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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

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CONTENTS

GREATER FLEXIBILITY IN CEMA CENTRAL PLANNING, NO GENUINE REFORM

Zurich NEUE ZUERCHER ZEITUNG in German 7 Feb 84 p 9

[Unsigned article: "Little Chance of 'Economic Reform' in CEMA"]

[Text] With the exception of Hungary, there are hardly any indications in the CEMA as to any genuine economic reforms. Of course, all East states are trying to make their planning somewhat more flexible in order to be able better to adjust to the altered international economic situation. Most communist countries avoid speaking of reforms in this connection altogether; instead they talk about "perfection of planning and management" of the national economy, such as, in Czechoslovakia, in the GDR, and in Romania. The idea is to underscore the limitations of these changes and their tie-in with the "old" system. A basic improvement in the economic situation of course cannot be achieved in this way. But the limitations of economic reforms--and that applies even to Hungary--emerge more and more clearly also where the party monopoly is threatened.

Compulsion to Change

As part of a discussion with experts from the WIIW (Vienna Institute of International Economic Comparisons) it became clear that the East Bloc governments have been forced to make changes in the economic mechanism as a result of the crisis. Moreover, there is the danger that, following an "improvement" in the situation, the compulsion toward reforms will abate, in the opinion of WIIW director Professor Friedrich Levcik. In general, one can hardly prove whether, in times of crisis, more centralized planning or decentralization would make it easier to master the problems; everything depends on the specific conditions in the particular East Bloc country. It is becoming increasingly clear that it is not the degree of centralization of the economic mechanism that is decisive but rather that the specific economic policy also plays an important role. For example, both East Berlin and Bucharest pursue a centralist course; but while Romania's exports if anything shrank, the GDR was able greatly to increase its exports.

Differences in Hungary and Bulgaria

Michael Friedlaender described Hungary's economic reform with the key words: Abolition of planning by directive and attempts to achieve a flexible price

system and realistic exchange rates. A reform in the taxation system is currently being carried out. Furthermore, the firms are being urged more and more to react faster to signals from the market. At the same time, subsidies are being reduced. And consideration is being given to "controlled insolvencies"; in other words: When firms are being closed down, then one must also decide what is to be done with the manpower that now becomes available and with the capital. Of course, it is difficult for Hungarian firms to act in keeping with the market because there are still too many monopoly enterprises although some of the big trusts have already been broken up. In recent times there has been talk of replacing domestic competition with import competition but that is running into certain limitations in view of the foreign exchange shortage. An attempt is being made at any rate to persuade the firms to finance themselves.

The various measures to change the planning and management of the economic mechanism in Bulgaria, in the opinion of Mrs Ilse Grosser, do not have any parallel in Hungary because the directive-governed, quantitative planning effort is still in force there. Prices and investments are also being managed centrally, as is foreign trade. To be sure, profit does play an important role and this also helped improve the quality of Bulgarian products. Free price development is possible only in the case of high-grade commodities. The entirely too rigid price system was somewhat loosened up through price hikes ordered from topside as a result of which it was possible to achieve more flexibility. The management of the enterprises has a very restricted co-determination right in price fixing. But the big economic organizations --which are not unlike the GDR combines--prevail in the Bulgarian economy. By and large, Bulgaria is entirely successful in economic terms; the reform measures brought more flexibility and less planning indexes.

Theory and Practice in Poland

The economic reform in Poland, which was launched early in 1982, went even further than the one in Hungary. It required the in-house financing of the enterprises, self-management (something which does not exist in Hungary), and independence of firms. In this connection, Benedykt Askanas stressed that is was never possible consistently to introduce the independence of the enterprises because there was a general shortage throughout the economy. Allocation however requires central decisions. There is also resistance to the reform among the party's medium-level cadres (but not in the top party bodies). The price reform, an important component of the economic program, led to a tremendous surge in inflation and that also contributed to a rejection of the measures among the workers. The reform thus did not fail; instead, it simply remained on paper.

Failures in Czechoslovakia

Czechoslovakia only carried out the so-called perfection of centralized planning without any successes emerging into the light of day. This is documented for example by the drafting of the plan for 1984. The reform measures were designed, through various incentives, to get the enterprises to adopt "mobilizing plans" which were supposed to contribute to a cost reduction

and an efficiency increase. The plans of the enterprises however showed that the firms had set goals for themselves that were too low and this was also criticized by the government, as was underscored by Peter Havlik. Here is the consequence: The Planning Commission simply revised the firm concepts upward. Of course, one can detect a general recovery in the Czechoslovak economy so that the plans now spelled out for 1984 look realistic.

Romania carried out merely a price and exchange rate reform in order to tie the domestic economy in with the world market, as was explained by Gabriele Tuitz. A decentralization or reduction in the planning index was not carried out; instead, even new standards were adopted. It is interesting to note by the way that wages are now guided by the enterprise result.

According to official data, the GDR did not carry out any economic reform. Of course, some important changes were also made there: Foreign trade, for example, was shifted to the combines and profit now carries greater weight in enterprise management. The number of planning indexes was reduced.

Experiments in the USSR

Gerhard Fink emphasized that there are no indications as to a genuine economic reform in the USSR either. They are only carrying out an experiment regarding whose implementation however no precautionary steps were taken. The Soviet Union thus still has an economy based on allocations; but no increase in deliveries was planned for the enterprises included in this economic experiment. The authorities "discovered" this problem just now and at last released increased quantities of raw materials, energy, material, and semi-finished goods for the particular enterprises in the context of the experiment; but those supplies again will be missing in other sectors and this causes disproportionalities. The "brigade system" will also be hardly in a position to function well because, according to the latest plans, the brigades, with 10-12 workers, are to have an opportunity to meet the target requirements also with less personnel. But where are the now released workers supposed to be placed? Levcik in the final analysis however does not rule out the possibility that the experiment might be a preliminary stage leading up to a genuine reform if there is some degree of success, such as, for example, greater economic growth or more labor discipline.

5058
CSO: 2300/280

CEMA AIDS LDC'S IN AGRICULTURE, INDUSTRY, EDUCATION

Potsdam MAERKISCHE VOLKSSTIMME in German 20 Jan 84 p 5

/Unsigned Article: "SKET Has Good Reputation in Ethiopia; Cooperation Concentrated on Key Economic Problems"/

/Text/ Names such as Magdeburg and Leipzig have a good reputation in Ethiopia's New Mugher and India's Sha Zafar despite their foreign sounds. Magdeburg's heavy machinery construction combine "Ernst Thaelmann" (SKET) has built in the New Mugher, 100 kilometers west of Addis Abeba, the largest cement factory of the country which, after its completion later this year, will manufacture daily 1,000 tons of this important building material. A plant set up by the Leipzig combine Polygraph is going to make four-color print products in Sha Zafar Marg.

These are only two examples among the more than 650 projects the GDR has completed so far in developing countries. They include, among others, rice and grain mills, chemicals installations, sugar plants, rolling mills, pumping stations, steel mills, refrigeration and power plant equipment, railroad signal and security installations and printing plants.

. Foreign trade between the developing countries and CEMA has expanded more than thirty-fold since 1950.

. To-date, more than 4,400 industrial and agricultural installations have been set up, or are under construction, as a result of this relationship.

The primary objective of this cooperation is to solve key economic problems: the creation of a domestic energy basis, continued industrialization and an improved food situation. The state sector, in particular, is the beneficiary of this assistance.

For instance, plants CEMA country experts helped construct provide today 100 percent of Syria's and Ethiopia's petroleum production and refining, natural gas and nitrogen fertilizers, and 90 percent of Algeria's steel.

Among the CEMA countries, the USSR supplies the major part of the economic and technical assistance.

. In Africa alone, the USSR has started 500 industrial, agricultural and research projects, 300 of which have been completed already.

. Besides power plants, the USSR furnishes above all machinery and equipment, petroleum and petrochemical products, wood, rolled steel and chemical products.

An important prerequisite for continued industrialization is the training of national cadres.

. Currently, universities and technical schools in CEMA countries are training more than 51,000 students, research assistants and trainees from more than 100 developing countries.

. In the GDR, 900 boys and girls from Mozambique are currently receiving occupational training at Stassfurt's Solidarity School. Since 1953, over 3,700 Vietnamese graduated from universities, colleges and technical schools.

. Moscow's Lumumba University with its 9,000 slots for foreign students enjoys an excellent reputation.

The CEMA nations promote the large-scale establishment of teaching institutions in the young developing nations.

. On the African continent, 28 colleges, 23 technical schools and about 140 occupational training centers have been completed so far or are under construction.

. At this time, the GDR is setting up an occupational training center in the Nicaraguan town of Jinotepe.

7821
CSO: 2300/282

FUTURE OF GENERAL ENGINEERING INDUSTRY VIEWED

Prague PLANOVANE HOSPODARSTVI in Czech No 12, 1983 pp 45-55

[Article by Eng Fratisek Chochola and Jindrich Cupal, Dr Nat Sc, Research Institute of Engineering Technology and Economy, Prague: "Prospective Development of Key General Engineering Sectors"]

[Text] Extensive structural changes connected with the formation of a specialized production profile in mechanical and electrotechnical engineering sectors are among the features characterizing the intensification process in the Czechoslovak economy. A topical contribution made by economic research in this area is constituted, among other things, by the results obtained in dealing with the research task "Development of Mechanical and Electrotechnical Engineering Till 2000 and in the Eighth 5-Year Plan." Its key objective was to devise general conceptual considerations and detailed insights into the problems of the prospective development of significant sectoral groupings, key sectors, product categories and product representatives. This involved primarily the generation of a certain accumulation of topics for devising a concept of the prospective development of Czechoslovak mechanical and electrotechnical engineering. Concurrently progressing results were confronted with the views and conceptual considerations of ministries affiliated with technology and of their VHJ's [economic production units], which permitted the detection of conformant features as well as differences in views regarding the most viable methods and forms for the development of production programs. Consideration was given at the same time to providing for the needs of the national economy, concurrent or anticipated changes in internal and external conditions of development, requirements for a higher measure and form of participating in the international division of labor, particularly within CEMA, possibilities for the implementation of technological progress, limitations of sources and other significant factors. The present article is oriented only toward selected segments of the production program of the general engineering sector.

Highway Transportation Equipment

This occupies a very important position in the production program of Czechoslovak mechanical engineering and constitutes a traditional part of export assets. In the Sixth 5-Year Plan we produced, e.g., 880,000 passenger and delivery automobiles, over 200,000 trucks, more than 14,000 buses and 1,600

trolleybuses. A considerable part of production finds application on foreign markets. The volume of exports to the markets of socialist and non-socialist countries in 1981 reached Kcs 12 billion in prices quoted as "all charges paid." Nevertheless, the effectiveness of exports (with considerable differentiation between individual sectors) is not quite satisfactory. Direct exportation of automotive accessories, in which proceeds from sales are demonstrably higher, is an inadequately used opportunity.

The automotive industry shows on a worldwide scale a trend toward close international integration and cooperation. Relatively complex products are characterized by multiple direct linkages to subcontracts from many other sectors and branches of the national economy. Lagging demand on foreign markets polarizes the strong competitive struggle among automobile producers. The formation of large automobile companies (often supranational) is by now a common occurrence. In this manner it is easier for them to concentrate and accumulate considerable means for the constantly more demanding R&D, cut down the time and costs of the technological production preparation stage, eliminate superfluous duplication in tackling identical technical, design, technological or other problems, accelerate implementation of the latest findings and results of technological development, engage in mass production (with attendant lowering of production costs) of top-quality structural groups, assemblies and parts, set up an extensive and flexibly functioning servicing and repair network.

Intensification of development of the national economy requires that the CSSR automotive industry prove itself capable of following the path of intensive development. This means, first of all, achieving a high utilitarian value and quality of products with more efficient utilization of raw materials and inputs of energy, at a labor productivity comparable to and practiced as a rule by advanced producers worldwide. At the same time, the development of individual products and of entire sectors must be tied to the already existing capacities of the production base and investment resources must be oriented primarily toward the modernization and upgrading of machinery.

Holding one's ground under the harsh conditions of worldwide competition calls for a prudent distribution of resources and utilization of the advantages offered by meaningful participation in the international division of labor. It is impossible to ignore actually progressing processes of integration, specialization and cooperation and believe that under conditions of a smaller economy the automotive industry can keep achieving favorable results on a wide scope without relying on direct cooperative relations with advanced partners abroad.

Worldwide production of passenger automobiles amounts annually to approximately 30 million units and that of trucks to about 10 million units. This means that the CSSR's share (180,000 passenger cars and 45,000 trucks) represents approximately 0.5 percent and as such does not affect in any significant way the situation on the world's markets. Exports from the CSSR are based in essence on Skoda passenger cars and Tatra trucks (with

prevalent orientation toward the markets of socialist countries). Prerequisites for the expansion of export deliveries exist particularly for the new Tatra 815 truck, which is very well suited for functioning under extreme operational and climatic conditions; a certain potential exists also for highway haulage trucks (Liaz, Avia), where the main obstacles are constituted by the lack of a servicing network abroad and/or by licensing conditions. A still inadequately utilized opportunity is the exportation of automotive accessories. Trolleybuses, specialized trailers (e.g., refrigeration) and truck modifications for special purposes (e.g., trash hauling and collection, for agricultural or construction purposes, etc.) also have good prospects for finding a longer lasting and effective application in exportation.

There are four independent series (Tatra, Liaz, Avia, Praga) of truck production in the CSSR, each of which has undergone independent development. The lacking deeper mutual unification linkages account for many negative impacts, primarily on production in limited series, lower concentration of developmental capacities and the capacity of toll-making shops, wide assortment of accessories and fragmented servicing facilities. Such a situation is not conducive to creating suitable prerequisites for the desired transition to modular assembly of vehicles which would provide for a more flexible and cheaper meeting of the diversified demands of users (e.g., with regard to dimensions and equipment of truck cabs, alternate choice of engines, specialized superstructures, etc.).

--The Tatra truck is a heavy truck with high maneuverability in the terrain and in highway operation. Combination of the preceding types produced the new T 815 vehicle with excellent running properties, higher reliability and longer service life, higher level of unification and modular design. Its production takes place on the basis of a specialization agreement among CEMA countries. It is envisioned that between 1982-1985 production should be turning out all of its 32 modifications with 8-12 cylinder engines of higher outputs. For the future it seems advisable to achieve maximum interlinkage in the design concept of the Tatra and Liaz vehicles in order to attain a closely unified interlinkage between both series.

--Liaz trucks are designed primarily for heavy highway haulage. Their technological level corresponds to the worldwide average. Preparations are underway for production of the 120 series with improved tonnage for international truck haulage. There exists a certain overlap with Tatra trucks (tractors, dump trucks); however, their considerable differences in design (engines, axles, chassis) make a deeper unification process difficult and obstruct concentration of production of potentially interchangeable parts, assemblies and accessories. We should endeavor to make the Liaz plant into a specialized producer of automobiles for long-distance and international haulage in socialist countries.

--A light utility truck is represented in the Czechoslovak automotive industry by the Avia vehicle produced under license. It conforms well to the worldwide standard. Innovated types will come equipped with a five-speed

gearbox and a modernized cab. Since it is used primarily for intraurban transportation, it conforms to requirements for minimum emission of pollutants, smoke and noise generation, good maneuverability, economic operation, a wide assortment of superstructures, mechanized loading, provisions for accommodating pallets and containers. In view of the worldwide trends in this area it seems advisable to produce several series of light Avia trucks with a carrying capacity of 3, 4 and 5 tons derived from types A 30-32, which was interlinked for unification, with a uniform cab and 4 to 6-cylinder diesel engines. In these configurations the vehicles should be fully suitable for economic cargo transportation and might find a chance for finding wider applications in exports.

--The Praga V3S medium truck for terrain and highway haulage is to be modernized between 1983-1985. The objective need for this truck in the production program of the Czechoslovak automotive industry must be reassessed from a more long-term outlook.

--The production of trailer vehicles is concentrated in the BSS and Orlican national enterprises. It involves trailers, collapsible trailers, articulated trailers and refrigeration tractor-trailers. The worldwide trend is oriented toward expansion of the assortment of specialized transport vehicles, prolonging and lowering the loading area of trailers, reducing the aerodynamic resistance of sets by reducing the distance between tractor and trailer and other methods for cutting down the weight of trailers. A considerable potential for exports is opening up for us in view of the increased demand for a refrigerated transporter, the production of which should preferably provide for a higher carrying capacity (20-21 tons) and adapt its interior for accommodating pallets and containers.

Development of the production of passenger automobiles in the CSSR was based autonomously on concepts regarding the development of motorization in the CSSR as well as applying the export potential of the Skoda-make cars to foreign markets. Their annual production has been ranging lately around 180,000 units. Sales on the domestic market are tied closely to the future development of the standard of living and of lifestyle. Even though a considerable part of the populace owns automobiles, a large-scale replacement of the current fleet of vehicles could be expected in case of potential availability of a reliable vehicle which would have a longer service life, an acceptable purchase price, would be economical to operate and warrant multipurpose utilization.

The marketing of Czechoslovak passenger automobiles on foreign markets is at the present hampered by poor selling prices, which on markets of nonsocialist countries is the reflection of an uncompromising competitive struggle in which marketing difficulties are encountered even by quite renowned world passenger car producers. In socialist countries, Skoda vehicles expand the assortment offered by domestic producers.

Production of the current-type series of Skoda vehicles is to continue till 1987, when a new type of Czechoslovak design with front-wheel drive is expected to make its appearance. Modernization of the existing automobile

between 1983 and 1987 consists in offering more 1300 ccm engines, optional installation of an economical 5-speed transmission, modifications of the body and axles. If it becomes possible to scale all obstacles in developing a new type by meeting the highly demanding requirements placed by the worldwide trends on the design and features of a lower medium class passenger automobile, expansion of export efforts could be envisioned.

Dominant among the demanding requirements on the passenger automobile of tomorrow are economy, reliability, safety, long service life, ease of operation and simple maintenance, all at an acceptable purchasing price. Beyond dispute for advanced producers is compliance with strict ecological regulations and providing perfect servicing facilities. Comprehensive meeting of these requirements is beyond the individual possibilities of the Czechoslovak automotive industry, which to this day has been subject to largely autarchical development. Viable solutions must be analogous to developments abroad, specifically integration, specialization and cooperation in preproduction stages, in production itself, in marketing and postsale services. That translates into establishing close cooperative relations with foreign partners. The most topical problem is cooperation in the production of the power unit and electronization of passenger automobiles.

Delivery and light utility automobiles are most often derived the world over directly from passenger automobiles. In comparison to light trucks they are simpler, cheaper to produce, have a favorable payload to their own weight ratio. With front-wheel drive it is possible to design a very low loading area, their compression ignition (Diesel) engine provides the prerequisites for economical operation, particularly in urban deliveries. Their common characteristic is the optional offer of a diesel or internal combustion engine, many specialized modifications and variants, emphasis on low cost of operation and comfort of operators.

The S 1203 light utility vehicle is produced in the CSSR. It is envisioned that it will be replaced by a modern utility automobile derived directly from a series of passenger automobiles and unified with them very closely. However, that calls for more substantial direct international cooperation in the production of the Skoda passenger automobile, which could contribute a viably designed diesel engine as well as power drive components. A utility automobile of modern design should obviously generate great demand among organizations of the socialist sector as well as among part of the populace. It would also expand without a doubt resources for exports, particularly to markets of socialist countries.

Buses and trolleybuses represent the backbone of mass highway transportation of passengers; operation of trolleybuses is tied to urban and/or suburban transportation with built-up trolley lines. The worldwide trend is oriented toward differentiation in design of buses for urban, interurban and long-distance transportation which, as a rule, are not derived from a single type series. Intensive investigation and practical testing is conducted on prototypes of highway transportation means for mass transportation of passengers by use of alternate motive sources (electric motor charged by batteries recharged at stops or exchanged at charging exchange stations, a combustion

turbine, individually and/or in combination with a generator and a flywheel and other combinations of hybrid drives under consideration). In mass urban transportation in the CSSR, gradual substitution of city buses by more economical means making use of electric traction (streetcars, trolleybuses, subway sets) can be expected wherever technically feasible and economically viable. Also an important aspect of such a solution are positive consequences conducive to improvement of the environment.

