors of the national economy, such as between the processing industry and
energy and raw material resources in the national economy, Comrade Nicolae Ceausescu stated in his report to the party national conference of 1982: "We must resolutely act to rapidly eliminate these disproportions and to achieve a balance and an harmonious and proportionate development of all the sectors of activity."

In view of the fact that oil and methane gas resources are becoming increasingly limited, while world prices have become very high, oil and methane gas are predominantly used as raw materials in the petrochemical industry, and as little as possible for energy supply purposes. Consequently, energy resources are developed by utilizing all types of primary energy resources in the economy, particularly lignite and bituminous shale, by expanding the construction of hydropower and nuclear power plants, and expanding the utilization of new energy sources such as solar, geothermal, and wind energy, biogas, and biomass.

In accordance with the directives of the 13th party congress, by 1990 the net coal production is planned to reach 95-100 million tons, by 30.7-35.7 million tons more than is envisaged in the 1985 plan. This increase will be attained particularly by utilizing lignite deposits. At the same time, the extraction of bituminous shale will also be developed in the coming 5-year plan, thus supplementing conventional energy resources.

Out of the entire electrical power production envisaged for 1990 (95-97 billion kWh), 38 billion kWh will be obtained from coal and bituminous shale, and 21-22 billion kWh in nuclear power plants.

In developing energy resources, simultaneously with increasing the production of primary sources of energy and utilizing all energy resources, both conventional and new, we also plan to efficiently utilize all resources by enhancing the productive conversion of primary energy into useful energy, increasing the productivity of power installations, reducing specific consumption, and recovering secondary energy. Similar efforts will be made to fully utilize ferrous and nonferrous deposits, including poor ones, and nonmetal bearing minerals, and to increase the utilization of domestic raw materials for economic purposes.

In securing energy and raw material resources, particular attention is paid and will continue to be paid to the rational utilization of these resources and to recovering and reutilizing energy and raw materials. At the recent joint plenum of the National Council of Working People and the Supreme Council of Socioeconomic Development, Comrade Nicolae Ceausescu stressed: "It must be clearly understood that the best and most important source of raw materials and energy is rational utilization and reduced consumption of raw and other materials. This is the first and most important source, and it is available to each and all of us." Along this line, in keeping with the recommendations of the party secretary general, in the 1985-90 5-year plan at least 50 percent of the energy and raw materials required to increase production will be derived from reduced specific consumption, energy recovery, utilization of new energy resources, and recycled raw materials.
The problems currently posed by developing raw materials and energy resources strongly highlight the particular importance of the extractive industry for the smooth running of the economy. In 1983, electrical and thermal power accounted for only 3.3 percent of the total industrial production, while coal accounted for 1.1 percent. However, the importance and role of these branches far exceed their share in the overall industrial production; one of the reasons for this is that the branches that produce energy resources or energy are connected to all the other economic branches and that no sector can function without energy. This also accounts for their primary position in our party's current economic policy of modernizing economic structures.

Proceeding from the need to achieve a modern, dynamic, and balanced economy, the industrialization policy attaches particular significance to establishing a correct ratio between the A and B groups of the industry, i.e., between the production of means of production and that of consumer goods.

In our country, the rates of growth of industrial production in the A and B groups became more even in the 1966-83 period; however, the rate of growth of the A group is consistently higher, that being one of the essential requirements of the process of expanded reproduction.

Average annual rate of growth of production in the A and B groups of industry in the 1966-83 period

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966-83</td>
<td>1971-83</td>
</tr>
<tr>
<td>1. Group A</td>
<td>10.7</td>
</tr>
<tr>
<td>2. Group B</td>
<td>8.3</td>
</tr>
<tr>
<td>3. Difference between the two groups</td>
<td>2.4</td>
</tr>
</tbody>
</table>

The great achievements attained in the country's industrialization constitute the guarantee for the further development of the economy and for overcoming general difficulties created by the international economic crisis. "Now, in the current circumstances created by the international economic crisis," Comrade Nicolae Ceausescu said, "we are justified in saying that our party's policy of building a strong and modern industry has been entirely correct. Without such an industry we could not deal with the difficult problems currently present in world economy."

In Romania, agriculture is the second most important branch of the economy in view of its share of and contribution to the progress of the entire society. Comrade Nicolae Ceausescu developed a thesis of a great theoretical and practical importance according to which in our country, now and in the future, agriculture is and will be one of the basic branches of the economy, playing an important role in the general development of the country and in defining the character of the national economy. "In the more distant future, too," the party secretary general stressed, "Romania's economy will have to be based on a modern and highly developed industry, and on a modern and highly productive
agriculture, thus remaining an industrial-agrarian country. It is on this basis that we will ensure the development of the production forces and the general progress of the society, and will raise the material and cultural standard of the people."

Our own experience, as well as international experience, shows that, simultaneously with the development of industry as the basis for raising a country to higher levels of socioeconomic progress, agriculture must be developed, too. Analyzing this process in the light of the modernization of economic structures highlights the fact that, while in absolute terms agricultural production is increasing, its share in the national income and the population employed is dropping. This trend has appeared in our country, too. For example, in the 1965-83 period, agricultural production increased 1.9 times over, while its share in the national income dropped from 28.9 percent to 15.5 percent, and in the employed population from 55.5 to 28.9 percent.

One of the defining traits of the modernization of the structure of Romanian economy at the current stage is ensuring an optimal ratio between industry and agriculture and harmoniously developing all the branches of the national economy, as a primary condition for continuous and many-sided progress. Within this framework, according to the directives of the 13th party congress, agricultural production will be developed more intensively in the 1986-90 5-year plan, and the average annual rates of growth of agricultural and industrial production will be made more even, namely 5.4-5.8 percent, as compared to 6-6.5 percent.

The achievement of this major objective will be made quite possible by the implementation of the new agrarian revolution and, within it, by the great intensification of agricultural production. Indeed, by developing the technical-material basis, implementing the national program of land amelioration—especially the irrigation of 55-60 percent of the arable land—and by extensively wielding the new achievements of applied biology and genetic engineering, we will obtain high and stable vegetable and animal yields regardless of climatic factors.