Karosa buses are turned out in annual series of approximately 3,000 units, with their absolute majority destined for domestic utilization. The newly emerging 730 series differs from the preceding S 11 series by higher economy of production and technical level. The concept of both the previous and the new series of Karosa buses is marked by interlinkage of all modifications, which adversely affects more flexible meeting of the specific requirements of individual types of transportation (e.g., devising a city bus with a low platform, or a long-distance bus of standard 12 m length with a large baggage space and a more comfortable interior). The new 730 type series shows promise for line production. A close unification linkage seems advisable with the new series of Skoda trolleybuses, as they undoubtedly share many common structural groups and parts and establishment of more extensive cooperation with Hungary (Ikarus). A good step in this direction are deliveries of automatic transmissions and cooperational deliveries of axles. On the other hand, suitable conditions exist in the CSSR for the dynamic development of trolleybuses, particularly in view of the envisioned renaissance in trolleybus transportation and considerable opportunities for selling them on foreign markets.

Motorcycles produced in the CSSR have behind them a long tradition, high reliability and long service life. The gradual introduction in the long-term innovation program of a four-stroke engine that would be the result of joint CSSR-USSR development is envisioned.

Existing forms of international cooperation are essentially limited to the USSR (testing) and the GDR (development of technologies). Motorcycles are produced under Czechoslovak license in Turkey and Egypt.

It is envisioned that final production of touring motorcycles will be concentrated in the Jawa plant in Tynec on the Sazava River within the projected period. Production should start in the course of the Seventh 5-Year Plan on a new generation of type J 638 touring motorcycles that will form the basis for a subsequent transition (in the course of the Eighth and Ninth 5-year plans) to the equipment of motorcycles with four-stroke engines as the result of direct cooperation with the Soviet Izhmash plant in Izhevsk. With a view to the fact that a prevalent part of Czechoslovak motorcycles are destined for delivery to Soviet customers, it might be advisable to specialize (on the basis of an eventual long-term agreement with the USSR) on selected motorcycle parts and flexibly to adapt the volume of final production in our production capacities to meeting domestic demand and wider opportunities for exports. Production of sports motorcycles, which are meeting with very satisfactory results in international competitions, could become a certain domain.

Accessories for highway motor vehicles represent a potentially very promising area for the Czechoslovak automotive industry. Their production can be expanded, but it is imperative to narrow down the assortment, concentrate production of specific items and promote unification. This will widen the possibilities for exports in which we achieve better selling prices than in exports of final products. Bilateral and multilateral negotiations regarding potential specialization in production and mutual deliveries of automotive accessories are currently underway among CEMA countries. That would make it possible to do away with parallelism of production, improve economy of production, concentrate R&D capacities, accelerate the unification process, etc., in individual socialist countries.

Automotive accessories are finding an increasingly wider application in final products of the automotive industry as well as in other motor vehicles (tractors, agricultural, construction and roadbuilding machinery, etc.); their qualitative aspects are also changing, specifically in connection with the continuing electrification of motor vehicles. Application of electronics to various systems of the vehicle is important enough to affect detrimentally the sales of vehicles not equipped with electronic accessories to a constantly increasing degree on foreign markets.

The technical level of automotive accessories significantly affects the properties of final products, their reliability and service life. Some 40 percent of the sector's production includes product groups that are comparable with the production of leading foreign manufacturers (Bosch, Lucas, Westinghouse, etc.). The CSSR could specialize in their production on the basis of a long-term agreement regarding specialization and cooperation.

In addition to promoting specialization within CEMA, it appears advisable to maintain close contact with the world's leading producers of automotive accessories in nonsocialist countries, be it in regard to procurement of licenses, expansion of cooperative relations, etc.

The automotive industry will continue to occupy a leading position in the structure of mechanical engineering production in the CSSR. Its continued development can essentially take two forms:

--maintain the existing full assortment of final production and automotive accessories and the relatively autarchic nature of its development;

--narrow down the assortment of products, effect a transition to a closer unifying interlinkage and modular construction, concentrated production of specialized final products, components and accessories through establishing viable international relations of a long-term nature.

The first approach is undoubtedly more simple, conforming to the existing development and usages in the continuing development of the Czechoslovak automotive industry, but it also means coming to terms with lagging behind the tempestuous worldwide development which in its consequences could lead to nothing else but marketing difficulties, lower efficiency of highway

transportation and ineffective export prices. Implementation of the second approach is, without a doubt, much more difficult, even potentially somewhat risky (since it links our own fate to the economic prosperity of the cooperating partner, leads to a higher dependency of domestic production and meeting of domestic demand on imports), yet still desirable for the CSSR and, obviously, the only one that makes it possible to attain a more favorable economy of production, acceptable valorization of expended labor, of raw material and energy inputs, providing good prerequisites for expanding opportunities for exports and achieving higher selling prices on foreign markets.

The following were among the key objectives of devising alternate concepts for the prospective development of Czechoslovak highway transportation means:

--utilization of existing production capacities that absorbed a considerable input of resources in the past, of the R&D base and of the qualifications of experienced personnel;

--respecting worldwide trends in overall development, design, technical and utilitarian features of highway transportation means;

--meeting in an economical way the demands of user sectors in cargo transportation as well as the demands of the populace for mass and individual highway transportation;

--precluding further deterioration of the marketing situation on domestic and foreign markets;

--narrowing down the turned-out assortment of products, concentrating production on a more economical serial production, attaining a higher degree of participation in the international division of labor.

A frontal approach to the development of the automotive industry in smaller economies is not frequently encountered worldwide. To the extent that cooperative production with advanced foreign partners proves feasible (involving, understandably, cooperative relations based on mutually acceptable conditions), it should be embarked upon without delay, particularly in the area of power assemblies, accessories and the electronization of transportation means. This would substantially improve the outlook for better compatibility of products of the Czechoslovak automotive industry for competition, meaning also more effective sales on foreign markets.

Machinery and Equipment for Mechanical Engineering

The significance of this type of production for the intensification of the production base of the Czechoslovak economy and for meeting export quotas is beyond dispute. The transition to comprehensive automation and robotization of production processes calls for equipping production units with NC [numerical control] and CNC [computerized numerical control] systems, integrated production lines and, eventually, flexible production systems. An important feature of such an intensification process is the tempestuous

development and application of industrial robots and handling systems (PRaM) that make it possible to eliminate direct participation of humans in the production process, particularly in an environment harmful to health, in carrying out (physically and mentally) taxing production or assembly operations.

A dominant role in the production technology of general engineering is played by machine tools and forming machinery. On a worldwide scale we occupy the fourth place in value of their production per 1 million inhabitants behind Switzerland, West Germany and East Germany. Expanded application and more intensive utilization of forming machinery in technological processes generates tangible savings of materials and energy; machine tools and forming machines constitute traditional export items of Czechoslovak machine building that are in constant demand and are effective in exports. Machinery and systems for welding, surface finishing and application of unconventional technologies supplement the basic machine equipment represented by machine tools and forming machinery.

A basic direction in the orientation of technological progress in the development of general engineering production technology will continue to be derived from worldwide trends with a view to their suitability and beneficial effects for the Czechoslovak economy. However, there should occur a more pronounced transition to modular machinery design, to processing of precision semifinished products, wider application of forming, welding and precision casting. Continued increases in labor productivity will be achieved by means of machinery controlled by NC and CBC systems and by the degree to which they can be integrated with PRaM. Single-purpose machinery will be designed and built for required technological operations according to their users' specifications. Efforts expended on economic design will become reflected in the structure of foundations and frameworks for machinery by a wider use of weldments, concrete and plastics.

The development of conventional as well as of unconventional technologies applied in general engineering production will be affected worldwide by pressure on the material and energy economy of production processes. Forming technology in particular has not achieved in the CSSR a level commensurate to top attainable limits. At the same time it was shown that substitution of machining or cutting by forming produces a 5 kWh [kilowatt-hours] saving of electric energy per 1 kg of workpieces, in cold forming as much as 10 kWh. In welding there is envisioned a systematic mechanization and gradual automation and robotization of welding operations and their consequent application to special purpose systems, production lines, welding machines with NC and CNC systems, semiautomatic machines for electric arc welding in protective atmosphere using active and inert gases. Considerable energy savings and higher labor productivity in surface finishing are expected from the use of coated materials produced already at the metallurgical production stage. Unconventional machining and cutting methods are oriented toward the application of new physical principles and of various phenomena that can affect the surface shaping of bodies, culminating specifically in electrospark, electrochemical, laser or ultrasonic machine tools.

The maintenance of good positions and creation of promising export outlooks is tied to being able to equip general engineering production technology with advanced electronic control systems at acceptable price levels. Thus, in addition to its key role in the intensification of the process of economic renewal, electronization also represents the key factor in improving one's position and in effective marketing of this commodity on foreign markets.

We recommend implementing in the production program a shift from individual machines to production of integrated production systems with orientation toward:

--machine tools and centers with CNC control while providing for their integration with PRaM and equipping complicated machines with diagnostic systems and adaptive controls;

--automatically controlled all-purpose and single-purpose machines and systems for machining and cutting;

--flexible production systems and forming centers using PRaM;

--integrated production sectors, lines and single-purpose special systems for welding;

--machinery and systems for unconventional machining and cutting equipped with rotary circular tables, revolving turret heads for electrodes, suction and exhaust systems, eventually also adjustable microscopes.

Industrial robots and handling systems will be in the 1980's and 1990's among the most dynamically developing production programs in general engineering. They will gradually facilitate the comprehensive automation of many production processes and will start finding effective application also in the nonproductive sphere.

The development of automation and robotization has been incorporated into the strategic objectives for development of the national economies of CEMA countries. For example, the prospects for development of PRaM in the USSR were dealt with by a plenum of the CPSU Central Committee in September of 1980, 40,000-45,000 PRaM are to be produced and put to use in the GDR by 1985, in Bulgaria robotization represents the second key goal of industrial policy. The significance of the development and application of PRaM in the CSSR has been emphasized by the incorporation of this field into goal-oriented state programs. Approximately 3,000 PRaM units valued at almost Kcs 1.2 billion are to be produced in the course of the Seventh 5-Year Plan.

The long-term concept of PRaM development under CSSR conditions logically underscores the need for concentration and specialization of production and development on only a few types of PRaM, systematically unified from the viewpoint of their design, drive and control systems. The varietal assortment of needs of the national economy, complexity and technical demands of

PRaM production call for the intensive participation of this field in the international division of labor and the establishment of stable cooperative relations, particularly for the production of key elements and assemblies.

It appears advisable to develop PRaM production in the CSSR in the form of a modular structural design based on unified modules, the production of which would be the result of agreed-upon specialization and cooperation among CEMA member countries. With the aid of modules it would become possible to devise all-purpose specialized as well as single-purpose systems. Advantage might accrue from orientation toward PRaM that could be built into general engineering production technology, on industrial robots for nuclear power engineering, multiarm and assembly robots as well as robots for nonproductive activities. It is expected that providing the production base with robots and handling systems will lead to improved competitiveness of many general engineering sectors and gradually create improved conditions for exports.

Machinery and Equipment for Agriculture

Among the central points of economic policy of all countries belong efforts oriented toward efficient food production and providing nutrition for the populace. Agricultural products and various types of foodstuffs are increasingly becoming strategic commodities and a significant stabilizing factor of economic growth. They can be sold with great advantage on the world's markets, and countries that manage to generate them in surplus quantities find themselves under the current complex economic situation in a more favorable position in comparison to other countries.

The development of agricultural production under CSSR conditions is unthinkable without its intensification. Increasing plant yields per hectare and utilitarian value of animals is tied to expedient application of new findings from the area of industrialization and chemization of agriculture, of modern biotechnologies and wide effective application of high-performance mechanization and automation systems.

Due to its limited potential and production capacities, Czechoslovak machine building is unable fully to meet the needs of the national economy with regard to deliveries of advanced technology for agriculture. The only plausible approach is a developed international division of labor in agricultural machine building, particularly within socialist economic integration. With regard to agricultural machinery, among CEMA countries there exists a well developed specialization in products that include more than 200 items.

Over 40 percent of Czechoslovak agricultural technology production is exported to foreign markets. Among those of particular importance are tractors (of the more than 750,000 produced Zetor tractors, over 500,000 were exported). The national economy gains through their exports annually over Kcs 2 billion in "all charges paid" prices; nevertheless, the currently attained selling prices do not reach a satisfactory level.

A good basis for transition to higher forms of international division of labor within CEMA is provided by concluded multilateral and bilateral agreements regarding specialization and cooperation in production. It is in the common interest of member countries to accelerate, intensify and upgrade efforts in the area of unification, normalization and standardization to provide the indispensable prerequisites for the structural design of machinery and equipment on the basis of uniform assemblies, components and parts.

An important part of the intensification process is the electronization of agricultural machinery, which will have a decisive effect on the utilitarian value and technoeconomical features of agricultural technology products. Application of electronics in our country is still in its initial stages. Achievement of full electronization of routine serial production will call for the availability of microelectronic components on the domestic market, elimination of the still-existing shortage of passive electronic elements and selection of a suitable type of modular microcomputer system for demanding operation as part of agricultural machinery.

Tractors will continue to represent the basic means of mechanization in agriculture. While in the last several years the marketing potential on markets of advanced capitalist countries has been continually deteriorating, supply highly exceeding demand and competitive struggle gaining in intensity, on the other hand there has come the opening up of potentially interesting markets in developing countries, primarily with a view to their acute need for improving labor productivity in the agricultural sector and increasing the volume of agricultural production.

Devising alternate approaches to the potential development of machinery and equipment for agriculture was based on the facts that:

--agricultural products and foodstuffs together with sources of raw materials and energy are assuming an increasingly important strategic and political role on a global scale;

--intensification of production in Czechoslovak agriculture requires deliveries of high-performance agricultural mechanisms, machinery and equipment;

--a relatively well-developed product specialization exists in agricultural technology among CEMA countries;

--agricultural machinery and tractors in particular are among the significant items in Czechoslovak general engineering exports;

--machinery and equipment for agriculture was in the 1970's among Czechoslovak general engineering's most dynamic fields, with average yearly production increments in excess of 10 percent; this reinforced the production base of agricultural machine building.

Continued development of agricultural machine building calls for following up on established CSSR product specialization, promoting cooperation in production within the framework of socialist economic integration on the basis of bringing structural design and unification closer together. In the production program of Czechoslovak agricultural machinery building is envisioned (with a view to specific needs of Czechoslovak agriculture as well as demand on the part of the USSR) the expansion of production of machinery and equipment for reclamation, cultivation of land resources and harvesting of grass fodders in mountainous and foothill localities, small-scale agricultural mechanization (e.g., small tractors, motorized cutter bars, etc.) and others.

An indispensable prerequisite for maintaining and increasing the marketing potential and effective sales of Czechoslovak tractors on the markets of advanced capitalist countries are improvements in technical level, quality of products, providing postsale services at a competitive level and effective sales. This would call for a shift to higher traction classes in the production program.

The orientation of exports toward markets of developing countries is based on the idea of selling smaller agricultural mechanization means and tractors with a lower output and of simple design with low demands on operation and maintenance. Exportation of systems for animal production--which is tied to technical assistance and service--might also prove to be of interest. It should be based on individual requirements and needs of developing countries, but also on our active promotion.

Each of the potential paths of future development of Czechoslovak agricultural technology is strewn with its own obstacles and risks. A decisive role in the success of future development will be played by creative talents, professional prowess, skills and readiness of all personnel, be it in research, production, foreign trade or servicing.

Machinery and Equipment for Civil Engineering

The prospective development of these sectors is determined by internal needs of the CSSR and by the potential for favorable marketing of products on foreign markets. Among the key factors belong primarily the overall investment activity in Czechoslovak economy of the 1980's and 1990's and potential sales to our largest customer--the Soviet Union. The worldwide sluggishness in capital construction and sober reassessment of investment projects will lead to strong polarization of competition among leading world producers and exporters of machinery and equipment designed for operations in civil engineering. Thus, effective application can be found only by perfect products with an acceptable consumption of fuels and energy in operation and with readily provided commercial and technical services.

Machinery and equipment for operations in civil engineering represent a colorful assortment of products designed for mechanization and/or automation of earth moving, construction, road-building, partially even extraction or

mining operations and for predominantly discontinuous transfer of loose or lumpy materials over short distances. On the other hand, many products used in civil engineering, such as, e.g., bucket ladder excavators, cranes, transporters, transport or other vehicles, implements, etc., are assigned to other classification areas of Czechoslovak general engineering's production program.

The highly dynamic growth of domestic production of machinery and equipment for civil engineering in the course of the 1970's was primarily the consequence of the increasing internal needs of the Czechoslovak national economy, expanding potential for marketing on foreign markets (particularly the USSR) and the fact that the sector of prime importance by volume--machinery and equipment for construction, road-building and earth moving operations--was incorporated into a set of developmental programs. The assortment of products required for operations in civil engineering is so multifaceted that covering the needs of the national economy exclusively by domestic production would not be economical, to say the least. For that reason, long-term coverage of approximately 50 percent of domestic needs has been provided by imports; in addition, one-fifth of production of domestic origin comes from other than general engineering sectors.

A favorable circumstance for the promotion of the international division of labor within SEI is the specific inclusion of machinery and equipment for civil engineering in long-term goal-oriented programs of cooperation. The next step in shaping the production profile of Czechoslovak general engineering in this area should be narrowing down active product specialization with key orientation on multiple purpose earth moving and finishing machinery and equipment. Bringing structural design and development of unification, standardization and normalization closer together within CEMA will create suitable conditions for visible improvements in assembly and parts specialization and expedient development of cooperative relations.

Future development of a specialized production assortment will be necessarily tied to quality of performance and effectiveness of marketing products on foreign markets. Marketing limitations for leading world producers on the domestic market leads all key producers to escalate their export efforts, accompanied by accomplished service and a flexible credit policy. In addition, the world markets are starting to be penetrated by many developing countries, so that acquisition and maintenance of positions under conditions of very keen competition will become increasingly more difficult.

Machinery and Equipment for the Consumer Goods Industry

Orientation of the long-term development of machinery and equipment for the consumer goods industry should respect the needs of the Czechoslovak textile, printing, leather, clothing and wood-working industries and their potential participation in foreign trade. The development up to now has created the basic prerequisites for making use of the advantages offered by international division of labor and production programs under conditions of a constantly widening assortment and achievement of high technical level, series-type,

efficient production and utilization. An assessment of the potential for technological progress shows that there exist realistic possibilities for an export orientation of machinery and equipment for the consumer goods industry. In a part of production we achieved the highest technical level and we can assume that in the future we will manage to beat the competition in timely application of new principles, come up with original solutions, with elements of high automation and integration of technological processes, i.e., implement technological progress ahead of others. In addition, we have a much wider potential scope for sustaining technological progress by gradual improvement of existing principles, by expanding technological utilization and improving the quality of performed operations (involving, e.g., automated spindleless spinning machines, automated stamping machines, selected glass-making machinery, machines for processing glass fibers, etc.).

With regard to their finding application in foreign trade, we assume an exclusive orientation toward socialist countries. An important consideration is the creation of conditions of overhaul and modernization of the consumer goods industry while eliminating worn-out inventories and nonviable productions. The annual rate of production over the next 20 years should range between 5-6 percent, the rate of exports should increase by 0.1 to 1.1 percent, while imports should more or less follow the growth rate of production. In relation to socialist countries our deliveries should contribute to the gradual meeting of their needs in selected commodities imported heretofore from nonsocialist countries. In relation to nonsocialist countries it is within our means to provide for high rates of exports with effective selling prices.

The development of production for domestic use, but mainly for exports, is justified not only from the viewpoint of achieved and expected standards of its technical level and effectiveness in international exchange, but also because it involves production that poses little demand on consumption of energy and materials which under conditions of stagnation of their available sources will manage to valorize them effectively. It is for this reason that the development of machinery and equipment for the consumer goods industry is part of the progressively developing structural core of Czechoslovak general engineering.

Consumer Durables

The development of consumer durables that include primarily products and devices for household equipment, eventually for family (individual) recreation, will continue to be affected in the future by increases in the standard of living, particularly by personal consumption. Development of production is to meet the demand for consumer durables at a high technical and esthetic level and generate the requisite resources for exports.

The concept of long-term development is based on prominent participation in the international division of production programs. Under such conditions more than half of all production will be oriented toward the domestic market, the rest toward exports. It is envisioned that the average rate of production increases until 2000 should fluctuate around 3-4 percent, with priority

given to the rate of development of exports oriented primarily toward socialist countries. In imports high rates that will derive from the application of international specialization and cooperation are also expected. In its promotion our general engineering should concentrate on mass production of selected unified assemblies and parts, such as, e.g., compressors for refrigerators, components of bicycles, etc.

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The prospects for the development of key sectors of general engineering are good. They derive from the expected development of user branches (transportation, agriculture, consumer goods industry), from the anticipated increases in equipping households with consumer durables and from the possibilities created by the development of the international division of labor, particularly as part of international socialist integration. On the other hand, these good prospects are reinforced by the built-up production base, capacities of the R&D base, capabilities of technicians, organizers of production and all other personnel. In the coming period it will become possible to use all of these possibilities and talents in full measure to make general engineering the decisive factor in the transition to an intensive path of development of our economy.

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OBZINA VIEWS R&D, BUILDING OF DEVELOPED SOCIETY

Prague ZIVOT STRANY in Czech No 25, 1983 pp 11-14

[Article by Jaromir Obzina, member of the CPCZ Central Committee and vice premier of the CSSR Government: "Progress in Research and Development and Building of a Developed Socialist Society"]

[Text] The session of the CPCZ Central Committee on accelerating R&D adopted in June of this year a long-range program whose achievement will be decisive for the successful building of a developed socialist society in our country, which is our party's immediate strategic goal. The achievement of R&D in socialist conditions, or unification of the R&D revolution with the advantages of socialism, represents another higher stage of our constructive endeavors.

From the viewpoint of R&D in the current specific historical situation, the relation of the ruling workers' class and the CPCZ to intelligentsia in general and to intelligentsia comprised of scientists and technologists in particular is of the greatest importance for the political program. In specific terms this means that the following questions must be clarified:

a) How is the leading role of the workers' class and its Marxist-Leninist party asserted?

b) What evidence is there that socialist intelligentsia consciously serves the ruling workers' party and socialism?

c) How are the social relations of the Marxist-Leninist party, the workers' class and socialist intelligentsia established and developed in political and scientific areas during the period of the building of a developed socialist society?

In short: What are the relations between the political program-science-socialism?

We are concerned first of all about the specifically historical interpretation and practical implementation of science, technical knowledge and technology in the class struggle waged for the building of an advanced socialist society in our country and, on an international scale, in the world class

struggle between the world socialist system and capitalism. For that reason an organic unity of science and the political program is a most important principle for the party leadership and control of socialist society. In this context the theses of the CPSU Central Committee proclaimed on the occasion of V. I. Lenin's 100th anniversary stressed: "Leninist, communist control of economy must be based on science."

The following main stages are historically evident in the interrelations between the policies of the Marxist-Leninist parties, the revolutionary movement of the workers' class and science:

1. The first stage--the transformation of socialism from a utopia into science and the linkage of scientific socialism with the revolutionary workers' movement, i.e., the period from the publication of the Manifesto of the Communist Party to the victory of the Great October Revolution. F. Engels derived from this fact a practical, extremely relevant conclusion: "...having become scientific, socialism demands that it be treated as science."

2. The second stage is the period of adopting real scientific, technological and cultural values of the capitalist socioeconomic formation and the entire preceding development of mankind, including exploiting the bourgeois intelligentsia during the period of transition from capitalism to socialism. In Lenin's famous words, only a person who has acquired a critical command of the treasures of science and culture from the past may become a communist, because "education and science are the most beautiful flowers of civilization." Therefore, from the perspective of the building of socialism and communism he categorically demanded mastery of "...all science and technology, all knowledge and arts. We cannot create the life of communist society without them." In the period of transition from capitalism to socialism he never hesitated efficiently to use bourgeois intelligentsia's knowledge, skills and talents in order to build socialism as much as possible on modern scientific foundations.

3. The following stage, which is the most crucial period for the development of socialist society, is the preparation of its own socialist intelligentsia and the establishment and development of science, technology and culture based on socialist principles within socialist society. This is a stage of intensive building of socialism after the foundations of socialism have been laid; in the USSR and in our country it culminated with a programmatic approach to the implementation of the R&D revolution in the conditions of socialism. As characterized by the CPSU documents, socialism in this stage "...has advanced in a historically brief period to the front line of progress in R&D, the results of which are applied to an increasingly great extent in the country's national economy."

4. The next stage represents an organic, internal amalgamation of the R&D revolution with the advantages of socialist society, as first articulated and adopted by the 24th CPSU Congress as well as by the 16th CPCZ Congress and by congresses of most fraternal parties in socialist countries during that period.

This is a task to attain the world standard in R&D achievements in socialist countries and in R&D application in social practice as an objective prerequisite for the further development of socialism, because without achieving that objective--i.e., world standards of R&D and its practical implementation--there can be neither advances in the historical stage progressing from a developed socialist society to actual transition to communism in the USSR, nor successful building of a developed socialist society in the CSSR and in other socialist countries.

The final victory of socialism over capitalism worldwide cannot be achieved without reaching the world standard in R&D, because the class struggle is now being waged worldwide precisely in the area of R&D and its practical social application. With the current strategic military balance between socialism and capitalism this area has become one of the main directions in the competition between the socialist and the capitalist systems.

These strategic political conclusions are irrevocably confirmed by the following concrete facts:

The Leninist thesis that the final victory of communism will be achieved only after we have reached a higher level of social labor productivity than capitalism still applies. And precisely now, after the sociopolitical advantages of socialism have been confirmed and the strategic military balance has been achieved, it applies more than ever before that the economic effect of socialism determines world developments. V. I. Lenin declared: "We appreciate communism only if it is founded on economy" (volume 29, p 185), because first, "in comparison with capitalist labor productivity, communism represents higher labor productivity of voluntary, ideologically mature, united workers using advanced technology" (volume 29, p 421), and second, "capitalism may be, and will be, ultimately defeated when socialism develops new, much higher labor productivity," because socialism represents "a higher type of social labor organization than capitalism. That is the essence of the matter, that is the source of strength and the guarantee of the inevitable total victory of communism" (volume 29, p 413).

History has confirmed that the actual path of real socialism to the achievement of those goals is not straightforward, as one may have initially assumed; for example, if we plan to expand the volume of production over several 5-year plans and we achieve the anticipated goal! The development of socialist society has not been simple in the past and neither is it simple at present. In fact, the struggle for the attainment of this strategic goal of world socialism demonstrated in the past and still demonstrates at least two idiosyncrasies:

First, the achievement of a higher standard of social labor productivity in socialist countries than in the capitalist world as a whole, i.e., in all capitalist countries, appears inadequate in terms of strengthening the inevitable ultimate victory of socialism over capitalism. As a result of the axioms of an unbalanced development of capitalist countries in the era of imperialism, the vanguard of the seven most advanced capitalist states has

crystallized with the United States, which has attained a considerably higher level of social labor productivity than the capitalist world in its totality, in first place. It has been joined with another group consisting of 20 to 22 very advanced and advanced capitalist states, many of which have achieved a high standard of social labor productivity.

The socialist countries must take a specific historical approach to Lenin's statement of 1918, which means achieving a higher standard of social labor productivity than the most advanced and very advanced capitalist countries, i.e., those 20 or so most developed capitalist states, because they in fact have generally developed into a real force of world imperialism. At present the path to that goal leads through victory in the area of R&D and its mass application in social practice.

Specific comparison in reality appears as follows:

The CSSR is producing about 1 percent of the world industrial production and meeting about 45-70 percent of the standard social labor productivity of the most advanced countries in the world (depending on the country with which we compare our country). In the process of development it is an indisputable historical fact that--as a rule--the economic growth rate of the CSSR has been faster year after year than that of the most developed capitalist states as a whole and individually. The CSSR has at its disposal an enormous economic and R&D potential capable of resolving, together with the USSR and other socialist countries, these urgent tasks. A joint CSSR-USSR communique of June 1982 states that world socialism represents such a force that with its enormous economy, its developed scientific potential, its highly skilled cadres and its extensive natural resources, the socialist community fulfills all necessary prerequisites for the successful solution of any complex social and economic task.

This applies primarily for the level of social labor productivity and for R&D.

We realize these facts, but so does world imperialism and its citadel in the United States, as confirmed by some of its projections of the future development of the world and of world imperialism. Thus, for instance, the aspirations of U.S. society are outlined in the so-called unofficial prognosis to the year 2033, i.e., for the next 50 years, in the report "On the Threshold of the 21st Century," prepared for the U.S. president several years ago by 13 institutes and published this year in the U.S. NEWS AND WORLD REPORT of 9 May 1983. The document is entitled "What Will the Next 50 Years Bring Us?" Whether it represents a trial balloon of U.S. propaganda or the opinion of one of the influential power cliques, or an expression of unbridled imagination and illusion, or an attempt at a realistic prognostic outlook, we must note that U.S. imperialism has based its future economic development on further powerful R&D. In practical terms this means that it is projecting its hegemonist imperialist plans for the rule of the world in the future on the basis of "its own" military and R&D supremacy over all other countries. Of the more than 200 states on this earth, U.S. imperialism reckons

only with the most scientifically and technologically advanced states and assigns all others--including all socialist countries--to a category which lacks (in its opinion because of its lagging R&D) any economic, and thus also power, military, political and social influence, and will be mere make-weight or appendage to several capitalist states with the most developed R&D, led by the United States. These U.S. projections openly proclaimed U.S. imperialist supremacy under "scientific" and "technical" guises, and the repression and inferiority of states which failed to attain the U.S. standard and which, according to prognoses, cannot meet it, are taken as a matter of fact.

The U.S. imperialist militarist ruling cliques have not recovered from their shock when, thanks to the USSR, their strategic military supremacy was terminated for good and an approximate strategic military balance in the world was achieved; pursuing the policies of a further hectic arms race which jeopardizes world peace, they are already fabricating a new class illusion--their insurmountable superiority in R&D which should guarantee them world supremacy. They failed to achieve world supremacy with their hectic arms race and arsenal and they will not rule the world, not even with the aid of R&D!

That is one of the most relevant international aspects of this question.

However, the political significance of R&D not only represents one of the crucial factors of the class struggle on the global scale between world imperialism and real socialism, but it also is a pivotal moment in the solution of such global world problems for all mankind as:

1. the prevention of thermonuclear world war by consistent struggle against any abuse of R&D achievements for the annihilation of mankind on this earth;

2. the environmental protection of our planet;

3. a guaranteed supply of energy and raw materials, because it is known that at the level of their current production world resources of crude oil will last 30-40 years, world supplies of natural gas 50 years, and world deposits of coal 150 years;

4. a guaranteed food supply to all people on this earth, because according to official statistics roughly 40 million citizens of the world are dying every year due to food shortage, and according to the World Health Organization before the end of this century mankind will lose 500 to 600 million persons, 250 million of them children, solely due to food shortage.

These realities, and above all the fact that in R&D a great class struggle is being waged on a global scale between the countries of real socialism and the imperialist forces, and secondly, that many global world problems of all mankind cannot be resolved without mass application of R&D, prompt us to avoid any cheap, fashionable approaches to this--next to the prevention of a thermonuclear world war--cardinal problem of the policies pursued

by the world communist movement and by our CPCZ. If we intend to attain our strategic goal, i.e., communism, that cannot be achieved anywhere, not even in our country, the CSSR, without reaching high standards in R&D and its mass application in social practice, especially in production.

The decisive strategic significance of R&D and its application in social practice has its basis not only in the international but also in the internal political arena.

The report of the CPCZ Central Committee, presented by Comrade Gustav Husak at the 14th CPCZ Congress, realistically specified this task, stating: "The development of socialist society is indivisibly linked with R&D. We are facing the task of achieving organic linkage of the achievements of the R&D revolution with the advantages of socialist society. R&D in socialist conditions must be accelerated by means of a unified state technical program for the implementation of our party's economic strategy." The agendas of the 15th and 16th CPCZ Congresses emphasized this particular task and the most recent sessions of the CPCZ Central Committee compared this momentous task of our internal policy with such programs as socialist industrialization or collectivization of our agriculture. It is therefore not a departmental or partial issue but a societywide task whose fulfillment will determine one of the most crucial aspects of real socialism.

How is it expressed?

If in the process of socialist industrialization the former proletariat transformed itself into the ruling workers' class of our society, if in the process of agricultural collectivization the kulak class and all remnants and vestiges of feudalism in the village were socially and politically liquidated and small and average-size farmers were transformed into an independent cooperative agricultural class in our socialist society, we are now facing with an unusually meaningful new task in conjunction with R&D, namely to consolidate further the ruling position of the workers' class in our society and to recognize that the way to achieve this goal calls for strengthening, expanding and intensifying the link between the workers' class and the socialist intelligentsia in the process of the R&D revolution with the objective of taking a meaningful step forward to bring mental and physical work closer together. Although the R&D stipulated and required in the given stage will neither completely and absolutely eliminate class differences between the workers' class and the members of agricultural cooperatives nor abolish social differences between the workers' class and socialist intelligentsia, nevertheless it is developing one of the decisive ways to reach that goal.

However, from the very beginning this program of our party has made great demands on the workers' class, which must be able to implement in fact R&D in society in general and in production in particular. Every skilled worker must be professionally able to meet the requirements of contemporary R&D, which cannot be replaced by mere affiliation with the workers' class or political awareness and dedication, because they call for higher expertise and higher standards of labor discipline stemming from the political

and economic objectives as well as from the scientific, technical and technological needs of production and from the conditions of societywide development. It is an objective, highly demanding task to strengthen the ruling role of the workers' class in socialist society.

In 1920 V. I. Lenin already called for the renovation and building of new industry, agriculture, construction industry and transportation, of the whole socialist economy, as he explicitly stated, "...following the latest scientific achievements...on modern technical foundations, supported by modern science, technology and electricity," and he demanded categorically that the working people be equal to that task because "without it no socialist and communist society can be built." At the current scientific, technical and technological level and in the given international political situation, the political postulate stated above applies today to the workers' class and to our young socialist generation more than 60 years ago because the workers' class may successfully accomplish its historical mission "...only if it acquires modern education. Without that education communism will be only wishful thinking" (volume 31, pp 283-284, 285-286, 290, 293).

It is imperative to convince and inspire the workers' class to fulfill these tasks. Individuals as well as small or large workers' teams, those who, despite the program of political education of the party and of the socialist state, fail to grasp this objective necessity to strengthen the leading role of the workers' party in our society, are promoting, or soon will promote, backward, outdated views and, consequently, attitudes to work, life and society that are objectively injurious to socialism and to the workers' class. We must attempt to reduce them to a minimum. First of all, communist training and education as well as programs aimed at consolidation of labor, technical and technological discipline may guarantee that the influence of outdated views, underrating professional training and R&D be decreased to a minimum and overcome in the workers' class and among the members of agricultural cooperatives. The politically mature vanguard of the workers' class and above all our workers-communists must play their key role in modern professional education and the implementation of R&D. From this perspective they must be concerned about the good reputation of their place of work and, as they used to be concerned in the past about the "skillful golden hands," they must be now concerned about high technical standards and the quality of their achievements; they must be proud of the political mission of their class. If the leading role of the workers' class in the socialist political system is to be further enhanced and consolidated, if the building of a developed socialist society is to be accomplished, and thus if a realistic way is to be opened to initiate the gradual transition to communism, the workers' class must also become the primary promoter of R&D progress.

Members of agricultural cooperatives must also undergo an analogous process.

In this process our socialist intelligentsia must realize its social responsibility and its social mission. Ideological contents and innovation of

R&D depend mainly on the level of expertise and scientific potential of our socialist intelligentsia and on its knowledge and ability to utilize scientific achievements in our social practice, in the building, defense and security of our socialist society.

What, then, is the basis of the contents of socialist intelligentsia's social responsibility and mission?

As V. I. Lenin emphasized, the contents of the scientific intelligentsia's social responsibility and mission in socialism stem first of all from the fact that socialist intelligentsia in particular is called to master "...all sciences and technology, all information and arts. Without that we cannot build a viable socialist society. However, these sciences, technology and arts are in the hands and in the minds of experts, and therefore socialism needs precisely such intelligentsia, so that we not only may build socialism and communism but also so that we be able to fight against the bourgeoisie, against bourgeois sciences and technology in the whole world" (volume 29, pp 61-81). Second, the intelligentsia as a whole and individual members of the intelligentsia have the political, moral and human responsibility to realize always--in Lenin's words--that "the intelligentsia is nothing if it is not joined with a certain class" (volume 1, pp 438-440). Third, the social mission and responsibility of the socialist intelligentsia stem from the fact that "we call intelligentsia intelligentsia precisely because it reflects and expresses with the greatest awareness, determination and accuracy the development of class interests and political formations in all society." So long as it is incapable of doing that, it cannot fulfill its social mission. In this sense, in this comprehensive political concept, the socialist intelligentsia in our society serves the workers' class, socialism and the CPCZ as its leading force. Only a member of the socialist intelligentsia whose work, moral qualities and political attitudes characterize him as a responsible citizen of our socialist country is able to serve the workers' class, to serve socialism and the communist party, to serve his people in this complex area of class struggle. Even members of the intelligentsia who are not affiliated with any political party progress to deep socialist conviction and awareness and to the communist party primarily by way of their professional, scientific and technological work and by their recognition of the class they serve.

If it is an objective fact that the socialist intelligentsia as a social stratum fulfills its historical mission by serving the workers' class and socialism in the political and class sense, it does not mean what it is submissive to individuals and local or group interests of any kind. Those who underestimate the work of the honest members of the intelligentsia or the socialist intelligentsia as a social stratum degrade it or even oppose it in their political myopia, and thus harm our party and socialism. The CPCZ and our working people have always valued and still value knowledge and talent and above all, and they respect those scientists whose lives are dedicated to the service of their people and their country.

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MINISTER DISCUSSES ENVIRONMENTAL, ECOLOGICAL POLICY

Karl-Marx-Stadt FREIE PRESSE in German 16 Dec 83 p 6

[Interview with Dr H. Reichelt, deputy chairman, Council of Ministers and Minister of Environmental Protection and Water Management by H. Eckert, staff reporter: "Using, Shaping and Safeguarding Our National Environment Wisely, Intelligently"]

[Text] [Question] The term "our homeland" does not only refer to our cities and villages. Our children sing songs about the beauty of our country and about its riches, which belong to us all. Minister Dr Reichelt, what are the reasons for the fact that environmental protection has become a social concern?

[Answer] The policy of doing everything for the welfare of our country, which is our republic has been decided by the party of the working class and our government, also calls for shaping nature meaningfully, using its resources rationally, and protecting them effectively.

In the program of the SED the objectives and tasks of the environmental policy of our socialist state are formulated as follows: "The preservation of nature as the source of life, of material riches, of health, and of human joy, and rational utilization of it on a scientific basis so that it may serve the safe and happy life of future generations in the communist community." From this socially significant mission, there result two most closely interlaced objectives. For one thing, environmental protection serves to improve working and living conditions and, for another, it contributes to an increasing effectiveness of our national economy. In this sense, environmental protection is an inseparable component part of our economic and social policy.

> ...the natural forces are indispensable preconditions for work, but without work they are unable to produce any social values....
>
> Wilhelm Liebknecht

[Question] Those who love nature and its beauty must do everything possible to preserve peace for our world. This is the thought on which our reader Gottfried Kropf is basing his committed cooperation in environmental protection work. Would you please comment in some greater detail on the relationship between peace preservation and environmental protection?

[Answer] We consider the struggle for the preservation of peace, against a nuclear arms buildup, and against the deployment of U.S. first-strike weapons in West Europe to be the decisively important path to be followed for the preservation of our national environment. Environmental policy in the interest of the peoples requires their living together peacefully, irrespective of their social order. Environmental policy is incompatible with armament races and the policy of confrontation and arms buildup in which the Reagan administration and the aggressive NATO circles are engaged. From this policy there emanate the greatest dangers for mankind, the latter's cultural progress, and the natural environment as well.