One of the means of rapidly and intensively developing the agriculture is to resolutely implement the guidelines, recommendations, and tasks issued by Comrade Nicolae Ceausescu at the expanded plenum of the National Council of Agriculture of May this year. In his speech, the party secretary general outlined the major objectives that are to be pursued in order to successfully complete the new agrarian revolution.

Another sector that has greatly developed in the past 20 years is the constructions branch, which accounts for over 40 percent of investments in the national economy and which directly contributes to creating the conditions required for a smooth and efficient expanded reproduction in all the areas of activity (both in the area of material production and in social-cultural and other similar areas). Considerable efforts have been made to improve activities in this branch and to speed up the industrialization of operations by implementing mechanization programs, raising the index of utilization of the equipment, and better utilizing manpower. In the 1965-83 period, the volume of construction-assembly work increased about 3.6 times over; the
highest rates of growth were recorded in the areas of industrial building (4.7 times) and housing (4.6 times), thus confirming the statement that this branch serves the entire national economy, both material production and social-cultural activities.

In consequence of the consistent promotion of socialist industrialization and the development of the machine-building industry, upgraded production means were provided to the economy, and thus, in the 1965-80 period the degree of work mechanization increased to over 95 percent. With a view to increasing efficiency in construction work, special stress was put on promoting economical solutions, beginning with the design stage, strictly observing technological specifications, raising execution and acceptance standards, improving the methods and forms of organization and management, and reducing building time.

In the two decades since the ninth party congress, within the extensive process of improving the branch structure of the national economy, a special role was played by transportation and telecommunications. This branch increased its contribution to the national income by 2.2 percent, and its share of the employed population by 3.2 percent. Its material basis developed greatly; the volume of all types of transportation increased continuously, as did their contribution to creating the necessary conditions for expanded reproduction and for trouble-free activities in all socioeconomic areas. In this field, too, most important at the current stage of development is to efficiently utilize the ample material basis available and to reduce material and production expenditures for all transportation categories.

One of the important means of improving the structure of the national economy in the "Nicolae Ceausescu Era" is to increase the contribution of science, scientific research, and technological development and progress to developing the national economy. In the 1965-84 period, the network of scientific research units expanded considerably, and was provided with highly technical equipment, installations, and apparatus; the number of cadres employed in research also increased considerably.

Practically speaking, science has become a direct production force, a propelling element of primary importance for technical progress in all the areas. Proceeding from the fact that science is decisive for successfully building socialism and communism in Romania, and referring to the achievements attained in this area, the party secretary general said: "We currently have a powerful basis of scientific and technological research. We have an extensive network of research institutes and centers in each domain, equipped with modern installations and apparatus. And above all, we have a strong corps of researchers and scientists with extensive scientific and technological capabilities. Science has been closely integrated with education and production. On this basis, we have attained noteworthy achievements in the area of science and technology."

Emphasizing the role of intensive factors of development at the present and in the long-run involves increasingly complex tasks for science, tasks which necessitate an optimal combination of applied and theoretical-fundamental research. Referring to the scientific research program for the 1986-90 5-year
plan, Comrade Nicolae Ceausescu said that this will "ensure an organic blending of applied and theoretical research in mathematics, physics, chemistry, biology, medicine, and other areas, thus increasing the contribution of science to fulfilling the 1986-90 5-year plan and to ensuring technical solutions for fulfilling the socioeconomic development objectives of our country after 1990."

Another characteristic of the modernization of the structure of the national economy is the increased role of trade, communal administration, education, culture, and health within the socioeconomic progress of contemporary Romanian society, and raising the people's living standard and quality of life. In the 1965-83 period, the number of people employed in trade increased from 4 to 5.9 percent; from 2.1 to 3.9 percent in communal administration and services; from 3.5 to 4 percent in education and art, and from 2 to 2.6 percent in health, social services, and sports. At the same time, the number of people employed in administrative functions dropped from 1 to 0.6 percent.

The dialectical link between material and non-material production, the need to increase efficiency, and increases in consumer requirements mean that in the coming period non-material production branches will acquire new scope.

Improving the structure of the national economy is a continuous process subordinated to the strategic objective of building the comprehensively developed socialist society and Romania's advance toward communism, and of raising our country to new peaks of progress and civilization. As Comrade Nicolae Ceausescu stated in his report to the 13th party congress, "By the year 2000 Romania will be a manysidedly developed industrial-agrarian country providing scientifically determined conditions for the healthy physical and intellectual development of all its citizens."
MANPOWER, ELECTRIC POWER SHORTAGES PLAGUE IRRIGATION EFFORTS

Bucharest AGRICULTURA SOCIALISTA in Romanian 8 Aug 85 pp 1,2

[Excerpts] In the plains of Oltenia, Burnaz, and Boian, the lack of water in the soil continues to be 1,500-1,700 cubic meters per hectare and in the rest of the southern zones -- Arges, Calarasi, Ialomita, Constanta, Tulcea, Braila, and Galati counties and the Ilfov agricultural sector -- the figure is 1,000-1,400 cubic meters per hectare.

We asked Aurel Popa, state secretary in the Ministry of Agriculture and Food Industry, what measures had been taken to irrigate the largest possible areas.

[Popa] All irrigation systems are in operating condition, all watering equipment is in the fields and the workers in this sector are on duty. During the next 10-12 days, the irrigation of corn and soybeans will be completed and the irrigation of second crops, fodder crops and vegetables will continue.

[Interviewer] Despite all this, the way in which irrigation is being carried out in some units and even in some counties is not satisfactory and schedules are not being carried out completely.