The armament race which is being forced by NATO is inflicting difficult-to-repair damage on nature, leads to a wasting of natural riches and to a ravaging of forests and cultivated landscapes. Long-overdue necessary global environmental protection measures are being held back by this aggressive policy, and internationally agreed-upon programs are interfered with or prevented. Problems can be solved for the benefit of many millions of people with a fraction of the funds which are being made available for the inflated armament budgets of the NATO countries. For all these reasons as well must the nuclear amament spiral be checked in the interest of a peaceful development on our planet. The struggle for peace must now be continued all the more. This was urgently emphasized by the 7th Plenum of the SED central committee. Peace is the most important requirement for the protection of the environment, which is vitally necessary for the people.

> The human spirit has discovered many wonderful things in nature, and it will discover more and thereby expand its power over nature....
>
> Vladimir Ilich Lenin

[Question] In our republic, environmental protection in its broadest and in a more narrow sense affects each and everyone of our citizens. What is the comparative ranking of the problems of environmental protection in the economic strategy of our country?

[Answer] The economic strategy of the 1980's corresponds optimally to the environment-shaping and environment protection objectives which reach far into the future. The constant deepening of the intensification in all sphers of our national economy, the higher level of raw-material refinement, the more effective utilization of materials and energy, and the more rational use of water are in the interest of our socialist society as is the case with the ever more improving collection and utilization of secondary raw materials and the obtaining of valuable materials from production refuse and waste water. SED Central Committee Secretary General Erich Honecker has in this connection pointed out most emphatically on the occasion of the 7th Plenum that they lead to a growing performance capacity of our national economy. We at the same time make it possible thereby carefully to protect and to make rational use of nature's riches, and we reduce environmental stress, especially in the workers' centers.

[Question] ...and in this connection there is no way of bypassing science and technology.

[Answer] This must be emphasized categorically. On the occasion of the 7th Plenum of the SED central committee, Comrade Erich Honecker was in a position to state that the GDR, with its spiritual potential and its material resources, will be able also in the future to realize the performance increase necessary for a successful pursuit of the main task. Of great value are the research and development tasks for production processes and technologies with only limited waste products or none at all, which have been provided for in this five-year plan. Our ministry has made arrangements for research and development plans extending up to the year 1990 with eight GDR ministries. They include more than 150 subjects. Raw materials will be utilized ever more rationally with these new processes. This, among other things, applies to the fields of chemistry, the foodstuffs industry, the metal processing industry, the cellulose industry, and the coal and energy industries.

[Question] The fact remains that waste products will continue to come to hand. Herr Wilfried Wallenschlaeger of Karl-Marx-Stadt and other readers are interested if and how, for instance, accruing quantities of ashes are being processed. What level has been reached in the area of waste production utilization?

[Answer] This is a justified question, which does not concern only one branch of our national economy. In the GDR, more than 450 kinds of industrial waste come to hand annually. Whereas in the 1970's approximately 12 million tons of waste products were reused as secondary raw materials annually, they amount today to approximately 26 million tons annually, which is tantamount to 37 percent of all waste products obtained. The corresponding figure for 1985 is to be at least 40 percent. In the course of this five-year plan, 72 investment projects for the processing of secondary raw materials are to be carried through. Raw materials in the value of approximately 900 million marks are thereby to be recovered from the production cycle of our national economy. Currently, every third ton of the ashes obtained in the power plants is reused, predominantly in the building industry. Substitutions for up to 40 kilograms of cement per cubic meter can be achieved by way of using finest-consistency additive materials in the production of concrete. Re-use of one ton of ashes results in a gain of between 5 and 30 marks. Metallurgical slag is an equally sought-after raw material in the building materials industry.

[Question] Minister Dr Reichelt, you have already stated that completed material cycles reduce environmental stress. At the Bezirk assembly session for the further shaping of land cultivation and water conservation, which was held on 5 October 1983 and in which you participated, the subject of a more rational use of water and of keeping the water clean played an important part. How can both objectives be obtained?

[Answer] As a matter of fact, reduced water consumption in industry, the cycling of water is an ever greater number of enterprises, and the recovery of usable materials from waste water bring about a better water quality. As in the case of other national resources, we do not have an unlimited supply of

water at our disposal, but a stable supply of drinking water and of water needed for otheruseful purposes must be provided under all circumstances. For one thing, therefore, every water consumer must carefully and thriftily use the water which has been processed for him at great cost and, for another, enterprises must open up reserves through rational use of water. The objective is to take out of the public network an ever decreasing volume of water used for production purposes. In the last analysis, all efforts lead to a situation in which water consumption and water utilization in our industrial sector do not increase to a substantial extent in spite of increasing production. This results in certain consequences: The water requirements per production unit must be lowered by 5 percent annually. It is particularly enterprises handling their water rationalization in an exemplary manner which confirm the fact that a more rational use of water is very useful for their enterprises and for our national economy, and that it is entirely feasible. In the past 2 years, the specific industrial water requirements have been reduced by 8 percent. Participating in this are, for instance, the Karl-Marx-Stadt screw manufacturing plant in Karl-Marx-Stadt Bezirk and an ever increasing number of LPG's [agricultural producer cooperatives].

> There is no better teacher than nature, which continues to have an abundance of unused energy, and the reality created by human will power and intelligence.
>
> Maxim Gorki

[Question] A higher level of water utilization also involves better waste water treatment. This task assumes increasing importance particularly in Karl-Marx-Stadt Bezirk with its extensive industry and intensive agriculture. What are the tasks to be mastered in this area.

[Answer] The Council of Ministers of the GDR has decreed far-reaching measures for the protection of the drinking water reserves both on the surface and ground water levels. They range from strict observance of the government-established drinking water preserves to expanded waste-water treatment installations. In Karl-Marx-Stadt Bezirk alone, more than 320 million marks were spent in the 1981-1983 period for expanding the capacities of the water works and filter installations, the supply conduits, canalization, and the reservoirs in dammed-up areas. Some examples of this are, among others, the Eibenstock dam and the Burkersdorf drinking water processing installation, the Zwickau-Silberhof waste-water pumping station, and the new filtering installations in Karl-Marx-Stadt-Heinersdorf, Rodewisch, and Plauen.

[Question] Water means life--for people, animals, and the soil. What possibilities do you envisage for achieving increasing results by means of extensive irrigation?

[Answer] After the experiences gathered particularly in the past two years, with their sustained dry periods, the politburo of the SED central committee and the GDR council of ministers have decreed a water supply program. This decree has meanwhile triggered--in Karl-Marx-Stadt Bezirk as well--manifold initiatives for making use of water reservoirs such as ponds, lakes, and wells

for purposes of irrigation. In this connection it will be necessary to improve upon some useful ideas for perfecting existing irrigation systems, utilizing also new wells and waste water from animal-raising establishments.

The local people's representatives and councils have, as one activity connected with the preparations for the communal elections, already done much to recruit the village populations for their energetic participation in this work. In this connection, water-management experts who render active help and advice in connection with the selection of appropriate locations and of suitable procedures as well as in connection with the maintenance of installations....

[Question] ...for creating more irrigation possibilities at less cost--is this limited only to the agricultural sphere?

[Answer] No. All irrigation projects must be understood to have broader implications. I consider to be a good initiative the fact that in Karl-Marx-Stadt the Bezirk committee for water supply of the Nature and Environment Society of the Cultural League has set for itself the goal of helping to clean up many ponds in the villages in order to be able to utilize these reservoirs for irrigation purposes. Far-reaching ideas are also being entertained in the Bezirk association of the BKSK [Union of Small Gardeners, Settlers, and Livestock Breeders]. Through the taking of simple measures it is to be achieved that withdrawals of water from the drinking water network are to be reduced further and that irrigation will be made possible during the entire vegetation period.

> Man's struggle is always uplifting, and no saga is more beautiful than that of Prometheus.
>
> Ilia Ehrenburg

[Question] To come back once more to the 13 October Bezirk assembly, representatives have informed us about extensive achievements attained by citizens for the protection of nature and of our environment. How can each inhabitant participate in realizing the tasks which have been decreed?

[Answer] His relationship to the socialist community and to nature is reflected in his conduct at his place of work and in his leisure time. Our state therefore places great value on promoting a feeling of respect and responsibility for our natural environment on the part of each and every citizen and on developing the latter's cooperation so that the beauty of nature may be preserved. These are both rights and duties laid down in our constitution.

Noteworthy work is being done in this connection by social organizations, such as the Cultural League, particularly with its juvenile work teams, the URANIA [Society for Spreading Scientific Knowledge], the Architects' League, and the thousands of helpers participating in the "Join Our Work" competition.

Thus the field of activity in the sphere of environmental protection extends from the protection of fauna and flora to the collection and re-use of secondary

raw materials and waste products, and it includes the preservation and cultivation of our forests as well as strict implementation of the pertinent city and communal regulations.

Environmental protection is every citizen's concern to the same extent that it is one of the important concerns of our state to preserve our environment and carefully to protect the riches and the beauty of nature. It is a concern for us who are living today as well as for those who will come after us.

8272
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MEASURES TAKEN TO IMPROVE AIR, WATER QUALITY

Leipzig LEIPZIGER VOLKSZEITUNG in German 11 Jan 84 p 3

/Interview with Rolf Opitz, chairman, Council of the Bezirk: "Polluted Air Getting Cleaner Year by Year"/

/Text/ /Question/ /Comrade Chairman, today we want to discuss our natural environment and environmental protection. In this subject a major concern of the council in the same way that housing construction and the supply of consumer goods and services are?/

/Answer/ I can confirm that in good conscience. The council of the Bezirk understands the situation, as do the other local councils. The councils know what measures are being taken to imrpove environmental conditions and are supervising their execution.

/Question/ /Would you give our readers some examples?/

/Answer/ The most severe environmental problems are in the densely populated industrial areas such as the city of Leipzig and the Espenhain, Boehlen, Borna region. Regarding water purification, for example, the first stage of the biological wastewater treatment plant at Espenhain, constructed at great expense in terms of both money and equipment, went into operation at the end of 1983. By the end of 1985, we will have completed a biological treatment stage in the Leipzig-Rosental clarification plant.

During the first half of 1984 the water treatment plant at the "Otto Grotewchl" VEB in Boehlen will be completed, and construction will begin on a clarification plant for the Rositz facility.

These measures will guarantee that by 1985 our waters will be free of industrial wastes, particularly in the Pleisse and Weisse Elster regions where the pollution level roughly translates into the amount which would be expected from a population of 1,250,000.

New Electrostatic Filters in Briquette Factories

We also have plans for cleaning up the "dirty air." In Borna kreis new electrostatic filters are being installed in the Deutzen and Witznitz

briquette factories. At the "Georgi Dimitroff" heating and power station in Leipzig and at the Boehlen briquette factory the filters are being modernized to increase their efficiency.

Steps are being taken to reduce the amount of air pollution produced by the low-temperature carbonization facilities at the VEB brown coal refinery at Espenhain. And in the first quarter of 1984, the dust suppression system at the Leipzig-Leutsch electric steel casting section of the VEB Foundry and Machine Construction Company of Leipzig will begin operation.

/Question/ But many of our readers write that there is still much to be desired with regard to a more beautiful environment...

/Answer/ Of course we cannot eliminate all at once all of the environmental pollution which arose during the capitalistic period, particularly since each countermeasure involves high monetary and material expenditures.

It is a fact, however, that air pollution has decreased by 10 percent since 1976, even though industrial production in the bezerk increased by about one third during the same period.

Moreover, in Leipzig bezirk about 70 million marks are allocated annually from the national budget solely for the most urgent pollution control projects in key industrial plants. Obviously our potential in this area will develop in step with our economic growth.

/Question/ Again and again we hear that existing facilities are not fully utilized and that, for example, filters are turned off at night.

/Answer/ In order to limit such occurences, all plants which pollute the air and water to a significant degree receive so-called "critical limit notices." In Leipzig bezirk currently over 300 plants which contribute to air pollution have received such notices. In addition, there are another 225 plants subject to controls. This means that the plants which produce 90 percent of the emissions affecting air quality are regularly monitored.

In many plants, such as the Leipzig energy combine, the "Otto Grotewchl" VEB in Boehlen and the Regis and Borna brown coal works, these environmental protection statistics are firmly established as a part of socialist competition, and factory employees have a material interest in staying within the maximum permissible limits. Between 1976 and 1983, for example, the availability of the electrostatic filters increased from 88.9 to 97 percent in the "Ernst Thaelmann" power plant in Leipzig and from 76.1 to 90 perennt in the "Georgi Dimitroff" heating and power station, both of which belong to the energy combine. At 93 percent availability we lie above the GDR average. Turning off filters purely to achieve higher production figures is

therefore a thing of the past. However, should individual cases of such actions come to light during inspections, those responsible will have to answer financially as well as morally.

/Question/ Does environmental protection not just cost money...?

/Answer/ No. In the final analysis environmental protection is also economically efficient. Sales of usable substances reclaimed from the air and water amounted to 17.4 and 5.6 million marks respectively in Leipzig bezirk in 1982. At the same time we use derivative raw materials such as phenols, sulfur, ash from brown coal precipitation and coal dust as source material for chemical products, in construction or as an energy source.

Many Residents Set Good Examples

/Question/ What do you think all of us can do to contribute to the protection of our environment?

/Answer/ Each person bears responsibility in many different ways for the protection of natural resources, for order and cleanliness and for environmentally sound, efficient production facilities. More and more of our citizens are showing their acceptance of this responsibility by setting a personal example and by working in voluntary social organizations such as the Chamber of Technology (KDT).

Let me say a word to our motorists. Beginning in 1984 an exhaust gas emissions inspection will be required for all vehicle owners. In 1982 over 30 percent of the vehicles inspected still had impermissible exhaust gas emission levels. If everyone would make adjustments to their vehicles in neutral position in order to reduce pollution we in the GDR could save 20,000 tons of carburetor fuel.

12552
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FORESTS THREATENED BY INDUSTRIAL EMISSIONS, DISEASE

East Berlin PRESSE-INFORMATIONEN in German No 9, 20 Jan 84 p 3

[Article by R. Ruethnick, chief forestry commissioner and deputy minister, Ministry for Agriculture, Forestry and Foodstuffs: "Good Care Essential for Forests]

[Text] Practically one-quarter of the territory of our republic is forested. These forests constitute one of the most important raw material sources of our country. But they also serve our people's recreation and provide shelter for the wild animals. The forests provide a reservoir of water for the soil and they provide protection for the agriculturally used areas such as, for instance, protection against wind and other climatic influences.

All this can be accomplished only by healthy, properly managed and cultivated forests. The more than 49,000 forestry workers are making a noteworthy contribution to their protection and to ensuring their productivity to an even greater extent. In so doing, they are getting many kinds of help from other domains of our society.

Stability and Ensured Productivity

In the past ten years, winds and heavy snowfalls have repeatedly caused much damage in the forests. More than 20 million cubic meters of broken wood have had to be processed. The thinned-out forests provided additional areas to be attacked by storms and snow. To this must be added smoke damage caused by industrial enterprises, particularly in the fir stands of the Karl-Marx-Stadt and Dresden Bezirke as well as in the prine forests in other areas of the GDR. All this makes the trees more vulnerable to climatic influences such as, for instance, severe draughts and cold spells. Forest-damaging pests are enabled to spread more rapidly.

In order to counteract the perils endangering our forests effectively and to stabilize their productivity, the GDR council of ministers had decided to take special measures for the protection of our forest areas. Thus, for purposes of a speedy conclusion of clearing out the remaining million cubic meters of wood broken by the effects of snow and wind in the Thueringer Wald [Thuringian Forest] area and its speedy processing by the end of 1984, it was decreed that forestry workers from all GDR Bezirke help out with their technical equipment

in the affected territories. Proven to be effective in this connection have also been the energetic support of the cooperative farmers and agricultural workers, the "Healthy Forest" campaign of the FDJ [Free German Youth Organization], and the many citizen's initiatives in the affected areas.

Concrete measures have also been taken for the reconstruction of the forests damaged by winds, snowstorms, and smoke. The foresters are already in the afforestation phase and in connection with the cultivation of the forest stands making efforts to increase their stability against storms and wet snow by means of proper forest management measures. For instance, the maintenance of optimum distances between trees, the promotion of suitable crown formations, and the multi-stage building up of forest stands in endangered areas are included in this work. Repeated fertilization with nitrogen serves to enhance stability in smoke-damaged pine forests.

On the whole, it is necessary to achieve an optimum ratio between a high level of wood production, on the one hand, and an adequate measure of assured future production, on the other. It is for this reason that the work of reconstructing the damaged forests is also being utilized for increasing the share of deciduous trees. In accordance with the existing natural situation, coniferous trees account for 75 percent of our forest areas. We are paying particular attention to planting fewer smoke-sensitive types such as beech trees, sycamore trees, mountain ash, aspen trees, larches, Omorika pines, blue pines, Murray firsm, and black firs. In Karl-Marx-Stadt Bezirk alone, 560 hectares were afforested with more smoke-resistant tree types in 1983.

Extensive Measures Against Forest Pests

In combination with the damages due to wind and snow-caused wood breakage, and helped along by the climate prevailing during the past year, a massive increase in forest pests has become apparent both in our own forests and in those of other European countries. Ailing trees promote reproduction of insects and fungus. For instance, the large pine-bark beetle called "printer," because of the pattern left by his feeding activities, finds ideal breeding conditions in broken trees. Such a danger actually does exist in the Thuringian Forest area. Since the past year, extensive countermeasures have been carried out there. Thus, among other measures, 20,000 special bark-beetle traps have been installed in 1983, and 10,000 cubic meters of so-called entrapment trees have been set up and equipped with bait materials.

In the pine forests of Neubrandenburg, Rostock, Potsdam, Frankfurt, and Cottbus a massive increase was noted of night-beetles--a butterfly from a caterpillar which can within a few weeks devour entire pine woods, leaving them totally stripped. In May and June of last year, counteraction was taken against this pest with at times more than 30 agricultural aviation aircraft on approximately 135,000 hectares of wooded areas.

In addition to the bark beetles and the night moths, which presently are the most dangerous pests in our area, our forests are also endanged by the grey larch leaf-roller moth, several leaf-wasp types, the "lustrous pine beetle,"

the Waldgaertner beetle [forest gardener beetle], the Kiefernkulturruessler [pine culture beetle], the Nutzholzborkenkaefer [commercial timber bark beetle], and other insects of our forests.

Maintenance of order and cleanliness in all territories in a decisive prerequisite for an improvement in the state of health of our forests. To share extensively in the creation of clean forestry complexes is therefore an important point to be kept in mind in connection with the competitive programs of the foresters. The workers of the Neustreliz state forestry enterprise, who have called on their professional colleagues to participate in the competition, intend to devote quite particular attention to the subject of forest cultivation.

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FODDER SHORTAGE FORCES ECONOMIES, SLAUGHTER OF UNPRODUCTIVE LIVESTOCK

East Berlin BAUERN-ECHO in German 16 Jan 84 p 5

[Article by Prof Dr W. Laube, director, Section for Animal Nutrition, Research Center for Animal Production, Dummerstorf-Rostock, Academy of Agricultural Sciences of the GDR: "Using Each Pile of Fodder Precisely according to Its Value"]

[Text] Even though the supply of livestock with raw fodder in our republic is on the average essentially assured throughout this winter and up to the time of the new harvest, there nevertheless do exist some considerable differences between the various cooperatives and the various areas of the GDR. It is essentially in the central and particularly in the northern Bezirke that one can encounter many a cooperative in which not only concentrated fodder but also the raw fodder is becoming so scarce that there is a need for taking more, and more specific measures than merely the organizing of competent and rational fodder use, which is also a requirement for economic management even in situations of adequate supply.

Raw fodder in winter consists of green fodder stocks (silage, dry green fodder, hay) and straw. Mostly insufficient are the green fodder concentrated reserve stocks, even though in the past few years the GDR has on the average never produced as much hay as it has produced in 1983, namely almost 3.5 quintals [1 quintal equals 100 kilograms] per RGV [Raw fodder large-scale livestock unit; 1 RGV equals 500 kilograms of live weight of domestic animals feeding on raw fodder] but, in the case of some silages, this situation obtains to a far lesser extent than in other cases. Good-quality fodder straw reserves are in most cases not in short supply, which fact is a positive consequences of the dry weather existing during grain harvest time.