[Popa] Indeed, that is the situation. For example, during the period from 27 July to 2 August, only 300,453 hectares had been irrigated, compared to the 522,973 hectares scheduled -- 57 percent of the plan. The plans were fulfilled 90-107 percent in Arad, Dolj, Olt, Timis, and Vrancea counties and the Ilfov agricultural sector. In the rest of the zones, the situation is unsatisfactory. In Constanta County, only 29 percent of the irrigation has been completed and only 24 percent has been completed in Tulcea and 43-56 percent in Braila, Calarasi, Giurgiu, Ialomita, and Mehedinți.

[Interviewer] What are the causes and what should be done to make sure that the water reaches the roots of the plants as rapidly as possible?

[Popa] The shortfalls mentioned are a result, partially, of the failure to provide manpower for operating the equipment and of shortcomings in the organization of labor. More than 4,500 hectares did not receive water in Braila County for these reasons and similar situations exist in other places. Another serious obstacle was the failure to supply the allocated amounts of electric
power and fuels. During the month of July, for example, only half of the requisite electric power was received. On the other hand, interruptions in the power supply have resulted in losses of water and defects in the pumping stations. Therefore, we stress that the suppliers of power and fuels should provide the allocated amounts in their entirety and on a regular basis, for the good operation of the pumping stations and motorpumps.

In light of the excessively high temperatures and the high water consumption by the plants, we are asking the suppliers to provide an average daily electric power of about 1,000 MW so that the irrigation can be carried out in accordance with the established schedules.

CSO: 2700/193
PROBLEMS IN TAX REFORM, BUDGET DISCUSSED

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 15 Jul 85 pp 18-19

[Article by T. Dumezic: "Is the Constitution an Obstacle"]

[Text] A part of the economic system where nothing essential has changed in the last 10 years or so is the tax system. Individuals mostly pay for government agencies when they purchase goods and services whose price includes a fair-sized turnover tax, and organizations in the economy do so when they import (customs duties and special import charges) as well as through the income tax, which is actually closer to a kind of turnover tax (an added value tax) than a direct taxation of revenues. Thus the commitments contained in the Long-Range Economic Stabilization Program with respect to fundamental changes in the tax system (increasing direct taxes and reducing indirect taxes, bringing the tax burden into line with the taxpayer's ability to pay, overall relative reduction of government expenditure) have remained only a proclamation even after enactment of the new social compact on the joint bases of tax policy.

Perhaps the full answer to the question of why nothing very essential has been changing in the tax system is offered by the economic system as a whole, by the basis of the motivation of economic entities and individuals, the financial status, independence and responsibility of economic organizations and representatives of sociopolitical communities and organizations. For example, in economies in which private property and private ownership are dominant, the motive is crystal clear—it is maximization of the profit of the enterprise or, viewed in individual terms, maximization of the income of the individual or the household. The tax base is also defined thereby—the profit of the firm or the income of the individual or household, which after the prescribed deductions is taxed by applying a progressive scale. Appropriate elaboration of a system of deductions (tax deductions and exemptions) and the steepness of the tax scale contribute to achievement of priority economic, political and social goals.

How is our present enterprise to be taxed? If the tax base were the organization's profit (appropriations to expand the material base and for reserves), then what remains after paying personal incomes and social services would be taxed. That is a certain remainder of net income which is not the motive behind the business operation of organizations of associated labor, so that its
taxation would contribute only to a further reduction of the capital surplus, which is already small and declining. Nor is income a suitable tax base, since it consists of differing categories (personal incomes, contributions, other appropriations, and the capital surplus), whose procentual share differs essentially from activity to activity, from enterprise to enterprise, primarily under the influence of differences in the organic composition of capital.

What the Constitution Says

In this kind of economic system, where organizations of associated labor do not have a natural business motive, where the only operative motive for those who are employed is to maximize their own share in distribution of funds for personal incomes and for social services, it is not possible to build up an optimum system for taxation of economic entities. Finally, the tax system is nothing other than a mirror of the socioeconomic system (economic, political and social). And the picture which that mirror gives is truly astounding.

Today there are many reproaches of the present tax system. One is the dominant role of indirect taxes (the turnover tax and customs duties) in forming the revenues of sociopolitical communities. A second is that the present tax system is not unified, that the republics and provinces are independent creators of the tax system and of tax policy, which also results in the differing position of economic entities on the unified Yugoslav market and a differing opportunity for disposition of income by individuals in different republics and provinces.

Article 264 of the SFRY Constitution set down that federal law would establish all types of revenues realized by taxing products and services which are bought and sold in Yugoslavia. The rates of the basic turnover tax are also set uniformly. Article 265 provided that the republics and provinces would by mutual agreement coordinate the basic tax policies and the tax system if required to guarantee the unity and stability of the Yugoslav market. The absence of an agreement has not prevented the republics and provinces from enacting legislation in the domain of tax policy and the tax system. It was also set down who was to be the beneficiary of the income taxes and taxes on personal income.

It follows from these provisions that the only uniform tax in Yugoslavia is the basic turnover tax (of course, federal law also sets the level of customs duties and special import charges), while all direct taxes are in the jurisdiction of the republics, provinces and opstinas. This solution could result in destructino of the unity of the Yugoslav market and a differing position of individuals in Yugoslavia. It has to be admitted that those differences are not after all so large, at least with respect to the position of economic entities on the unified Yugoslav market. The differences are slight for the simple reason that we are dealing with a quantitatively small tax burden. The entire income tax and taxes paid on personal incomes by organizations of associated labor in the economy over the period January-April of this year amounted to only 10.4 percent of total budget revenues of all sociopolitical communities. A greater problem lies in the fact that this kind of disunited
tax system has resulted in a forcing of the turnover tax, which has been having adverse economic consequences (inflation) and social consequences (a relatively larger burden on the income of individuals whose income is small).

The republics and provinces have been exerting financial influence on the economy in other ways. They have been prescribing mandatory pooling of funds for investment in certain lines of business, they have been establishing special taxes on the financing of certain projects in the infrastructure and indeed even on the financing of certain large organizations, through the banks they have been ordering where the credit potential of the banks is to be loaned out, and they have been exerting direct influence on organizations of associated labor to pool their resources in other organizations, and so on. This power, in which the will of individuals is dominant, has far more adverse consequences than if a far larger portion of the economy's income than is the case at present were drained off through the set of tax instruments.

Budgetary Revenues Over the Period January-April 1985

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Amount, in millions</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>322,834</td>
<td>100.0</td>
</tr>
<tr>
<td>Income tax and tax on personal incomes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On income in the economy</td>
<td>21,535</td>
<td>6.7</td>
</tr>
<tr>
<td>On income in the noneconomic sector</td>
<td>1,153</td>
<td>0.4</td>
</tr>
<tr>
<td>On personal incomes in the economy</td>
<td>12,039</td>
<td>3.7</td>
</tr>
<tr>
<td>On personal incomes in the noneconomic sector</td>
<td>3,777</td>
<td>1.2</td>
</tr>
<tr>
<td>On personal incomes of persons employed by private individuals</td>
<td>160</td>
<td>0.0</td>
</tr>
<tr>
<td>From farming</td>
<td>1,775</td>
<td>0.5</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>5,249</td>
<td>1.6</td>
</tr>
<tr>
<td>Turnover taxes</td>
<td>189,133</td>
<td>58.6</td>
</tr>
<tr>
<td>Basic turnover tax</td>
<td>130,281</td>
<td>40.4</td>
</tr>
<tr>
<td>Special turnover taxes</td>
<td>57,001</td>
<td>17.6</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1,851</td>
<td>0.6</td>
</tr>
<tr>
<td>Fees</td>
<td>3,575</td>
<td>1.1</td>
</tr>
<tr>
<td>Customs duties and special import charges</td>
<td>78,400</td>
<td>24.3</td>
</tr>
<tr>
<td>Duty paid by the economy</td>
<td>49,154</td>
<td>15.2</td>
</tr>
<tr>
<td>Duty paid by the noneconomic sector</td>
<td>893</td>
<td>0.3</td>
</tr>
<tr>
<td>Duty paid by individuals</td>
<td>2,019</td>
<td>0.6</td>
</tr>
<tr>
<td>Special import charges</td>
<td>26,334</td>
<td>8.2</td>
</tr>
<tr>
<td>Revenues under special enactments</td>
<td>2,185</td>
<td>0.7</td>
</tr>
<tr>
<td>Revenues of administrative agencies and miscellaneous</td>
<td>3,853</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Individuals pay negligible taxes (if we omit the turnover tax). In the first 4 months of this year the share of taxes from farming in total budgetary revenues amounted to only 0.6 percent, while other revenues from individuals amounted to 0.8 percent. This small volume of revenues paid by individuals could be justified in an extremely underdeveloped society where the distribution of income is by and large uniform throughout the entire population. But our society is not at such a low level. This is demonstrated by the value of
property individuals possess and also by the amount of foreign exchange and dinar savings. The differences are not removed, but rather increased, by the payment of taxes based on the turnover tax. Individuals who earn quite small income set aside a considerably higher percentage of income for the turnover tax than is the case with individuals who have high earnings.

That is why an essential change in the tax system and tax policy is indispensable concerning taxation of individuals (the individual or the household). The changes would be aimed at creating a uniform tax system throughout Yugoslavia, and that would also require amending the constitution. The principles on which the new tax system would be based might be the following: direct taxation of organizations of associated labor and individuals, interdependence of the tax burden and ability to pay, progressive taxation, a tax system that acts as an incentive, the contribution of the tax system and tax policy to achievement of the planned structural and regional development of the country.

What Individuals Pay

In 1984 total revenues to budgets of all sociopolitical communities amounted to 753 billion dinars. The turnover tax alone accounted for about three-fifths of this, or 459 billion dinars. It is clear that the largest part of this tax was paid by individuals realizing income from employment and from self-employment. The level of the taxes which individuals paid in this way is 20-fold higher than the taxes paid on all other bases. And there are many of those other bases. Thus a tax is paid on farming, crafts and trades, on income from property, on royalties, on activities done outside of employment, on the total income of individuals, and so on. This relationship between direct and indirect taxes paid by individuals indicate the character of the tax system. It can be said that it is aimed primarily at bringing money into the budgets of sociopolitical communities in good time. The consequence of this kind of tax is inflation since the rates of the turnover tax are high, they have been rising, and they have also been raising the prices of products on which the turnover tax is not paid (staple foodstuffs). The tax system is also asocial, since the tax burden is inversely proportional to the ability of taxpayers to pay. The large number of different taxes favors voluntaristic determination of the tax burden, which depends primarily on the opstina, but specifically on individuals in public revenue departments. The question therefore arises—Why not introduce just one tax on the income of the individual or (better) the household that would be paid on the basis of a progressive scale?

There is no reason whatsoever for differing taxation of income from employment, from farming, from crafts and trades, from royalties, from the liberal professions, and so on. All income should be treated in the same way. A deduction might be made from income for the amount of the guaranteed personal income multiplied by the number of members of the household, although, of course, there first ought to be a deduction from the base of the material costs incurred by the person submitting the tax declaration insofar as they were related to earning the income. The present tax on the total earnings of individuals is not appropriate for several reasons. First, the exemption from the tax base amounts to three times the personal income realized in the
republic or province, which automatically puts in a privileged position all employed persons who have high personal incomes (officials of all sociopolitical communities and sociopolitical organizations, key personnel in economic and noneconomic organizations, and a large number of specialists employed in activities where high income and high personal incomes have traditionally been realized). Second, the present tax on the total earnings of individuals, which is a supplemental tax, is evaded wholesale. A return is filed only by those persons whose total earnings can be ascertained on the basis of their personal income and giro account. Third, the present progressive scale acts utterly as a disincentive. For instance, last year in many sociopolitical communities the rate of the income tax on income over and above 50 percent of the tax base was 90 percent. In practice the purpose here is to reduce the level of income realized on the basis of labor to the level of the recorded material privilege enjoyed by representatives of sociopolitical communities and sociopolitical organizations.