What principles must be considered to be applicable for the cooperatives in which the livestock cannot be adequately supplied with silage, hay, and dry green fodder and which, for example, up until 10 May 1984 have to manage with less than 7 kilograms of dry substances per RGV per day from these combined three fodder groups?

First Principle

In these enterprises, the instructions for the currently necessary strict selectivity especially in the areas of cattle and sow stocks (see DBZ [German Farmer's Journal] No 49/83) must be observed with the greatest possible consistency. The reason for our being able to enjoy the presently high stocks of these animal categories is because they make it possible for us to butcher off everything in these stocks which has shortcomings (cows with fertility or udder problems, young cattle with physical development shortcomings, sows which produce too few piglets, or the breeding performance of which is inadequate) and to proceed with the 1984 production with the remaining animals capable of a higher performance level. In places where even the raw fodder becomes scarce, one must only retain the livestock which is absolutely necessary for ensuring the attainment of the 1984 production targets. The pertinent decisions are to be made in a responsible manner by the livestock and plant production sectors, jointly with the veterinarians and in concurrence with the Kreis councils.

Second Principle

In cases when the available silage and hay have to be used sparingly, it is all the more important to know the specific fodder value of each fodder category, so that it will be possible to use it in accordance with the specific quality contained in the category concerned. This is important in the interest of a precise calculation of the fodder rations, because in a situation of inadequate supplies one must, of course, calculate more extensively and more precisely than when one has surplus quantities. There can be no doubt about that. The fodder control functionaries of a cooperative must consequently have a complete grasp of the dry-substance regulations applying to each silage and hay stack, and must see to it that the other value parameters (energy, nutrients, preservation successes, and so forth, with certified usage recommendations) are determined by the state-conducted fodder inspection.

It is, on the other hand, important to have a precise knowledge of the silage and hay in each storage pile in order to be able to determine the most appropriate animal group for which a certain fodder category is to be used.

Third Principle

In situations in which the green fodder reserves are scarce, the available fodder categories must in accordance with their quality be fed to those animals which have the corresponding qualitative requirements. For all practical purposes, this means the following: If silage of a particularly high quality (energy concentration, protein content, successful preservation, high quality level) is determined to be in a wilted-silage containing silo, then one must determine whether to use this silage fully in the adjoining stable in which perhaps young 13 to 24 months-old cattle are kept, or whether it is not possible to organize a distribution of such silage in such a manner that some milk cattle stables and, in the latter, particularly cows in their last month before calving and in the first three months of lactation will also be supplied from it. The young cattle in the above-mentioned age range can, if need be, also manage

with less good silage selections and with partial use of straw, instead; however, milk cows at the above-mentioned stage are subject to extreme performance requirements--they need the higher quality and they utilize it to a particular extent. Such decisions favoring economic management of fodder in spite of higher transport and distribution costs must always be made consciously and responsibly.

Similar considerations apply to our sheep flocks. Sheep with lambs need the same quality-silage and hay as milk cows, but those without lambs must do with lower quality fodder and with smaller than normal portions, getting more straw instead. And whereever raw fodder for male sheep is becoming scarce, straw will be its most important component part, and they must also be given the remnants from the feeding troughs of the milk cattle stables as well as silage of the lowest available quality. And all this has to be done regardless of whether a flock of sheep is part of animal or plant production activities. This should be a matter of course in a cooperative working together in a profitable manner.

Fourth Principle

Pregnant cows must be given good raw fodder to the point of their satiation, even if this does result in its becoming even more scarce for the ruminant stocks. At no other point of the feeding process is substitution for grain or mixed fodder through the use of raw fodder as effective as in the case of pregnant sows, amounting to as much as 40 percent of their energy requirements, because in the case of sows there occur through the use of proper substitution no negative, but rather positive, changes with respect to their performance (fertility, rearing of the piglets, duration of their performance span). Pregnant sows have a physiological need for raw fodder, and this is all I am going to say on this subject. In this connection, appropriately dispersed straw, dried fodder, green fodder, concentrated fodder, and mixed pellets dispensed in proper doses are certain to have the least effect on the raw fodder supply of cattle and sheep. If this cannot be provided, special green fodder silages for sows must be created. But where these are not presently available, recourse must be taken to the good silage categories of beet-leaves and maize, and of the latter particularly that which has arrived at a higher level of maturity, for feeding the pregnant sows. In this connection, effective subsequent chopping up is highly important, so that the beet tops and corn cob pieces will also be eaten.

Fifth Principle

An as great as possible compensation for the lacking quantities of silage must be created with the available fodder straw. Greater use of straw consequently is not the measure to be considered first when raw fodder is becoming scarce, but it should be considered last, because the use of more straw will become fully effective only after the principles already mentioned above have been realized. In connection with the use of straw, several aspects are to be considered.

1. The true fodder straw categories (oats, barley, and the straw deriving from all grass and leguminous plant seed cultivation, taking into account the

presence of defoliants in connection with the latter) are best fed to the animals in their full length by way of their last ration components in the evening, when the animals have a long period of time for eating ahead of them. This also applied to all cattle, sheep, and horse stocks. A cooperative is following correct economic feeding procedures if it is successful in storing these straw categories under a roof and in thereby moving all the high-quality straw available at the 1983 harvest time to the feeding throughs throughout the winter. Of course, all the other usage forms (see below) are applicable also for these straw categories. However, since they are also eaten effectively in long-straw form, they are not primarily considered for pellet-making, reduction in size, and so forth.

2. The straw types deriving from bread grains (wheat and rye) with their higher raw-fiber content are, of course, also to be used to the maximum extent wherever raw fodder is becoming scarce. Here, consumption must be stimulated by special measures. The latter include size reduction in the hammer-mill and feeding as a mixture with various types of silage or beets and/or the preparation of pellets. A maximum of three to four kilograms of straw per RGV and animal can thereby be made available for feeding. But one must not believe that thereby the effective performance of the same TS [dry matter] quantity of silage can be replaced. An example follows: If, for a group of cows which as of their having entered the lactation phase could produce 15 kilograms of milk per animal and day there are available only 5 kilograms of TS from silage and hay reserves, it is possible through correct use of straw meal and pellets to get the animals to eat 3 to 4 kilograms of TS of winter stalk straw. However, in order to cover the energy requirement for 15 kilograms of milk, an additional provision of more than 4 kilograms of grain leavings would be required. But because of the fact that such a high rate of fodder concentrate use is in most cases not possible, the milk production will go down and the high rate of the use of straw is nevertheless correct if the silage and hay portions cannot be increased. The animals will then at least stay healthy, produce 10 kilograms of milk when given their full requirements with an additional 2 kilograms of grain, and they also have fewer problems with low temperatures. Without the straw, it is impossible to prepare from 5 kilograms TS of silage and hay a ration which will do justice to milk cattle as their only source of raw fodder.

In connection with the making of straw pellets, one must add a word about molasses. Whenever the latter is now still obtainable, there is no better field for their use (the green fodder silaging period is over!) than in connection with straw pelleting. Straw and molasses (the same applies to beets) complement each other rumen-physiologically in an outstanding manner.

Other forms of using particularly winter stalk straw involve an improvement of the fodder value through treatment with caustic soda or urea with a simultaneous increase in straw consumption. The possibilities of caustic soda application prior to pressing should (again!) be created in all pellet-making installations whereby, when using energy-saving pressing equipment, 70 EFr [energy feed units] can be obtained per 1 kilogram of straw, which is tantamount to energy for 1 kilogram of milk additionally from 4 kilograms of straw used per animal and day.

The preservation of moist straw with urea is a procedure which belongs in the summer and which for best results is carried out directly in the grain harvest period for the processing of harvest-fresh straw types having a 30 to 40 percent moisture content.

In summary, it is not always possible to solve all problems connected with the energy and nutrient supply of the animals in situations of inadequate availability of green fodder preserves, but making available sufficient quantities of straw for the winter rations does play a considerable part in getting selected healthy cattle stocks through the winter in good health so that from the use of the new green fodder in the spring there will immediately once more develop a high rate of performance increase.

Sixth Principle

In view of the scarce reserves of raw winter fodder, the preparatory measures for spring assume still greater importance in the following areas:

--In the sphere of plant production, through placing emphasis on certain interim winter crop and green land areas for their early utilization through cutting their growth or by using them as pastures and,

--In the sphere of animal production, through competent organization of the preparatory and transition feeding procedures. We propose to discuss this in detail in future articles.

8272
CSO: 2300/263

BANK REPORTS ON 1983 INVESTMENTS

Budapest FIGYELO in Hungarian No 5, 19 Jan 84 p 7

/Article: "Investments in 1983"--Report by the AFB /State Development Bank/ /

/Text/ The socialist organs spent 187.2 billion forints at current prices on investments in 1983, 15-17 billion forints more than planned and 1.5 billion more than in the pervious year. The volume of investments--assuming an investment price level increase of about 6 percent--decreased by about 5 percent instead of the planned 10 percent.

Autumn estimates for the year's implementation assumed investment expenditures of 190-195 billion forints. The actual investment implementation is lower than this. In the final weeks in contrast with the usual increase also presumed for the end of 1983, primarily the investments by enterprises strongly moderated.

In spite of the significant decrease in total proejcted cost of the investments started in 1983, the investment inventory in progress at year's end is high and the number of investments in the preparation stage has increased.

Implementation of investments at current prices developed in 1983 as follows, according to preliminary data:

Development of Investment Expenditures

Decisionmaking authority	1982 actual	1983 plan	1983 actual	1983 actual as percentage of the plan	1983 actual as percentage of 1982
	billion forints				
State investments	76.9	69.6	78.7	113	102
Enterprise investments	108.8	99.6	108.5	109	100
Reserve		3.0			
TOTAL:	185.7	172.2	187.2	109	101

Some 22.4 billion forints were spent on major investments, 1.1 billion more than last year and 3.9 billion more than expected. The increment over the plan occurred mostly at the Paks Nuclear Power Plant where the 10.5 billion forints

paid out--because of the increased rate of Soviet deliveries over the previous years and the larger investment obligations--exceeded both the plan and the 1982 level. On the other hand, total expenditures for the other major investments just barely exceeded the projection (compared to the planned 11.5 billion forints, expenditures were 11.9 billion forints).

The major investments planned for completion in 1983--the steel plants of the Danubian Iron Works and of the Lenin Metallurgical Works, the semifinished product development at the Szekesfehervar Light Metal Works, and stage 3 of the Soviet-Hungarian natural gas pipeline--have been completed at the planned technological level and generally within the projected costs. Traffic at the Ferihegy Airport has been using the new taxiway since September.

Widening the Arpad Bridge and reorganization of Florian Square were progressing very well, section 3A of the North-South subway line was being built at a good rate, and thus at both developments it appears certain that they will be able to be turned over to traffic next year, as planned.

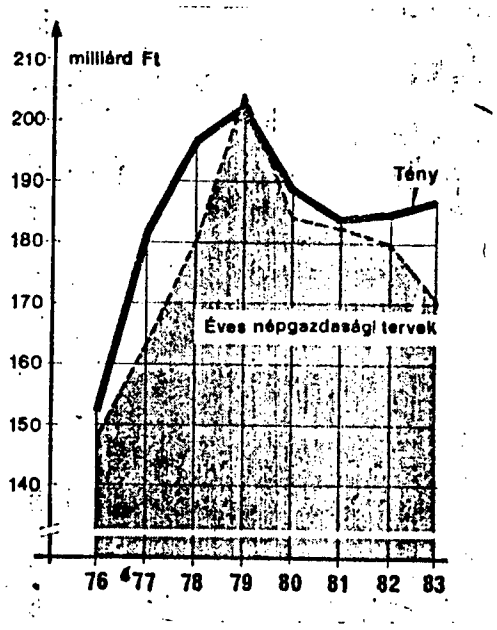
Even though last year's expenditures at the Szolnok Paper Mill exceeded the amount calculated in the plan and some of the earlier backlog was also reduced, yet the trial run of the basic production unit planned for 1 September 1983 still had not taken place by year's end. Due to lack of organization and lack of planning there is a significant lag (16 percent) in building the coking plant at the Danubian Iron Works.

Expenditure for targeted program investments implemented under ministry supervision was nearly 17 billion forint, more than expected. Exceeding the plan was financed basically from those enterprise resources which were available for these targets beyond the planned level of budgetary resources of the individual targets. Thus there were above the plan expenditures in the development of the grain storage network, the public railroad network and the telephone network.

The role of private resources increased also in financing the miscellaneous state investments of the ministries. They spent 8.6 billion forints, a sum close to the plan on their investments, which is about 6 percent larger than the 1982 expenditures. The investment activity of the educational, agricultural and food industry, and water management organs was outstanding in 1983 with respect to the amount of the expenditures as well as the growth rate. The increase was mostly financed from their own resources.

Implementation of the target program and other state investments of the councils was 30.4 billion forints. The extra amount paid out over their original investment opportunities was made possible for the most part by larger payments collected from the population than had been expected.

About 9 billion forints, 29 percent of the council investments, a smaller portion than in previous years was spent on housing construction. This is nearly the same as had been planned for 1983. At the same time the councils spent 12 percent more than in the previous year for development of the other infrastructural areas, primarily the educational network, local transportation, and the waterworks systems.



Implementation of Investments by the Socialist Organs

Key:

1. billion forints 2. actual 3. yearly national economic plans

The projection for enterprises and cooperatives approved in the national economic plan was far overfulfilled. Investment fulfillment at current prices is the same as that of 1982. The moderate dynamism of the investment activity seen during the year ceased during the last quarter and especially in December. The decrease occurred primarily in the branches outside of industry.

The higher than expected fulfillment of enterprise investments was determined by the high inventory of investments in progress and the increase in interest obligations. The livelier than expected investment activity was made possible by the high degree of using the reserve funds and using up the deposits made for development purposes. The inventory of enterprise deposits decreased by about 8-9 billion forints. The effect of measures taken during the year can also be seen in the low investment implementation of the final one-third of the year.

Last year also about 60 percent of the enterprise investments consisted of developments implemented exclusively from private resources. Payments for investments implemented through the use of loans decreased, the amount of loans being made is less than had been approved. At the same time, payments for investments assisted by state subsidy increased because of the low base related to the 1981-82 ban on decisions. (The decisionmaking opportunity has not been expanded.) However, the state subsidy approved for 1983 has not been used up in its entirety. About three-fourths of the shortage is at agriculturally oriented subsidies, and one-fourth is at interdisciplinary targets. Less than the awarded subsidies have been used for investments targeted at the modernization of energy consuming equipment and at developing the support industry.

More than half of the monetary funds aimed at supporting the economical use of materials was placed with the enterprises in the second half of the year, but actual utilization fell short of the opportunities. The rate of implementation increased for branch targets, and the budgetary surplus accumulated due to the shortfalls of previous years has in all certainty decreased.

In the material-technological composition of investment expenditures the value of construction investments at current prices is barely more than expected, and its volume will not even reach the expected level due to the presumably higher price increases than planned. The construction market's high backlog has perceptibly decreased in 1983, the number of rejected orders declined.

The larger than planned growth of domestic machinery investments and of the ruble accounted machine import is related to the shift in purchasing opportunities. Parallel with this, the delivery capabilities of both the domestic partners and the ones in the socialist countries have improved. The occasionally higher than expected price increases and definitely also the large quantity of deliveries arriving for the Paks Nuclead Power Plant in accordance with contractual scheduling had roles in the increase of expenditures.

In spite of strict import management we did not succeed in reducing the value of machinery purchased from convertibly accounted relationships to the planned extent. But moderation of the import in progress for years has also continued in 1983. After the three percent decrease achieved in 1982 machinery purchases decreased by an additional nine percent in 1983. More than 80 percent of the convertibly accounted machine import is investment made by enterprises. Within this, agriculture, the machine industry and the chemical industry are predominant.

The sharp increase in other investment expenditures is determined basically by the increase in the interest burden. Within the circle of state investments the interest burden increased by over 70 percent from 1982 to 1983. Nearly 40 percent of the increment is caused by the increase in outstanding loan volume, and about 60 percent by the interest rates.

8584
CSO: 2500/188

SUFFICIENT MACHINERY, LIMITED SELECTION OF HERBICIDES

Budapest NÉPSZABADSÁG in Hungarian 30 Dec 83 p 1

[Article: "What May Agriculture Expect? Enough Machinery, not enough Chemicals Available by Next Year"]

[Text] What will be the machine and tool supply of the agriculture next year? During the past weeks, among others this, too, has been discussed by the managers of the farmers' cooperatives and state farms. It is already well known that the prices of the industrial products used in this sector are increasing by six-seven percent. While it is so far only hoped for in the farms that for their money they are going to receive in due time the goods in the required quantities and qualities.

"By next year, the supply with machinery for the agriculture will be more favorable," asserts József Kárpáti, general director of Agrotek. "On the other hand, the prices in foreign trade have been changed, consequently we are forced to sell the Soviet-made machines at prices that are higher by 3.6 percent, those imported from the German Democratic Republic by five percent, the Czechoslovak machines by four, the Polish machines by five percent."

Due to the known financial difficulties, the demand by the farms has decreased, in the yard of Agrokerek the inventory increased, consequently, it became necessary to reduce orders. For example, the current stock of tractors of types T-150K and K-701 on hand are sufficient to satisfy requirements. In turn, there is demand for the MTZ tractors; Agrotek is purchasing 350 additional units of them, thus next year, 3,150 MTZ units will be offered to the farms.

In the next six months, there will be four Soviet-made T-130 type tractors tested, the fate of the further orders will depend on the results of these tests. Also, the Czechoslovak manufacturers are making improvements on the Zetor tractors they offer, however, the new type tractors at prices that are higher by twelve percent. As part of the program for intensive cultivation of cereals, 225 units of Fiat-1880 type heavy, universal tractors are going to arrive to the country. The Czechoslovak trading partner is delivering, however, only 500 units of the samll garden tractors, which quantity will not satisfy the demand. The problems might be eased by the plans of Rába to manufacture garden tractors.

The commercial enterprises offer larger quantities of grain combines than ever before. By next year, there will be 1,900 units of new combines in the country out of which 1,500 will be here in the first half of the year, thus the farms could buy them before the beginning of the harvest of cereals. Within the cereals cultivation program, which is supported also by the World Bank, 339 units of Class-Dominator will be delivered during the first half of the year. The farms may purchase by the end of June 400 units of the E-512 type, 250 units of the E-514 type combines that are most in demand.

As it can be expected, the provision of spare parts would also improve. Agrotek placed orders with domestic and foreign manufacturers for spare parts for a total of 4.7 billion forints, and by now 81 percent of these orders have been confirmed by contracts. Negotiations with the German Democratic Republic, and with the Czechoslovak exporters are in progress. Nevertheless, the commercial enterprise does not promise troubleless provisions for the future.

Recently, the requirements for plant-protecting agents have been collected and summarized. According to this, the farms have placed orders for imported plant-protecting agents for a total value of 4.2 billion forints. This year, Agrotek may spend somewhat more money to buy, nevertheless due to the increases in prices, it cannot purchase more goods. Though the requirements for quantities would be satisfied, but above all the selection in weedkillers will be insufficient.

Agrotek promises good supplies for the retail trade. They will offer in an unchanged manner in smaller packages plant protecting agents, providing advice for expert and economical use. The selection of the so-called combined packages will be enlarged.

The farms indicate great interest for the import of artificial fertilizers. As it is to be expected, the commercial enterprises will not be able to satisfy these demands. Poor supply is foreseeable in phosphorus-based fertilizers, while potassium and nitrogenous agents will be in sufficient quantities.

1250
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UNEMPLOYMENT FEARS GROUNDLESS, SAYS SZELIGA

Warsaw RZECZPOSPOLITA in Polish 14-15 Jan 84 p 3

[Article by Zygmunt Szeliga; material enclosed between slantlines printed in boldface]

> [Text] When I announced this article a week ago, I knew from the outset what its conclusion would be. Namely, it would be that whatever our circumstances, there is no work shortage in Poland, nor is there likely to be any for several centuries... This fact seems so obvious to me that I would even call it banal and in need of no proof. However, it is not that simple in reality, and the entire matter must be considered more carefully, beginning not from the conclusion, but from the beginning.