How To Tax the Economy

In the present economic system it is almost impossible to find an appropriate system for taxing organiza... [garbled sentence] ... tax system. The only sensible solution on which the Yugoslav economy might function is to build incentives into the economic system which would motivate employed persons to maximize their personal incomes and other earnings over the long term. A prerequisite for long-term maximization of personal incomes is development of enterprises, and that signifies both the formation of capital and its effective investment.

If advances against personal incomes were established by agreement on particular jobs, then it would be possible to use taxes to influence distribution of net income within organizations of associated labor. That could be achieved by progressive taxation of that portion of net income which is set aside, after advances against personal incomes have been accounted for, for personal incomes and for the social services of employees, whereby the scale of the progression could depend on the relation between that portion of net income and the total amount of advances against personal income paid out on the basis of current labor.

There are also constitutional impediments to rationalization of the tax system. However, the constitution can also be amended. The fact that there are essential material impediments based on interest is a greater problem, since they are more difficult to remove. For example, the present tax system regularly and abundantly fills the treasuries for the budgets of sociopolitical communities regardless of how sound organizations of associated labor in the economy are operating and regardless of the earnings which individuals realize. Changing the tax system in the direction of direct progressive taxation of income would eliminate that confidence of sociopolitical communities and would link revenues to budgets closely to the soundness of business operation and to the level of individuals' earnings.

The present tax system offers an erroneous idea about the price of government. It appears to be inexpensive, since the taxes paid by organizations of
associated labor and individuals are not high (the turnover tax is usually omitted, since it is an integral part of the prices of products and services). However, government is very expensive, not only because of the high turnover tax, but also because of the other expenditures for which no revenues whatsoever are collected (they are covered from primary note issue), such as differences in rates of exchange on the debts of the Federation and the foreign exchange savings of individuals.

Changing the tax system would also signify the end of privileges of a rather broad stratum of people, since it is precisely those who earn the highest income who ought to set aside both the largest amount and the highest percentage of their income for government. Of course, it is not just a question of material privileges of this kind. Introducing an automatic mechanism into the tax system and tax policy would abolish what today is the almost unlimited power of individuals in opstinas, a power that can, of course, be turned into material gain.

7045
CSO: 2800/393
TAX DISCRIMINATION AGAINST PRIVATE SECTOR DEPLORED

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 3-5 Aug 85 p 5

[Excerpts] In the last several months there have been many complaints about the drafts of the law on taxation of citizens and agreements on coordinating the elements of tax policy up to 1990 in the republics and provinces. In regard to the drafts, it is said they contain no new bases for the faster development of small business, while most of the criticism is directed at the high tax rates proposed.

Objections were made to the proposed tax benefits for private artisans: it was said that others in the private sector, such as those in auto transport and food and lodging facilities, etc., should also be included.

According to the assessments of the artisan sector in public discussions, these, as well as other documents, which regulate the small-scale economy have even betrayed earlier promises, obligations, and orientations. Namely, it can happen that in the next few years distrust will prevail, that these years will be filled with mutual suspicion on the part of tax organs and taxpayers, and time will be spent in long court cases. Specialists and business people estimate that the high tax rates which have been proposed will force artisan taxpayers to abandon their business to hide their incomes.

Private artisans expected considerably more from the proposed laws, which, as now formulated, do not stimulate the development of small business. This has been done, despite the fact that in the Long-Term Program of Economic Stabilization it is asked that tax policy support the development of private business.

According to assessments made in Croatia, the law has not responded at all to some questions which have been in dispute and have limited development. For instance, what about the tax base? There is a lack of equality in establishing total revenue in the private sectors and [establishing revenue] in associated labor; income has not been based on equal criteria. Personal income in the private artisan sector is still largely the result of tax practice which varies in individual regions.
There is an abundance of examples showing the dominance of tax subjectivism and it is indisputable that the small-scale economy is largely under the control of opstina administrations, upon which everything depends.

In 1984 total budget revenues of all sociopolitical communities amounted to 753 billion dinars. Of this amount 459 billion dinars was from turnover or sales taxes and the largest part of this tax was paid by citizens who are earning income from jobs or work performed with resources in the private sector. The amount of this tax is 20 times higher than the taxes citizens pay based on all other [non-private] bases. Such a ratio between direct and indirect taxes of citizens indicates the character of the tax system which is channeled primarily into the budgets of sociopolitical communities [opstinas, republics, etc.].

Everything contained in the Long-Term Program of Stabilization in regard to fundamental changes in the tax system (reducing indirect taxes and increasing direct taxes, coordinating the tax burden with the economic strength of the taxpayer, total relative reduction of general expenditures, etc.) remains simply proclamations, and this has continued even after the new Social Agreement on the Joint Bases of Tax Policy was issued.

Here are a few examples. The federal agreement on the bases of tax policy permits a tax reduction for new investments up to 25 percent of the apportioned amount. But in Belgrade the tax base is reduced by one-half of the amount of investment but only in the current year and with a limit of 170,000 dinars. The republic law in Bosnia-Hercegovina allows tax reduction of 15 percent (by opstina decision) on investments over 500,000 dinars but only in the first year.

In the apportioning and collecting of direct taxes it is said that the opstina revenue administration specifies higher rates because they doubt that the real income has been reported. Doubt also often surrounds accounting. Direct taxes in themselves are not a great burden but contributions [doprinosi] are a larger burden and are increasing rapidly. In 1984, 36.2 billion dinars were collected from taxes, contributions, and other obligations out of personal incomes from the private sector; this is 51 percent more than in 1983. The share of contributions in this increased from 62.4 percent of 63.2 percent.

The taxing of commercial products and services (within the federation's jurisdiction) affects the private sector more severely. Daily accounting of this tax is obligatory for the private sector, while the accounting service in OUR's can enter business changes in the books within an 8-day period. It is impossible, however, for private store owners to use the bookkeeping services, and many problems arise because of this.

It is difficult to justify the regulation according to which every sale of equipment by a private artisan is treated as the sale of a commodity to an ultimate consumer (for purposes of turnover tax collection). In regard to [tax] penalties, discrimination against private work is immediately recognized (the private worker is penalized in the amount of 500,000 dinars, while the penalty for OUR's is only 5,000 dinars).
The number of irregularities in all this is almost incomprehensible. Before the end of last year Vojvodina increased the basis for computing the tax on alcoholic beverages consumed in private taverns, cafes, etc., and also increased the tax rates 5-14 points. But for socialized taverns, etc., the tax rate was reduced. In fact, accounts show that in 1984 private sector sales of beverages brought in 2,380 million dinars and the tax on them amounted to 231,605 dinars; this year the tax expected to be paid amounts to 560,554 dinars, while socialized businesses with the same beverage turnover, will only have to pay 208,797 dinars.

CSO: 2800/405
BENEFITS OF LARGE-SCALE PRIVATE VERSUS SOCIALIST ENTERPRISES

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 15 Jul 85 p 9

[Article by Vladimir Gligorov: "Costs"]

[Text] Originally, socialism was supposed to facilitate, first, achievement of goals which are otherwise unrealizable, and second, reduction of the costs of achieving all goals. Otherwise put, socialism, "socialization," makes society more cooperative and speeds up its development.

However, since the very emergence of the socialist countries there has been a fear of competition with other systems and therefore of cooperation with them as well. Why? Let us take a typical example. Until recently private and government taxi drivers "coexisted" in Belgrade. Now the domination of private taxi operators is indisputable. Lower costs won the contest. At the same time, it was notable that the earnings of the private taxi operators were higher than the earnings of the government taxi drivers. This is also natural: lower costs, higher earnings.

So long as there was competition between the government and private taxi operators, there was a limit on the increase in the number of private taxi operators in order to protect the government operators. That cut back the supply of that service and raised costs, especially on the part of the government taxi operators. They went bankrupt. But since earnings are very good in this business, there is an abundant supply of it. The protection was removed, the number of taxi operators increased, the costs did not (except for those which are of the control of that profession) and earnings dropped. The real benefit from these changes went to the consumers. What applies to taxi services also applies to other services. When private business is restricted, the total volume of business is smaller, the costs are higher, and the income spread is also greater. What is more, the government, and that means consumers as well, has an additional obligation to producers concerning their costs and earnings. If private business is given a free rein, this obligation immediately disappears, and costs are left to the conditions of the market. Higher earnings increase the volume of business, so that faster growth is also achieved. Yet the government can stimulate competitiveness in the economy, taking the consumers into account.
Which is what people are afraid of. They suppose that free competition would result in utter superiority of the private sector. Socialism would go bankrupt. Let us suppose, then, that competition is not desirable. Why not good cooperation? If the private sector can benefit from socialist restrictions, what benefit could the socialist sector have from a complete elimination of the private sector? If the entire private sector as it now exists was "socialized," neither the volume of business nor earnings would be increased thereby.

The increased costs of the socialist sector are not the consequence of competition with the private sector. Nor have the low earnings resulted from sharing the profit with the private sector. Likewise, the low costs of the private sector are not the consequence of competition with the socialist sector. Only the high earnings, where they exist, are the consequence of coexistence with the socialist sector. And that is only the consequence of the high costs in the socialized sector and of protection of the market. This is fully in accord with economic laws. It only appears to be twisted. That is, let us take the private economy. The high earnings are achieved in two ways. On the one hand, costs are reduced through technological or organizational innovations. On the other hand the market is monopolized. Over the long run, however, the first approach predominates over the second unless stagnation and impoverization of the economy are allowed. What is confusing, however, is the fact that the high earnings in the private economy go hand in hand with large enterprises, rather than small ones. Even when innovation begins on a small scale, the enterprise grows rapidly if it wants to remain permanently on the market and if it wants earnings that will last.

Everything is degenerated under socialism because small business realizes large profits, but socialist monopolies run losses. Yet there is nothing strange about this. A socialist monopoly is almost explicitly a monopoly of the market, as manifested in the fact that it cannot do without a certain amount of economic or political protection. Its technological and organizational innovativeness is minimal, and its monopoly only raises costs, and the very fact of protection increases the value of any other alternative. But small business grows into big business. Once again the reason is contained in the costs. Fragmentation raises costs. There are obvious savings resulting from organizational innovations. Even in the service sector, just as in agriculture, it is not natural not to have large organizations. The creation of large service organizations and farms would reduce costs further. Socialism has been preventing this, since it restricts the private sector to "small business." Which is why the private sector operates with higher costs in the socialist countries. They are lower than the socialist costs, but they could be reduced still further. This unfortunately increases the ideological fear. What is small tends to grow to become something big. Small business, for all its advantages, is not a competitor of the socialist sector. Even if it were most optimally used, it would be limited to certain segments of the economy. To be sure, certain organizational innovations do favor it at the moment, but there will be sectors where the advantages will always come from consolidation. Only competition with large enterprises can work for real changes in the socialist sector. A large private enterprise combines private initiative with organizational savings. At present the socialist enterprise combines the absence of private initiative with high organizational costs.
DATA ON IRRIGATED LAND AREAS AS OF 1981

Belgrade EKONOMIKA POLJOPRIVREDE in Serbo-Croatian No 3, Mar 85 pp 159-160

[Excerpt] There is no doubt that land, water, knowledge and people's ability to work constitute the backbone of our advantages in the development of agricultural production. But those advantages have not yet been utilized. This especially applies to water, as illustrated by the table below.