Let this be the beginning: I believe that in all discussions and actions concerning the rationalization of employment, a certain psychological barrier that may be characterized as /the fear of unemployment/ has a paralyzing effect. I come into contact with this quite often at numerous meetings when the discussion turns to issues of work and employment. Generally, I hear the following type of reasoning at this time: /"Editor, everything that you say about low labor productivity and the employment surplus and the like is true. But there is really nothing that can be done on these matters, for if we really let go those people that are dispensable, unemployment would arise in Poland, and this is impossible, since the principles on which our system in founded guarantee full employment. This is clearly defined in our Constitution..."/

/I fear greatly that this opinion is also held by a significant part of our economic staff members at various levels. This is one of the causes of the temporization that faces us in employment policy./

The fear of unemployment has a historical-psychological basis. It is known that in many countries, this is one of the worst, if not the worst, social calamity. It is also known (although only to the older generation, and even they like to forget it) that during the interwar period, Poland was among the countries especially crippled by unemployment. Currently, unemployment is considered to be very high in the developed capitalist countries, where it

ranges between 10 and 12 percent of the total labor force (the employed and the unemployed combined). According to the prewar, 1939 Statistical Yearbook, the unemployment index thus calculated was 30 to 40 percent in Poland. Since that time, 45 to 50 years have passed, and today's teenagers and even adults in the 30-to-40-year age bracket treat this almost as a cock-and-bull story. At the same time, however, the social subconscious of even these teenagers is embedded with a fear of its own.

/The elimination of unemployment as a social phenomenon was one of the most important claims of our revolution and one of the chief achievements of the initial period of the building of socialism./ Very early on, however, this led to individual excesses. Let us consider the systemic guarantee that is written into our Constitution. It is laid out quite clearly: this guarantee is the /right to work./ Meanwhile, how is this right understood, interpreted and executed in practice? The concept of "work" has been replaced in the social consciousness and in economic practice as well by the concept "finding oneself in a position of employment," or of possessing a labor contract that more or less guarantees permanent emoluments and the inviolability of one's position.

In time it is this that has led to today's absolutely absurd situation. We have thousands--not to say, hundreds of thousands of people that are "employed" and are dispensable with regard to the system and constitutional guarantees. We have the powerlessness of enterprise managements and employee self-governments that try to do something to restore a normal, regular situation, based upon the idea that each organizational structure should contain only a certain number of workers--that number that is really needed for the attainment of the objectives of the given structure.

I am very afraid that the new wage principles that surely will go into effect this year (the Economic Reform Commission discussed the draft law several weeks ago, and the draft is now entering the final stage of legislative work) will not create a healthy incentives system. /Speaking realistically, such a system can arise if the discretionary wage fund at the disposal of the enterprise, in accordance with the principles of the financing system, will be able to be divided among a smaller number of workers./ I suspect, however, that the management, the self-government and especially the trade unions will not find in themselves the power and the energy to ensure the enterprise such a situation.

If we really wish to achieve progress in the employment sphere, labor discipline and the creation of an incentives system, we must, above all, throw our historical-psychological fears of unemployment into the trashcan. This is the initial, fundamental condition for rationalizing employment and is essential to the success of the entire new economic system.

Thus, we must tell ourselves clearly that there is not, and will not be in Poland any plane for the creation of unemployment, understood as a /work shortage./ It is enough to stand on any spot in our lovely country--in downtown Warsaw, Hel, Bieszczady, Katowice, Lodz or Wroclaw--to look around and ponder a moment about how much there is to do, how many possibilities we have for work today, tomorrow and in the future, at every turn.

The entire problem lies in the fact that this is real /work./ At times it is hard and even unpleasant work, requiring physical and mental exertion, often initiative and resourcefulness. Meanwhile, the many years of unhealthy practices in the employment and incentives sphere have resulted in making this perspective on real work, inventiveness and initiative totally foreign and unacceptable to a significant part of the citizenry of our beautiful country. It is much better to interpret the systemic principles to say that the /state guarantees every citizen employment, i.e., some kind of work position, even if disliked or disdained/ (I think that in Poland, as in no other country, are there so many dissatisfied and frustrated "employees" that nonetheless hold onto their "jobs" with all their might--this is evident at every turn, and especially in trade and offices).

The absurdity of the fear of unemployment can also be proved statistically. GUS [Central Office of Statistics] published its most recent 1983 Small Yearbook of International Statistics. Let us look there and compare our employment structure with the employment structure in other countries. At first glance, one sees the tremendous underdevelopment of the so-called third sphere in Poland, the sphere that encompasses activity outside of agriculture, forestry and mining (first sphere) and industry and construction (second sphere). /In Poland, the third sphere employs less than 31.7 percent of the total workforce, while in Czechoslovakia, the corresponding figure is 38.5 percent, in the GDR it is 38.7 percent, in Hungary it is 37.1 percent and in the USSR it is 41.6 percent./ In developed capitalist countries, employment in the third sphere encompasses more than half the total workforce (for example, in France it is 52 percent, in the FRG it is 51.5 percent, in Italy and Switzerland it is 51.3 percent and in some countries, it is even more than 60 and 70 percent (for example, it is 64 percent in Sweden, 66.5 percent in the United States and as much as 72 percent in Canada!).

Let us convert these percentages into the real needs of the third sphere in Poland. In order to achieve the indexes of the GDR and Czechoslovakia, we would have to have 1.2 million people in the third sphere. With regard to West European indexes (France, FRG, Italy and Switzerland), we have a shortage of 3.6 to 3.8 million people in the third sphere. Compared with Japan (56 percent), we have a shortage of 4.4 million. I will not even mention Sweden, the United States and Canada...

What is this "third sphere"? It is municipal transportation--almost every day, in every paper in the country, one sees advertisements of openings for bus drivers, trolley operators and other transportation workers. It is services of all kinds--everyone in Poland has the daily experience of having to go to nightmarish lengths to buy a railway ticket, to buy a money-order or to pick up money at the post office or to attempt to have shoes, a television, a refrigerator or a car repaired.

Putting aside even the third sphere, however, what are our real possibilities and needs in the first and second spheres? How many small brickyards could and should be set up (there is no shortage of raw materials), if we really wanted to solve the housing problem? How many fruit and milk processing plants (we also have plenty of these raw materials) or plants for the production of

various items based on local raw materials and waste material could we and should be build?

/Let us stop fearing the mirage of unemployment. Let us start talking about the possibilities for work that really exist--that are socially useful and necessary./

8536
CSO: 2600/640

BANK CHIEF DETAILS PROSPECTS, PROBLEMS OF CAPITAL CREDIT POLICY

Warsaw GOSPODARKA PLANOWA in Polish No 10, Oct 83 pp 419-423

[Article by Stanislaw Majewski, president, National Bank of Poland]

[Text] Regulations governing the banking laws and the NBP [National Bank of Poland] statute designate the NBP as the nation's central bank and as the center of the entire banking system within the functioning mechanism of the national economy. Bank reform implemented thanks to these laws and also on the basis of the legal norms of the entire legal regulation package and linked, among other things, with economic reform is of critical importance.

Due to the fulfillment of the Sejm resolutions, the bank has the opportunity to become an important part of the economy's operation. In contrast to previous years, bank reform makes it possible for banks to play an active role in the shaping and accomplishment of socioeconomic policy, the shaping of economic equilibrium, and the functioning of the national economy. The process of implementation of economic reform continues to place ever increasing obligations upon greater efficiency in all areas of the national economy. We must remember, however, that the level of utilization of opportunities delineated in the regulations also depends to a large extent upon the manner of operation of all the bank partners.

New Opportunities for the Operation of the Banking System

The increased opportunity for the banks to influence the economy's operation and its development was acquired, among other things, thanks to:

1. the Sejm's acceptance of the principle of voting every 2 years upon a comprehensive credit plan and the public income and expenditures balance sheet together with the assumptions governing monetary-credit policy. As a result, the opportunity for the increased importance of the credit plan itself within the economic management system (as one of the basic macroplans) is possible as well as that of the instruments of the monetary-credit policy linked to the plan's realization; consequently, the potential for greater subordination of economic decisions in specific economic areas, especially those concerning the enterprises, is contingent upon their financial conditions. The currently accepted procedure constitutes a vital step in the direction of a more suitable definition of the dimensions of the credit policy, the definition of the principles and rigors of granting bank credits, etc.;

2. strengthening the role of the NBP as the nation's central bank, as a national issuing bank, and as a central credit, savings, clearing, and foreign exchange institution;

3. establishment of a bank council (headed by the NBP chairman) as a coordinating and consultative organ for the remaining units within the banking system. The scope of the powers of the bank council as predicted by the banking law increases the potential for a more disciplined and coordinated achievement of monetary-credit policy by the entire banking system, and increases the banks' potential for a merit-oriented and advisory influence upon other units within the national economy;

4. basing the joint cooperation of banks and enterprises upon the principles of the agreements concluded. This strengthens the already existing bank policies concerning the enterprises and at the same time compels the banks to a greater degree of responsibility--in the area of disposition of funds--for the proper operation and development of its partners. This also places an obligation of increased financial discipline regarding compliance with the conditions for granting and utilizing credit.

Linked with this is the need for carrying out a "tight money" policy and implementing the fundamental tools whereby the banks can exert influence in the form of evaluating the credit worthiness of the enterprises. An indication of the new partner relationships between the bank and the enterprises is represented by the establishment of credit committees created by individual branches and departments involved in credit activities.

The reform of the banking system created both new official and legal conditions for bank activity and also placed new tasks before the banks. These new tasks are a result of the current state of change in the operational system of the economy (economic reform, among other things) and changes in economic policy directed toward leading the economy onto a path of balanced economic growth and fulfillment of its domestic obligations.

Credit Policy Conditions for the Near Future

Credit policy is subordinate to the basic objectives of the national economy, concerned with overcoming the economic crisis, the success of which depends upon the achievement of a real production growth in the area of tangibles, together with an increased national income and also a gradual return to domestic market investment and budget equilibrium, halting the inflationary trends, and gradual creation of conditions which would allow for competent realization of new domestic obligations.

In connection with this, the realization of the credit plan and monetary-credit policy assumption is directed toward bank cooperation with its partners in the achievement of a gradual financial equilibrium of the national economy, by easing tensions and disproportions which appear in the economy's individual sectors, and specifically in the monetary-market area, in the payments to foreign creditors, and in the investment sector, etc.

The achievement of the proposed effects is strictly dependent upon unquestionable compliance with the principle that the credits granted by the banks must be supported with funds accumulated in bank accounts.

Under these conditions the credit plan for 1983 (and also for future years) foresees limited potential for the granting of new credits to economic organizations and to the public. These opportunities would increase if the enterprises were to free themselves more easily from their obligations to the banking system and to the economy (mainly in the area of credit repayment, maximized use of own funds by the enterprises, increased size of enterprise bank accounts, etc.) or they can also be decreased relatively in case of the appearance of contradictory signs. Other bank system behavior, specifically increased credit activity without close linkage with the status of bank deposits, can only lead to a credit plan deficit and to the need for the creation of so-called currency without backing. Among other things, this would lead to growth in inflationary trends, erosion of the economic accounting indebtedness, etc. Moreover, a significant portion, approximately 30 percent, of the increase in funds invested in bank accounts is designated for payment of credit which is financing the national budget deficit. Therefore, a certain restraint by the banking system in exceeding the rational limits of credit activity is designed to halt the inflationary trends.

Direction of Credit Policy and Methods for its Accomplishment

The 1983 monetary-credit policy and the principles behind the credit system operation are directed at achieving the following important goals:

--activization of economic activity by state and cooperative enterprises in the direction of the most desirable premises and tasks contained in the CPR [Central Annual Plan] and the NPSG [National Socioeconomic Plan];

--stimulation of effective processes within the national economy;

--gradual balancing and rationalization of the investment front;

--inducement of the enterprises to optimal utilization of their own resources in financing current and development needs, from the point of view of the CPR and the credit plan;

--gradual restriction of the inflation level through the issuance of currency and establishment of bank credits within the limits specified in the comprehensive bank credit plan.

In accordance with the premises of the monetary-credit policy as well as the guiding principles of the credit policy of the NBP and other banks the above-mentioned objectives must be achieved with the assistance of the following basic system principles and tools:

a) the utilization of a broader and more profound evaluation formula to determine the credit worthiness of state and cooperative enterprises in comparison with 1982;

b) adoption of the principle of increased credit exclusively for purposes of financing real production growth and services and sales;

c) influencing the enterprises to use their own funds to finance economic activity;

d) limiting credit activity exclusively for continued investments and certain minor modernization and replacement projects.

The accepted formula for credit worthiness--besides the use of the already employed 1982 measure of the current profit rate of economic activity of the enterprises--has been broadened using the following elements:

--evaluation of the potential ability to repay long-term investment debts or special credits contracted to supplement the enterprises' own funds;

--evaluation of the level of economic management of individual enterprises and the level of improvement in relation to the past, and also based upon other enterprises within the same branch of industry.

Thanks to this, the level of credit worthiness will not only be measured by the achievement of the current positive financial results but also by the opportunity for their continuation and eventual long-term improvement, at least by the repayment date for the contracted credits. This new method used by the banks for evaluating the credit rating of the enterprises results from the need, obviously for the bankers, for justification of the proposal that the time period for the evaluation must be designated by the time period of former and future obligations of the enterprises with respect to the banks.

Based upon the evaluation of economic management by the enterprises, the banks are also focusing special attention, among other things, upon:

--the shaping of costs, their structure and dynamics, especially material and energy expenditures;

--export efficiency;

--improvement in work output and profit rate.

Considering the experiences of the second half of 1982, one of the basic agreements on determining the credit worthiness and reliability of the creditor enterprises was the adoption of methods and directions for the utilization (distribution) of profits earned in 1982. A specific role will be played by the bank appraisal of the sources of enterprise profits and the proportion of distribution of profits for financing production (especially development) and consumption needs.

Based upon 1982 experiences, in 1983 the banks have broadened their scope in the use of so-called agreement conditions in their credit agreements. Future credit will frequently depend upon the conditions whereby the enterprises are given a specific period of time to achieve financial results, etc., with banks reserving

the right to restrict the amount of credit to be granted if unsuitable financial and efficiency parameters contained within the agreement begin to appear.

Additional agreement conditions mentioned in the 1983 credit agreements depend, among other things, upon:

--the bank's ability to restrict credit if the enterprise obtains better financial results than were stipulated in the credit agreement. Previous experience indicates that in requesting credit many enterprises knowingly or unknowingly calculate their profits too conservatively, and then the increased revenues earned are chiefly spent on financing higher wages and bonuses. In reality, the mere restriction of current financial liquidity of the enterprise will not bring about any automatic changes in the balance sheet; nonetheless, the establishment of stricter financial conditions together with the threat of payment difficulties can restrain the enterprises from excessive growth in wages and other renumeration;

--stricter conditions imposed by banks regarding efficiency. In many cases by working in this direction the banks grant short-term credits, and at the same time make their extension contingent upon the achievement of specific parameters. These conditions primarily concern work output and efficiency levels, accomplishment of enterprise savings programs, especially cost reduction, etc. In certain cases, however, the banks granted credits for less than 1 year because material supplies were too low in comparison with the planned production program.

Following the expiration of the credit terms, a second analysis of the economic and financial situation and evaluation of compliance with contract credit terms is carried out in all the enterprises. If the evaluation is determined to be positive, then credits are extended under new terms for a new amount and a specified time period. If the evaluation proves to be unsatisfactory, credits are then restricted or even called in.

Banks have adopted a policy of gradual credit restriction with regard to many enterprises whose current economic activity and short-term prognosis do not justify complete withdrawal of bank credits which finance the so-called permanent needs, and whose efficiency is relatively low with little likelihood for improvement (or lack of credit worthiness for a specified time period). This is in order to compel the enterprises to improve their internal management and simultaneously to motivate them to increase the use of their revenues for financing current and development expenditures. This should also prevent these enterprises from increasing renumerations which are inadequate for actual economic activity, and also insure the calling in of the credits in case of enterprise bankruptcy. The banks instituted these proceedings in 577 cases (according to the situation as of 30 April 1983), restricting the credit quota of indebtedness of 15.8 billion zlotys by the end of 1982.

This signifies that besides the 183 state and cooperative enterprises which do not even possess current credit worthiness and are incapable of current self-financing in 1983, under present conditions the subsequent 577 enterprises do not possess so-called future credit viability. In order to apply the regulation

criteria on enterprise restoration and bankruptcy the enterprises must already be or at least become candidates for internal restorative programs in the near future.

Regardless of the criteria for current and future credit worthiness, the size of the majority of the working capital credit granted by the banks has been determined by the actual volume of production and its growth, as well as from specific preference and production contra-indications resulting from government and ministry programs.

Increasing credit exclusively for financing demands linked with the growth of sale of production, services, and sales represents a basic principle for defining the size of the operating credit granted together with current and future conditions denoting credit worthiness.

Therefore, the criteria designating growth in sales under comparable conditions were adopted in order to eliminate the growth achieved as a result of price increases. Where this was justifiable and possible the natural units were selected for comparison purposes, whereas in the remainder comparable price methods analogous to the calculation of the base for PFAZ taxation were used. These restrictions did not merely encompass the commercial enterprises where the regeneration of reserves and their financing through higher bank credits are economically and socially justifiable.

From the preliminary data on operating capital credits granted on 31 March 1983, it is evident that bank activities and results are directionally concurrent with monetary credit policy premises. During the course of examination of the credit proposals, the bank branches are focusing attention upon the need to limit credit in the financing of enterprise economic activity. In this manner, enterprises influence the continuance of a digressive trend regarding the size of credits in relation to the dynamics governing sales and reserves (constituting the basic component of the enterprise working capital).

Consequently enterprise funds in circulation increase (calculated in relation to reserves) while a certain decline in working capital credits is observed.

In the future these positive trends linked with increased use of enterprise funds in financing activities must be supported by the implementation of a system of credit conversion. The NBP developed this system, which would ensure more stable conditions for enterprise activity and also bring about the credits restoration principle by financing their fixed current needs with their basic assets. Modifications in the Council of Ministers decree concerning general principles involved in the granting of bank credits will be presented for discussion in the near future, together with other complex proposals concerning future improvements in the credit system.

Among other things, the proposed systemic changes intend to:

--grant credit for financing current permanent needs of the enterprises and bring about its repayment by 1990, which would be tantamount to the implementation of total self-financing;

--segregate credit granted for financing working capital (debt credit and credit for financing seasonal reserves, etc.) from redistribution type credits (fixed-term credit for permanent reserve growth linked with production and development growth).

The preservation of trends for increased use of enterprise funds for financing economic activity must be recognized as an essential condition for determining the achievement of credit policy objectives especially in the troublesome investments area. Within the next 3 years the investment financing problem will represent an especially difficult aspect of bank credit activity. At the same time, the banking system's field of maneuver within the investment sector is extremely limited.

In the area of 1983 investment activity the basic objective of credit policy and activity of the systemic mechanism is:

--maintenance of a so-called investment front within the rational limits and the inadmissibility of future dispersion of expenditures and production funds;

--the potential for achievement of the most important reconstruction and modernization needs with bank credits, within restricted credit plan limits;

--requiring increased involvement of enterprise funds in current investment financing;

--gradual implementation of self-financing regulations and ensuring credit returns in the investment sector.

The acomplishment of these goals continues to be very difficult for the following basic reasons:

--an unusually broad investment front, that is, a significant number of initiated yet uncompleted investments. It will be essential to add approximately 2.9 billion zlotys in order to complete these investments which have been completely and temporarily halted. This is the equivalent of 5 years of investment (assuming national income indebtedness through investments on the NPSG level for the years 1983-1985 with restrained investment growth in subsequent years). In this situation almost all bank credits must be directed, as was clearly determined in the monetary-credit policy premises, toward continued investments;

--nonregulation of expenditures and material scope of many investments, above all the central investments. Their final material scope and the expenditures essential for their completion and achievement of projected production results have not yet been specified. This situation particularly impedes the suitable definition of financing sources, specifically budgetary and credit funds, especially insofar as central investments are concerned;

--the appearance of a budget deficit which precludes proper current financing of central investments with budget funds, partially transcending the creditors' ability to repay the credit. In accordance with budgetary laws, the banks then

grant credit of a technical nature with guaranteed repayment by the budget in future years. The amount of 1983 credit payments of this type is estimated to be at least 70 billion zlotys. In situations where a gap appears in the credit plan (or issuance of money without coverage) a significant curtailment and in practice almost complete restriction of potential for obtaining new credits for even the most efficient enterprise investments favoring restructuring, reconstruction, and regeneration of production assets is characteristic;

--the increased indebtedness of many enterprises which has occurred in recent years. In a strict sense, this also concerns investments undertaken and completed in previous years under different financial system conditions, in which the source for investment credits repayment was mostly in so-called centralized funds, and decisions to invest were undertaken quite often apart from the enterprises. As of 31 December 1982, the enterprise debts from these investments totaled approximately 713 billion zlotys, and were unequally distributed among the enterprises.

Because of this situation, many of the enterprises repaying the credits are committing a large part of their development funds and do not have at their disposal the appropriate funds to undertake new and even highly efficient capital expenditures for modernization and completion projects. At the same time, some of the enterprises, especially those not burdened with these debts, possess substantial excess funds for a development fund. A partial solution is represented by bank influence, which would use the operating credits to exhort the enterprises to use their development funds for financing so-called operating costs.

Taking into consideration all the aforementioned reasons as well as central investment involvement in the aggregate expenditures of the socialized economy (the average rate of total expenditures in the socialized economy adopted by the CPR totals 1.0 percent, while central investments total almost 3.6 percent, regarding enterprise investment stabilization), it is necessary to realize that the practical opportunities for an effective and favorable restructuring of bank credits were and continue to be very limited. Under these conditions, the bank credit system is first and foremost forced to grant credit for continued massive capital expenditures.

In the terms outlined above there remain from the general economic point of view, however, many vital problems and investment needs which lack financing. Above all, one must include many of the continuing investment activities already counted in the 1982 enterprise central investment project. The expenditures and efficiency parameters of a large portion of these investments exceed the potential ability for self-financing directly through their own funds or bank credits to be paid off with development funds in future years. The national budget lacks the funds for these investment activities, and their normal credit financing is equally impossible from the point of view of compliance with the credit return principle, as well as from the point of view of the dimensions of the credit plan (for example, this concerns thermoelectric power plant construction with prohibitive costs and low financial efficiency). In addition, transitional investment financing of a technical credit infrastructure nature obscures the calculation of efficiency and investment returns, both on the microscale and, more importantly, on the macroscale.

The "tight money" policy, based on the adjustment of the amount of credit granted in comparison with the economy's financing potential through the justification of the necessity for proper use of enterprise funds, and the setting down of stricter efficiency conditions, often meets with strong opposition by those enterprises concerned with the restrictions on their self-management, and also pressure upon the banking system by the founding organs and local authorities.

As a result, irrespective of other undertakings, the proper activities designed to change the awareness in this area for all levels of the national economy are indispensable. At the same time, active and much broader participation by the entire banking system, all its organizational cells, and especially the provincial and operational organizations, is essential for the establishment and implementation of monetary-credit policies.

12229
CSO: 2600/528

REFORM BLAMED FOR HIGH WORK FORCE TURNOVER

Warsaw KURIER POLSKI in Polish 31 Jan 84 p 1

[Article by Danuta Giera: "Migrations in the Labor Market; Almost 2 Million People Changed Jobs; Greatest Mobility in Katowice and Warsaw Provinces"]

[Text] Last year 6,700 jobseekers were recorded, yet there were 286,000 job vacancies waiting to be filled in the factories. These vacancies were not the result of an expansion of the industrial potential and the creation of additional jobs, but were the consequence of the tremendous fluctuation of cadre in the entire national economy.

Over 1,800,000 people passed through the employment offices last year. This was a record amount in the last few years. This strange migration of people, it appears, is attributed to the principles of economic reform. People are simply going where they can earn more. And because of reform, wages in individual enterprises vary a great deal. However, it is doubtful that in each case the national economy comes out ahead.

Workers in the Katowice province, where 253,000 official referrals were issued last year, seem to be the most mobile, followed by Warsaw province with approximately 145,000 referrals, Lodz about 95,000, and Gdansk, about 86,000. The following provinces showed the greatest stability in employment: Lomza, Biala Podlaska, Zamosc, Chelm, and Krosno, i.e., the typically agricultural regions. Only about 10,000 to 11,000 job referrals were issued in each of them last year. Occupations such as mason, plasterer, concrete placer and welder were the most popular.

Workers, especially highly skilled ones, constituted 84 percent of the "migrators". What this says is that often their experience is wasted, because in changing their place of employment they work, as a rule, in other jobs which require new vocational skills. To acquire them again takes long years of schooling. And who knows whether this may not be the reason for the increasing number of complaints about the amount of unsalable goods being produced. Certainly the fluctation of cadre also has an effect on management efficiency, and as a result, on the price of goods also.

What, then, should be done to halt the excessive mobility of cadre?

The prescription seems to be simple: instead of complaining about shortages in employment, workplaces should vigorously apply themselves to the elimination of all kinds of organizational inadequacies, and apply new advances in technology, thus improving labor productivity. This is a subject which the workers' self-managements and the independent trade unions should certainly take up.

9295
CSO: 2600/631

INDUSTRY URGED TO ASSIST IN BEEFING UP RAIL FREIGHT SECURITY

Warsaw KURIER POLSKI in Polish 31 Jan 84 p 2

[Article by (Jac): "Unwatched Freight Cars; 24,486 Breakins"]

[Text] The Railroad Security Service, even with the help of the Citizens' Militia and the army, is still not able to cope with the thieves marauding through railroad freight cars. And although last year recorded thefts were 10.5 percent fewer than 2 years ago, losses continue to be enormous. And what is important, the thieves are after the scarce goods, those difficult to obtain on the market.

In 1982 losses amounted to 600 million zlotys. It was possible to recover goods valued at... 30 million zlotys. The year just past, although many cases are still under investigation, has turned out to be equally bad. In total, 24,486 breakins into cars were recorded and losses are estimated at about 750 million zlotys. By the first 10 days of January slightly less than 70 million zlotys worth of goods were recovered, which is scarcely one-ninth!

It has to be admitted, however, that the freight cars actually beg to be robbed. None of the safeguards such as hook locks, wires, screws, padlocks, etc., are any kind of obstacle to thieves, particularly since the trains often stand for hours in open fields and forests, without any surveillance. Unfortunately, it also turns out frequently that thieving gangs have accomplices among the railroad workers themselves. The militia knows of cases where the thieves knew in advance what kind of goods the train was hauling and where it would stop.

The most frequent loot is alcohol, footwear, ladies' and men's ready-to wear, radio and television equipment, automobile parts, tires, batteries, and food. And, of course, goods on the way to export, or imported goods, attract special interest.

Is the struggle with railroad thieves doomed to failure in advance?

Spot checks of car security, inspections at intermediate stations, certainly will not suffice. The truth is that thievery, and not just on the railroads,

is rampant. It is high time, therefore, that it be stopped. We simply cannot afford the luxury of these kinds of losses, and neither can those who are wealthier. Recently the Polish State Railway came out with a concrete proposal to the consigners of the shipments (enterprises, factories, work places, etc.) that their representatives serve as escorts in the trains in addition to the railroad workers. Cadre problems are generally known. The Polish State Railway has them also. Obviously, sending an employee on a long trip is not a simple matter. But after all, it is better than losing another... 750 million zlotys.

9295
CSO: 2600/632

CHANGES IN 'FAZ' TAX ASSESSMENT RULES SUMMARIZED

Warsaw RZECZPOSPOLITA in Polish 12 Jan 84 p 4

[Article by (p-k)]

[Text] Of all the laws recently examined and enacted by the Sejm and all the bills modifying the economic reform, the bill on the Labor Redeployment Fund [FAZ] has probably aroused the greatest interest. This is due not so much to the proposed changes in FAZ--which are important but few in number and do not affect the character of FAZ or the general principles of assessing contributions to it--as to the controversial nature of the subject itself. Like taxes, FAZ has always aroused keen interest, which is quite understandable. The subject has always provoked controversy and often given rise to misconceptions.

Some people forget that the FAZ contribution is not an isolated mechanism functioning in a vacuum, but just one part of the financial system of the economic reform, and should thus be viewed accordingly. The basic premise is the following--FAZ contributions together with corporate income tax and the credit policy pursued by banks are to force enterprises to make a choice between efficiency and insolvency.

In other words, the idea is that a set of financial constraints--FAZ, taxes and credits--induce enterprises to better management and economies, including manpower economies, which would entail putting a stop to overmanning and improving administrative procedures and the organization of production. FAZ is just one of several financial instruments, but it is one of the most important instruments of the economic reform and has several functions. What are they?

Firstly, it is not without reason that FAZ is sometimes called a bulwark against inflation or a safety valve against the paying out of excessive sums of money which are not linked to a real growth of output. It has to be borne in mind that the autonomy enterprises have regarding wages, which is a logical consequence of the reform, together with the pressure for wage rises, which is especially powerful at present, mean that the central authorities need an instrument of indirect financial control over enterprises so that they can safeguard society against further spiralling inflation and halt the race between wages and prices.

Secondly, the FAZ mechanism is intended to ensure a reasonable distribution of profits between current consumption, i.e., wages, and the further development of the enterprise.

Thirdly, the contributions are calculated on the basis of the enterprise's total wage fund, and not, as in the initial period of the reform, on the basis of the increase in the average wage within the enterprise. Hence FAZ is now geared to reducing employment levels, as this does not deplete the wage fund and means that, providing the necessary funds are earned, more can be allocated to finance wage rises.

Fourthly, by granting concessions in FAZ contributions to selected enterprises, industries, or branches of the economy (those which require special assistance), the central authorities can influence general wage differentials, eliminating disproportions.

In 1983, for instance, FAZ concessions were granted (in exchange for extra output) to the manufacturers of consumer goods. Thus, the possibility of wage increases there was greater than in other branches of the economy, which was quite justified in both economic and social terms, as average wages in enterprises producing consumer goods were exceptionally low.

These four essential functions of FAZ will remain unchanged. But what changes are proposed in the principles of assessing FAZ contributions?

The most important change is that sums which were subject to FAZ contributions the previous year will be excluded from the base for assessing FAZ contributions, i.e. the previous year's wage fund. This is not a purely technical correction; it has been introduced to prevent enterprises manipulating the regulations by increasing their wage fund to secure themselves a better starting point, even at the expense of a high contribution.

Another important change is that enterprises have been given a chance to create a reserve pool of wages. They will not have to pay everything out in the current calendar year. So the aim is to stabilize the FAZ regulations, which have been changing too much, as part of the general stabilization of the conditions in which enterprises operate.

This is the overriding goal of the proposed changes. They also stem from the need to make sure that the rules of the reform, which includes FAZ, are observed consistently, as they were originally intended to be. Although concessions will still be granted in 1984, there will be fewer of them and they will be more difficult to obtain. This is a logical consequence of the "tight money" policy and of the urgent need for efficient management.

It should be evident from all this that FAZ is not a classic form of payroll tax; although it does serve this function its role is far broader.

How are the funds accumulated by FAZ used?

The name Labor Redeployment Fund is slightly misleading, as it may imply that the fund is to prevent unemployment and alleviate the social consequences of "ruthless" economic mechanisms. This view is a misunderstanding.

In reality, FAZ plays a certain, as yet limited, role in manpower policy. It is envisaged that this role will increase as the reform gains momentum. According to the FAZ bill, currently being examined by the Sejm, the purposes to which FAZ funds are allocated should include training and retraining schemes, the creation of new jobs where needed, the organization of public works, subsidies to Youth Labor Brigades [OHP] and benefits for those who are currently jobless.

In short, FAZ assists the process of controlling the labor market and also serves to protect employees' living standards, which is necessary even if few people require such protection.

According to the bill, the Ministry of Labor, Pay and Social Security will administer the fund and supervise expenditures. The Sejm will exercise supreme control over these resources--the Council of Ministers will present it with an annual report on FAZ expenditures alongside a budget report.

CSO: 2600/639

DISTINCTIONS BETWEEN OFFICIAL, REGULATED, CONTRACTUAL PRICES EXAMINED

Warsaw RZECZPOSPOLITA in Polish 18 Jan 84 p 4

[Interview with Jerzy Chabros, director, Pricing Policy Department of the Office of Prices, by Tomasz Bartoszewicz; date and place not given]

[Text] Question: What kinds of prices are in use in Poland?

Answer: Under the 26 February 1982 law on prices, we have three kinds of prices in Poland--official, regulated and contractual (negotiated). The scope of application of official prices is determined by the Sejm in a resolution, and that of regulated prices by the Council of Ministers. The remaining goods and services are sold at contractual prices. Differences among the three categories have to do with the character of price-setting bodies (units) and principles according to which the prices are formed.

Official prices are set by bodies of state administration (Price Office or other bodies authorized by the Council of Ministers, in an ordinance). Depending on the nature of the goods or services involved (producer goods, consumer goods, farm produce purchased by state procurement agencies), the official prices are calculated on the basis of:

--foreign trade prices (paid in import and asked in export) translated into zlotys according to the current rate of exchange;

--warranted costs of production and distribution, plus profit.

The prices also cover customs duty and sales tax, if these are levied under separate regulations.

Save for specially justified cases, the fixing of official prices should be aimed at the goal of rebalancing the market.

Regulated prices are set by sellers or their associations according to procedures defined by state administrative bodies. In most cases, the regulated prices are formed on the basis of warranted cost of a concrete producer (hence, there may be different regulated prices for the same or similar products), plus profit (fixed in compliance with predetermined formula) and possible sales tax and trade commission. To some extent, regulated prices are set on the basis of prices paid in import or received in export (transaction prices), plus trade commission.

Contractual (negotiated) prices are charged on goods and services which fall outside the area reserved for official and regulated prices, as well as those goods and services within that area which are made to customized specifications (nontypical goods). The formation of contractual prices, by means of negotiations between the seller and the buyer, is left to economic units which are not bound by any pricing formula. The seller, however, is obligated to present price calculation at the buyer's request (this is not applied to retail sales). Starting from 1984, such calculation should be compiled on the basis of warranted costs. But no profit margin is enforced on the seller.

Question: What is the difference between the regulated and the official price?

Answer: The regulated price is set by the producer-seller. In most cases, it is formed on the basis of the producer's cost. Although, under current regulations, this cost should be calculated in accordance with the procedures of warranted costs computation, it will always reflect technological conditions in which a given producer is operating.

The so-calculated price is thus a resultant of the individual cost of the producer. Higher cost leads to higher price and vice versa. In conditions of producer's market (lower supply as compared with demand), this system virtually offers no mechanisms stimulating higher efficiency and cost reduction (new technology, organizational improvements, etc.).

The official price is set by an authorized body of state administration. But in contrast to the regulated price, it is not based on individual producer's cost but rather on an "average" cost of all (or most) producers of a given article, or on average prices paid in import or obtained in export.

In both cases, the so-calculated price constitutes an external datum for the producer. If he lowers his costs, then--with a given level of official price--his profit will increase. Conversely, if his costs go up, the profit will drop and he may eventually make losses.

For this reason, the official price has an advantage over the regulated price, since--being an external parameter for individual producers--it can stimulate improvement in the efficiency of economic activities.

But the official prices also have their shortcomings, and as a result cannot be applied universally. By their nature, they are less flexible than regulated and contractual prices. Their updating, reflecting changes in operating conditions, production costs, market relations, etc., always comes with some delay--which in large measure is due to technical reasons. In consequence, the prices may remain either too high or too low for quite a long time, which in both cases would be harmful to the economy. Problems with official prices appear in particular in industries with a large number of producers whose costs, for objective reasons, may differ substantially.

In such situation, the setting of uniform official prices based on average production costs requires that an extended system of subsidies be provided for those producers whose costs, for objective reasons, are higher than average, but whose production--in conditions of imbalances in many segments of the market--is still in demand. Broad extent of production subsidies efficiency and production growth.

Question: Why are we going to abandon regulated prices?

Answer: These prices, being closely connected to individual producers' costs and insuring the recovery of these costs, are least suited to stimulate cost reduction, rise in labor productivity, etc.

Question: What new items will be added to the list of official prices?

Answer: The previous list of goods and services to be sold at official prices (passed by the Sejm in a resolution dated 29 December 1982; see Monitor Polski No 33, item 290) covers the following:

--consumer goods and services of basic importance for the costs of living and for health production;

--producer goods and services of basic importance for the cost of production;

--basic farm products purchased by socialized procurement agencies.

Irrespective of this, the official prices are also charged on products of the spirits and tobacco industries, gasoline and engine oil, gold and other precious metals, postal and communications services, entrance tickets to city parks, zoos, recreation centers and public beaches, mandatory car checks and mandatory checks on imported and exported food and farm produce.

This list was extended under the provisions of the 29 December 1983 Sejm resolution to cover new items, mainly food industry products such as: noodles, canned meat for children, variety pork and veal meat, lard, cream, powdered milk, cheese, diaper fabric, coastal passenger-transport services, services of nursing and educational establishments, youth hostel services, tickets to cinemas, theaters, operas, and philharmonic concerts, and caretaker's services.

CSO: 2600/629

BAKA SYNOPSIS OF REFORM CHANGES PUBLISHED, REVIEWED

Reform Commissioner's Summary

Warsaw IDEOLOGIA I POLITYKA in Polish No 11, Nov 83 pp 53-64

[Article by Wladyslaw Baka, commissioner for economic reform: "Phase Two of the Implementation of Economic Reform"]

[Text] The Council of Ministers on 16 September 1983 adopted an important document titled "Directions for Strenghthening the Principles and Improving the Mechanisms of the Economic Reform Beginning in 1984." Work on this document began in March, when the Council of Ministers accepted the report of the government plenipotentiary for the economic reform on the evaluation of the course of implementation and effects of the reform in 1982 and continued for nearly half a year. As we know, a broad and lively discussion took place and the reform was the subject of a Sejm session. Nearly all the Sejm commissions, PZPR provincial committees, Central Committee commissions, and other social assemblies, as well as the Economic Reform Commission, whose function it is to carry out a kind of social supervision over the implementation of the reform, expressed their opinions. As a result of this discussion, a fourth version of improving the mechanisms of the reform was formulated, which has gained the approval of the Council of Ministers. It is an important step on the road to adopting the final form of the reform.

In the strategy of implementing the reform from the beginning, with the resolution of the PZPR Ninth Congress, the principle was adopted that within the next few years after 1981 it would be necessary to apply temporary solutions in order to overcome the most drastic imbalances in the economy. Those temporary solutions were features of the reform in the years 1982 and 1983. The situation now is different than it was at the onset of 1982. First of all, the foreground of the reform has been strengthened and shaped; second, the economic processes and phenomena, as well as the country's economic situation, have undergone a certain normalization; third, the prospects for development have become clearer because the National Socio-Economic Plan for the years 1983-1985 has been adopted, along with the anti-inflation program and a savings program. Moreover, our experiences have added up, we know more or less what worked out and what did not, what ought to be continued and strengthened and what ought to be changed. Taking all these conditions into consideration has permitted a relatively early start on the work on the directions of improving the reform mechanisms and strengthening its principles beginning in 1984.

The Goals and Methods of the Changes

"Directions for Strenghthening the Principles and Improving the Mechanisms of the Economic Reform Beginning in 1984," adopted by the Council of Ministers, was published in RZECZPOSPOLITA on 6 October 1983, in the form of an addendum. It is a relatively large document, which may lead to a misconception about the scope of the changes introduced. The matter needs an explanation.

A guiding principle in introducing the changes was the strengthening of the conditions of achieving the basic goals of the reform and the limitation of the scope of the changes actually necessary, in accordance with the principle, "only as many changes as it is necessary."

Among the aims of the changes are: a) to exert strong pressure on enterprises to improve their effectiveness; b) to create a stronger mechanism to counter inflation and restore the market balance; c) to equip the economic policy with a more effective tool necessary for the process of restructuring the national economy; d) to invigorate exports by strengthening the institution of foreign exchange allowances and tying the facilitation of export to effectiveness; e) to create stronger mechanisms for shaping and utilizing technical progress; for there is no other way to counter technical decline and secure a proper level for our economy. The option of importing technology, dominant in the 1970's, is out of the question altogether. We must rely on ourselves above all and increase cooperation and ties with the socialist countries.