Irrigation in 1981 by Republics and Provinces, in hectares

<table>
<thead>
<tr>
<th>Republic or Province</th>
<th>Equipped for Irrigation</th>
<th>Irrigation Sprinklers</th>
<th>Share of Sector Area Being Irrigated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Bosnia-Hercegovina</td>
<td>U</td>
<td>8,970</td>
<td>8,028</td>
</tr>
<tr>
<td>Montenegro</td>
<td>U</td>
<td>2,815</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Croatia</td>
<td>U</td>
<td>10,860</td>
<td>6,482</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>2,888</td>
<td>1,517</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>3,594</td>
<td>--</td>
</tr>
<tr>
<td>Macedonia</td>
<td>U</td>
<td>137,495</td>
<td>48,715</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>13,622</td>
<td>14,779</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>35,093</td>
<td>6,603</td>
</tr>
<tr>
<td>Slovenia</td>
<td>U</td>
<td>1,025</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>140</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

72
Table (continued)

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serbia proper</td>
<td>U</td>
<td>20,229</td>
<td>964</td>
<td>2,184</td>
<td>3,148</td>
<td>15.6</td>
<td>1.1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>814</td>
<td>2,184</td>
<td>2,998</td>
<td></td>
<td>95.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>150</td>
<td>--</td>
<td>150</td>
<td></td>
<td>4.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kosovo</td>
<td>U</td>
<td>44,982</td>
<td>42,896</td>
<td>2,086</td>
<td>44,982</td>
<td>100.0</td>
<td>14.8</td>
<td>14.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>937</td>
<td>2,086</td>
<td>3,013</td>
<td></td>
<td>7.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>41,969</td>
<td>--</td>
<td>41,969</td>
<td></td>
<td>93.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vojvodina</td>
<td>U</td>
<td>41,944</td>
<td>2,605</td>
<td>12,179</td>
<td>14,784</td>
<td>35.2</td>
<td>2.7</td>
<td>0.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>2,599</td>
<td>12,163</td>
<td>14,762</td>
<td></td>
<td></td>
<td>99.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>P</td>
<td>6</td>
<td>16</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

U = total; D = socialized farms; P = private farms.

Source: "Vodoprivreda 1981."

It is not difficult to calculate how large our agricultural output would be if instead of 1.84 percent we irrigated on the average about 20.5 percent of our total area, like the countries which are our neighbors, or the 15 percent which is the world average, or at least the 11 percent average for irrigation in western Europe.

The causes of the stagnation of irrigation are not only economic or financial in nature, nor technical nor technological, but they are above all the consequence of a failure to understand its role in the economy and in economic development. Yet it seems that we are becoming more and more aware that the progress of our agricultural production is not possible without using irrigation. Irrigation is one of the backbones in the Program for Long-Range Development of Agroindustrial Production: "Up to the year 2000 the area under irrigation is to be increased from 150,000 hectares to about 1.15 million hectares."

The Program for Long-Range Development of Agroindustrial Production has been adopted as a document for action and mobilization. However, if the increase in the area irrigated is to be achieved, there is a need to achieve more consistent and vigorous accomplishment of the other goals and measures envisaged by the program as well. Changes are needed above all in the attitude toward irrigation (it is not merely a technological addition), and then in the orientation and organization of science, the organization of work and division of labor, production orientation, personnel training and also the attitude toward people in the work process.

The results in agricultural production itself provide the social and economic justification for investments in irrigation. However, fulfillment of this program means that "industrialization of agriculture" will have a constructive impact on a number of other sectors and branches: from employment security, stimulation of the development of industry (machinebuilding, the chemical industry, and so on), construction, trade, etc., to the development of foreign economic relations with a marked growth of exports.
NONFERROUS METALLURGICAL PLANS TO YEAR 2000

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 24 Jun 85 pp 14-15

[Article: "Plans Without Backing"]

[Excerpts] How otherwise is one to describe planning for whose fulfillment barely 20-25 percent of the necessary resources have been furnished. Yet that is precisely the case with the long-range plans of producers of nonferrous metals, which are actually contained in a larger study—"Analysis of the Raw Materials Base and Projection of the Development of Mining and Metallurgical Capacity of Yugoslavia's Nonferrous Metallurgy up to the Year 2000"—which was commissioned by the general association and written by the Center for Economic Research of the Social Sciences Institute in Belgrade. Of the 640 billion dinars, the amount of minimum investments according to the institute's estimates, only the resources of mining and metallurgical work organizations can be counted on with relative certainty, and in no case will they exceed one-fourth of that amount. All the rest has to be procured in some other way—by pooling, through credits, from social funds, and so on. Yet it would be very difficult to count on those sources seriously. Although the pooling of resources is going somewhat better than before, no results of any significance can be expected of it, especially in this situation of the general impoverization of the economy. Foreign credits have represented 75-80 percent of total investments even in the past development of the heavy segment of nonferrous metallurgy, and because of their own overindebtedness work organizations do not dare to take new loans, nor would this be permitted them in the current payments-balance situation. Finally, no very significant resources can be anticipated from domestic banks, work organizations or social funds either.

In a sense this study is the consequence of the large discrepancy in development between the heavy and manufacturing segments of nonferrous metallurgy. Of course, just as is characteristic of our entire economy, it is to the disadvantage of the former. Yet this disproportion has had an adverse effect on the development of the entire industry.
Investments up to the Year 2000

If the output of nonferrous metals planned for the year 2000 is to be achieved, about 640 billion dinars have to be invested in 1984 prices. Of that 550 billion constitute investment in mines and metallurgy, and 90 billion in the most indispensable geological explorations to turn potential reserves into known reserves and for preparatory operations. If we add to this the 168 billion for power plants that would supply electricity to aluminum producers and the 85 billion for an electrolysis facility to cover an additional 100,000 tons of aluminum using alumina from Birac, total investments in the heavy segment of nonferrous metallurgy climb to 895 billion dinars by the end of this century.

The largest resources would have to be invested in the lead and zinc industry--238 billion dinars. Investments in copper production range about 189 billion, and those in aluminum production (not including investments for the power plant and the electrolysis facility) 123 billion dinars.

Table, in tons

### Production of Nonferrous Metals

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Aluminum</th>
<th>Copper</th>
<th>Lead</th>
<th>Zinc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>293,000</td>
<td>124,000</td>
<td>114,000</td>
<td>93,000</td>
</tr>
<tr>
<td>1984</td>
<td>320,000</td>
<td>127,000</td>
<td>112,000</td>
<td>92,000</td>
</tr>
<tr>
<td>1990 Plans of work organizations</td>
<td>360,000</td>
<td>152,000</td>
<td>196,000</td>
<td>155,000</td>
</tr>
<tr>
<td>Institute's estimate</td>
<td>360,000</td>
<td>152,000</td>
<td>150,000</td>
<td>150,000</td>
</tr>
<tr>
<td>2000 Plans of work organizations</td>
<td>414,000</td>
<td>207,000</td>
<td>226,000</td>
<td>190,000</td>
</tr>
<tr>
<td>Institute's estimate</td>
<td>414,000</td>
<td>180,000</td>
<td>210,000</td>
<td>180,000</td>
</tr>
</tbody>
</table>

### Consumption of Nonferrous Metals

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Aluminum</th>
<th>Copper</th>
<th>Lead</th>
<th>Zinc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual production</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983</td>
<td>196,000</td>
<td>147,000</td>
<td>106,000</td>
<td>94,000</td>
</tr>
<tr>
<td>1984</td>
<td>220,000</td>
<td>135,000</td>
<td>107,000</td>
<td>88,000</td>
</tr>
<tr>
<td>1990 Plans of work organizations</td>
<td>274,000</td>
<td>178,000</td>
<td>180,000</td>
<td>135,000</td>
</tr>
<tr>
<td>Institute's estimate</td>
<td>274,000</td>
<td>178,000</td>
<td>134,000</td>
<td>130,000</td>
</tr>
<tr>
<td>2000 Plans of work organizations</td>
<td>364,000</td>
<td>236,000</td>
<td>221,000</td>
<td>183,000</td>
</tr>
<tr>
<td>Institute's estimate</td>
<td>364,000</td>
<td>210,000</td>
<td>205,000</td>
<td>173,000</td>
</tr>
</tbody>
</table>

7045
CSO: 2800/385
EXCESSIVE PERSONAL EARNINGS IN OIL INDUSTRY

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 19 Jul 85 p 6

[Article by Milorad Urosevic: "Production of Petroleum Products: An Easy Life at the Expense of the Rest of the Economy"]

[Text] The grouping of petroleum product producers is well known to every Yugoslav, but few know that this country's economy would have larger exports than imports of the crude petroleum which these organizations refine. It is imported because production in the country is insufficient, which means that it is justified, but how much is imported, on what terms, and especially where, how and in which refining facilities this petroleum is to be turned into gasoline, oils, mazut and other products, all those things are by and large what is referred to as a trade secret. These circumstances have for years had a decisive impact on construction of refineries, in which immense resources have been invested, and then it later turned out that a mere half of that capacity is sufficient to refine the petroleum into products to satisfy the country's total needs.

The Blessings of the "Cost Principle"

In earlier years, when the prices of petroleum products were under direct controls, the refineries were in debt up to their ears. That was the consequence of the disproportion in prices, which was an objective circumstance, and it was constantly referred to whenever a demand for a higher price was involved, but the other subjective circumstance also contributed in large part to "building up" the losses, although by and large it was not mentioned. The high fixed costs of facilities built to refine 30 million tons of petroleum: interest, repayment of credits, and so on, as well as "maintaining" a work force of more than 7,000, were divided among the 13 to 14 million tons which are refined—less, that is, than half of capacity—which means that they were doubled per unit output.

What has been done in other countries under similar circumstances, the closing down of certain facilities and reducing them to the necessary level, never occurred to anyone in this country. According to some agreement among the refineries dating back a decade or more, certain new facilities were even built and even now, as far as we know, they are being completed. A solution worthy of a solemn was found for all of them, both the ones in place and the newly
built capacities. The so-called cost principle for setting prices, which has been checked in agriculture, which it put into a situation of producing less and less and raising prices "to the heavens," has also been applied in the grouping of petroleum product producers.

The losses were made up, salaries and social services were above the average by a very high percentage, and we will use an example to show how that happens.

"Last year the labor force employed in the country's economy had at its disposition 3 million dinars of business assets on the average, and it achieved on the average a net income of 581,000 dinars. This means net income in the amount of 19.15 dinars for every 100 dinars of average business assets employed."

Refineries Barely One-Third

By all economic rules production facilities equipped with up-to-date equipment and technology and with less "live labor"—referred to as capital-intensive, ought to afford larger accumulation, and vice versa. That is not the way it is in our context.

Those employed in organizations for refining petroleum into petroleum products have in the average year disposed of 26 million dinars of business assets, as compared to 3 million in the economy, which means that they had 8.5-fold more. With those resources they realized average net income in the amount of 1,935,000 dinars, which is 7.45 dinars of net income for 100 dinars of resources, which is only slightly more than one-third of the economy's average. And all the other results in economic activity last year were even "very successful," for those employed in those organizations it goes without saying.

The grouping has 20 organizations of associated labor with a work force of 7,650. The average share of accumulation in net income reached a very high 82.6 percent, but ranging from 95 percent in the refinery in Novi Sad to only 8 percent in one basic organization of the refinery at Modrica. While those employed in the economy at large disposed of an average of 35,860 dinars for personal incomes and social services last year, the average in this grouping was 53,080 dinars, or half again as much. The leader here was one basic organization of Naftagas in Novi Sad, with 71,000 dinars, and another with 69,000, which is twice as much as the average for the economy as a whole.

Net personal incomes have also kept up with the other results, which were achieved with the blessing of the cost principle. The average for those employed in the grouping was 31,025 dinars, 35 percent more than the economy's average, but here again there were pronounced differences, which by all appearances do not depend on the results of work done by the labor force. Thus in the basic organization "Technical Activities" of Naftagas in Novi Sad personal incomes averaged 40,640 dinars, while in "Petroleum Product Production" in the same system it was 39,620 dinars, and in the basic organization "Lubricant Production" of the refinery at Modrica they receive on the average only 22,000 dinars, which is just slightly more than half of what it is in the organizations of Naftagas referred to.
It follows from all we have said that with relations like that in such an important activity as production of petroleum products it would be difficult to achieve even initial results in the economic stabilization of the economy.