In carrying out the whole operation of making changes, particular suggestions were measured against each aim and only those were taken into consideration which promoted all the targets or were neutral in relation to some, while supporting others.

As I have already mentioned, the size of the document does not represent the scale of the changes. These were the result of a comprehensive formulation in one document of the elements of the economic policy necessary for the realization of the mechanisms of the functioning of the economy, and solutions which have been corrected and modified, as well as those which have not been changed. The point is to present to enterprises a clear picture of what they ought to adhere to in particular areas, and on what they should build their plans for the future. Finally, the point is to show how to use economic tools in the conditions of the economic reform.

What is currently being proposed is not intended for one or two years. Rather, these solution outline a permanent prospect which results from a considerable convergance of propositions with target solutions. It can therefore be said that beginning in 1984, the mechanism of the functioning of the reform will undergo qualitative changes: they may bring us closer to its target form.

The Scope and Essence of Changes

The first change consists of a significant curtailment of the distribution of deficit raw materials and the introduction of the formula of government orders, based on the principle of effectiveness auctions, covering all economic subjects which, independently of sector affiliation, will submit the best offer for the realization of the order. It is an essential change with regard to the current state, and not simply a technical-economic-organizational measure.

The implementation of this principle in economic practice may turn out to be very difficult, because it will be connected with significant consequences of a social nature. Until now we have been using a certain protectionism with regard to enterprises lacking raw materials. This consisted of distributing those materials by dividing them into small portions among practically all enterprises. As a result, enterprises used their production capacities, for example, 50 or 60 percent. The introduced change, on the other hand, is intended to reverse this and instead of, for example, 10 enterprises realizing a given material program and utilizing only 50 or 60 percent, this program wil be realized by 5 or 6 enterprises which will utilize their production capacities 85 or 90 percent. These will be the enterprises which will win the effictiveness auction by offering the best conditions.

Those enterprises which will lose the bidding and will not receive the government order will find themselves in a very difficult situation. They will have to either change their production profile or save themselves by some other solutions and actions. Some of these enterprises can opt for continuation of the aforementioned protectionism and forgoing efficiency auctions. The social problems facing those enterprises will be much easier to solve when there are no manpower shortages in the economy and no real threat of unemployment.

The discussed change, despite anticipated difficulties, ought to be implemented most consistently, because it constitutes an extremely important factor of necessary changes in the structure of current production and in improving the effectiveness of utilizing the production apparatus.

The second change consists of introducing the principle of applying the category of justified costs in calculating contract prices [ceny umowne] (there was no such condition until now) and--which is very important--permitting the state budget to take over excessive profit by means of a turnover tax. This solution is to prevent or making it more for difficult for enterprises, to obtain the monopoly rent or market imbalance rent. The enriching of the socio-economic content of the turnover tax is connected with this. This tax, generally speaking, performs two functions: fiscal, consisting in collecting a certain part of the turnover value for the state budget, and another--which it has already begun to perform and which it ought to perform more actively--the function of regulating the market.

With relation to nonbasic goods, particularly those for which demand greatly exceeds supply and with regard to which there are no social contraindications to use appropriately high prices of balance, the new structure of contract prices together with the supporting solution in the form of a turnover tax can perform an extremely positive role.

An inter-ministerial team will be formed in order to improve the mechanism of using the turnover tax, consisting of representatives of the Finance Ministry, Office on Prices, and Interior Trade and Services Ministry, among others, and their task will be to analyze particular markets and come up with appropriate initiatives. It ought to be emphasized that the increase of taxes is not the only point here. If an enterprise can and--in accordance with its interest--wants to expand its scale of production, then a reduction in the turnover tax will take place. The point of it is that in the future this market regulation function of the turnover tax ought to fade away; this prospect, however, is still far away.

The third change consists of departing from the formula of progressive income tax based on the processing costs, and moving on to income tax in a linear-payment form. Progressive income tax, based on processing costs, was a necessary evil. It fulfilled its role over the past 2 years; namely, it was an instrument to chop off excessive income. Of course, some enterprises suffered as a result, but basically there was no other solution. After all, we were entering the years 1982 and 1983 under the conditions of restructuring the whole system of prices and with a several hundred percent change in supply prices. In that period it was necessary to take over the excessive profit of enterprises, and apply simplified forms which, as a result, would serve the cause of equalizing the conditions of obtaining advantages by enterprises.

Thus criticism pointing out the anti-incentive character of the progressive tax and the considerable possibilities of its manipulation was justified. For this reason gradual departure from it was assumed beforehand. Now it can be done. What this new tax is to be like, however, is a question of debate; work on its concrete formulation continues. It is to be a linear-payment tax which would permit a relatively flexible passage from the conditions of 1983 to the conditions of 1984 and at the same time force a rational utilization of the production apparatus, turnover funds and all production factors.

Until now the value of assets possessed had practically no influence on the tax burden of an enterprise. Thus enterprises were not interested in the unloading of the unutilized assets and did not care how their production apparatus was utilized; they were even interested--due to the structure of amortization--in not having these assets because of the need to insure them, among other things. The influence of these assets could not be taken into consideration in the first phase of the reform because too many factors independent from the enterprise (for example, drastic curtailment of the whole import supplies in 1982) decided the degree to which they were utilized.

Now the situation is normalizing and although it happens that enterprises, through no fault of their own, still cannot utilize the production apparatus, the time has come to set in motion the mechanism which will increase the mobility and activeness of enterprises in this regard. Until now much has

been said about turning machines over to cooperatives and small manufacturers, to create new, small dynamic enterprises as a result of the overtaking of machinery and equipment from the key industry. This did not bring results. It must be assumed that the introduction of the tax mechanism will give this issue a greater momentum, because incentives greater than up to now will be created for increasing production and for savings of production factors.

The expenditure-linear income tax will consist of two components. In the first one, the amount of income paid by the enterprise in 1983 will be taken into consideration (of course with a correction regarding the size of assets) and this will constitute the expenditure tax. The second component will express the tax proportional to the profit increase, for example, in the ratio 50-50. A concrete formula will be presented as the result of finalizing the work over the so called simulated accounts concerning particular branches, for it results in particular consequences for enterprises and must, therefore, be calculated on the basis of empirical data.

The fourth change consists of introducing the principle that the cost of maintaining voluntary associations will be covered from the profit for division. This principle does not apply to obligatory associations, because their necessity results from the statute of the Council of Ministers: thus an enterprise ought not to bear the financial consequences. Voluntary associations supply services, which ought to increase the profits of the enterprises, and thus help in achieving higher effectiveness. Membership in an association ought to be profitable for an enterprise, thus there are no contraindications that enterprises should pay for the costs of maintaining them from their profits. This will probably not be popular in enterprises, and particularly in associations, but such a solution is logical and fully justified. Besides, it will contribute to the creation of the formula of associations which truly serve something--particularly since the expansion of their functions has began to assume alarming proportions. Enterprises will begin to take an interest in what they are paying for, and that is, after all, the point.

The fifth change consists of introducing the principle that the base for calculating in a given year the size of the wages [fund] free from payments for the PFAZ [State Vocational Activization Fund], is to serve the level of the wages fund achieved in the previous year, also excluding payments for the PFAZ. For example, let us assume that in 1983 an enterprise attained the level of wages without payments for the PFAZ amounting to 100, nevertheless it is not satisfied with the wages fund and wants to increase it. Since it has the financial means, it increases the funds level from 100 to 120, taxing itself for the PFAZ and making appropiate payments. This is in accordance with the rules of the game. If, however, in the following year 120 rather than 100 is the base, the enterprise achieves a certain rent of the payments it had made for the PFAZ in that year. Here a multiplication of benefits begins, because the bases changes from one year to another. It results in a very great threat to the central wages policy, because one such "heroic" year in which an enterprises makes large payments to the PFAZ suffices for it to sail comfortably through the following years. An enterprise ought not to be deprived of the possibility of increasing wages at the cost of payments for

the PFAZ; this, however, ought not to be duplicated. Each year, the wages fund can be increased, but also each year payments must be made for it.

An adoption of the above solution will probably result in difficulties for some enterprises. It must, however, be borne in mind that without the above solution it is impossible to realize the central wage policy through the shaping of proper wage ratios; without that solution, all the undertakings of the wage policy become sterile, and the policy of eliminating wage disproportions cannot be carried out because there would take place neutralization of the possibilities of the central steering of wage ratios.

The sixth change consists of entitling enterprises to create a reserve wage fund and defining a certain proper mechanism countering devaluation of this remuneration reserve. An enterprise in a given year is allowed not to pay all the funds due free from payments for the PFAZ and devote a part of these funds for the reserve wage fund. It is assumed then that in the base not only that which has actually been paid, but also that which was assigned to the reserve fund, is calculated. The enterprise can transfer these funds to a bank account (which ought to bear interest) and pay them in the following year, with the provision that the sum will not be included in the base of the following year because it cannot be counted twice. Thanks to this solution an enterprise can shape its wage policy in perspective.

The seventh change consists of entitling enterprises to use their own experimental wage systems which go beyond the current collective systems and regulations of the Labor Code. This very complex matter of the wage system cannot be solved from one day to another, nor can it be determined by decisions from the central echelon based on even the most comprehesive studies of the problems and utilization of the experiences of scientific institutes, etc.

The call for just wages and justified wage rations is widespread. Here and there simplified and mistaken opinions linger that such proportions can be worked out in a government office or in the Labor and Wages Institute. In fact, these ratios are born as a result of the interaction of the interests of various social groups with all-social interests. The wage ratios in various states are enormously diversified. That which is considered just in one state would be questioned in another. In our state there also is no way to satisfy people by presenting a certain system of wage ratios. It is indispensable then to create a mechanism for a proper discussion on this subject and to adjust the ratios both in the central systems and in concrete conditions occuring in particular enterprises.

It is also necessary to make appropriate modifications in the Labor Code and to restructure collective work systems for the purpose of adjusting them to completely new conditions. Collective work systems ought to be of general character and define the so-called minimal standards for worker privileges for given work positions in given conditions. This would be an attitude which could mark a beginning of a new development. On the other hand, apart from the general frame--central collective systems, in each enterprise there ought to be created enterprise systems. On one side there will be the director and

the worker council as the organs of enterprise management, and on the other--the trade unions.

Negotiatiation for a particular system in an enterprise ought to be based on:
a) general collective systems defining the minimum for worker rights which must not be violated (because a large category of workers is concerned);
b) a diagnosis of the state of the enterprise and an analysis of work conditions in particular jobs, which is indispensable for an assessment of the defined ratios, which are not filled by concrete zloty amounts;
c) the financial possibilities of the enterprise.
The above basis is in accordance both with the principle of independence and with the needs of the central wage policy.

It is being suggested that for a while, experimental enterprise systems be used in those enterprises which undertake it voluntarily and in practice try out the ideas described above. For this, however, a Sejm authorization is needed because the assumptions of the experiment do not correspond to some regulations of the Labor Code and the current collective systems. Also necessary is a modification of the Council of Ministers statute No 135, because the processes of shaping wages need to be extemporaneously set in order to adjust to the present conditions. Concrete solutions in this regard will be presented after the finalization of the discussion on the wage system which was taking place through the end of 1983.

The eighth change consists, in fact, of a development of a system-type regulation of the principles of remuneration for directors of enterprises. It is proposed that this very important question be settled and the director's position be defined more explicitly. It was adopted that the director's remuneration be composed of three parts: a) the basic pay to be shaped in relation to the median pay in the national economy, taking into consideration the branch factor, of course; the size of this remuneration will be defined according to the category of the enterprise (enterprises must be divided into categories); b) a position supplement, also in relation to the median pay and with the branch factor considered; c) a share in the profit in relation to the median share per employee, for example, the quadruple as the maximum. The salaries of the managing personnel, particularly deputy directors, ought to be shaped accordingly. The government intends to ask the Sejm to apply similar principles to the remunerations of the directors and deputy directors of cooperatives. In regard to this, a change in the appropriate regulation in the Cooperative Law is being proposed.

Apart from the changes presented above, an expansion of some principles currently in force will take place, particularly with regard to the following matters:

1. The continuation of the practice consisting of the use of a long-term norm for distributing the depreciation between the enterprises and the state budget, with simultaneous use of a system of reliefs and exemptions for some branches. In sum, it is being accepted that the state budget would take over about 35 percent of the depreciation, with the initial ratio amounting to 50

percent. The funds resulting from this difference (15 points) would serve to provide the necessary reliefs and exemptions and would constitute the bank investment assigned for the financing of investment loans.

Many enterprises treat the use of a long-term norm of distributing the depreciation as an attempt to subvert the principles of self-financing and independence, particularly because in accordance with the principle on the finance economy, beginning with 1984 the total of the depreciation was to remain in the enterprises. This issue requires an explanation. In 1984, the value of the fixed assets will brought up to date: as a result of the reassessment, it will increase more or less thrice. This is the natural consequence of price movements in previous years and in the recent period. The necessity of protecting retail prices from the influence of this reassessment and not allowing the price wave to rise resulted in the adoption of the principle that the economy will absorb these effects in a 4-year period, namely, each year 25 percent of the newly established value of the fixed assets will enter the economic blood circulation.

Independently of this, the modification of the law was proposed, aimed at solidifying the principle of distributing the depreciation among enterprises and the budget, and introducing the system of reliefs and exemptions for some branches. There are very important arguments for adopting such solutions. Above all, we must take into consideration the phenomena of the deterioration of the fixed assets, or decapitalization, in our economy. With our investment possibilities, it is impossible to avoid decapitalization. In this situation only one thing can be done: we must control the process of decapitalization. Therefore we must carry out such structural policy in which in some branches decapitalization is the necessary cost of putting the economy in order and solving the problems of the future, and in others we not only ought to prevent it, but must also create priorities assuring the development of production assets based of the possibly highest technology.

The discussed solution regarding the distribution of depreciation can help in precisely such a policy of structural changes (restructuralization) and controlling the decapitalization phenomena. Moreover, appraisal calculations show that if the whole amortization was left in enterprises and not adjusted in structural systems, a threat of increasing the so-called inflationary overhang would arise. The point is that the size of funds for development possessed by an enterprise would greatly exceed the production possibilities of construction-assembly enterprises. As a result, imbalance would increase in the investment process; this would be followed by the elimination of the role of the zloty in the formation of investment processes and by the necessity of returning to [the system of] limits. Partnership between the producer and investor in such conditions would be impossible, thus this very important feature of the reform could not be carried into effect.

2. The implementation of a customary conversion (extension of the payment deadline) of some of the debt by virtue of turnover loans of the enterprise financing its constant supply needs. Due to the constant character of these needs, the loans for this purpose are continually renewed. Thus in order to create a visible prospect of self-financing, and also to assure the

stabilization of the condition of the enterprise's activity, the period of paying off these loans is extended to 12 years. This will be followed by an increase in the participation of the enterprise's own funds in the financing of its needs. Thus this change will promote the strengthening of the principle of self-financing of the economy and its enterprises.

3. The limitation of the range of regulated prices (the so-called cost prices) and the expansion of the range of both official prices (particularly for supply-cooperational, catalog and mass-produced goods), and the range of contract prices (where they can be applied).

Contract prices, if they are used in those areas in which there are the necessary economic conditions and no social contraindications, are also parametrical prices. Of course, if the contract price is used on the basis of free contract in conditions of a very profound imbalance and monopoly, then it does not have the parametrical character and is a normal monopolistic price with all its negative effects. Thus we need a a new approach in the use of contract prices as an economic category, important in regulating economic process, and to this end serves the following change.

4. The permanent implementation of the principle that part of the enterprise technical fund will be transfered to the account for technical progress. The fund and the manner of its formation have been known for years. Until now it was assumed that beginning with 1984, enterprises will not transfer funds for this fund and therefore various possibilities of funding it were looked for. The necessity of the existence of such a central fund for financing and promoting supraenterprise big programs of research and development is obvious. Since no better method for determining the manner of financing a central fund has been proposed, the above solution has been adopted, which--in the opinion of social bodies and other competent assemblies--has proved itself in practice. Thus it is not really a change, but simply a continuation of a certain solution.

5. The implementation of the obligation of claiming contract penalties for supplying defective goods and increasing these penalties; also, prohibiting commerce to forgo the practice of qualitative reception of goods. These regulations are aimed at countering bad quality. This will not resolve completely the problem of quality, because for this the normalization of the market is necessary. Nevertheless such a requirement must be implemented, particularly since enterprises have begun to outdo themselves in continually shaping easier conditions of delivery. Certain sanctions against trade enterprises which enter into circulation shoddy quality goods are also anticipated. Commerce cannot be limited to the role of "tattletale," observing and signalling this phenomenon; it must also bear the consequences of bad quality. It will save everybody work and spare society from irritation and nerves.

6. The extension of the range of foreign exchange auctions organized by the NBP [National Polish Bank], to cooperative enterprise. Until now only state enterprises were entitled to them.

Problems of Further Actions

The main problem now is a correct use of system-type solutions. In order to achieve it, we must have a clear idea of what we want. For example, the plan in the area of structural changes must clearly delineate the directions which are to be given preferential treatment and those which will be limited. Thus we must determine not only what we want, but also the way of achieving goals in given conditions of management, the utility of the reform instruments and ways of utilizing them. These are extremely important questions, because we can observe some controversies over the role of the system of the functioning of the economy and economic policy, among others. For example, the charge that the system did not solve the problems of the increase of market production is a misunderstanding. There are, after all, system-type solutions enabling the application of preferential treatment for market production, but the problem consists of whether we have the funds to give these funds in a sufficient degree. We are talking about investment funds, foreign exchange funds, and others.

Of a similar nature is the accusation that the system did not resolve the problem of supplying cooperators with foreign exchange. There exist three ways of providing these supplies, which can be used by cooperators, but there foreign exchange is lacking. Thus we must have clarity in the question, what role is played by the system-type solutions and what role by the conditions and decisions of the economic policy. The purpose of the document is precisely to introduce this clarity. Thus it is useful not only for enterprises, but for all activists dealing with economic affairs.

The document adopted by the Council of Ministers does not contain numerical values, making concrete parameters. These values can only be established as the work on the Annual Central Plan progresses. The point is to limit to the minimum acceptability [uznaniowosc]. This means that the values of particular parameters and factors which an enterprise receives may not be the result of auctions and particular pressures, but must result from a basic document on the economic policy, which the CPR is. Many decisions concerning concrete solutions, for example the factors of adjustment, exemption etc., will be contained either in the plan or the budget. In the course of the year only the necessary adjusting and correcting actions ought to take place. This is an important change in comparison with the practice of the years 1982 and 1983.

Now the point is to speed up to the maximum the work on the packet of laws and directives and on the CPR and the budget. Enterprises, knowing the rules of the game which will be applied in 1984, ought to work out various variants and scenarios, which will be simply supplemented as the concrete values are being received.

And a final remark. Considerable progress in putting the economic law in shape has been already made. A large percentage of old regulations has already been removed. The remainder, however, continues to get in the way. The Council of Ministers adopted the resolution that the whole process of putting the economic law in order will be carried out in three stages.

In the first stage--to the end of November of the current year--all ministerial regulations ought to be lifted, and also those issued prior to 1977, that is, before the register of regulations in the Ministry of Justice was brought into force. Only those regulations ought to remain which are cohesive with the legal system of the reform. In the second stage--to the end of January 1984--regulations not corresponding to the principles of the reform and issued between the years 1977 and 1982 ought to be gotten rid of. In the third stage--to the end of May 1984--completely updated lists of legal acts in force in particular fields, ought to be issued. It is also proposed that the role and importance of the aforementioned Ministry of Justice register of regulations be expanded. The point is that only those ministerial regulations ought to have weight, which gain entry in the register, and that upon this register ought to act an authoritative body capable of evaluating whether those regulations conform or do not conform with the reform.

ZYCIE GOSPODARCZE Reply

Warsaw ZYCIE GOSPODARCZE in Polish No 1, 1 Jan 84 p 16

[Editorial commentary by S.C.]

[Text] We are starting off the new year with changes in many of the programs and institutional levers of the economic reform. We have been and still are writing about these changes in almost every issue of ZYCIE GOSPODARCZE, so I will not bother to enumerate each and every one of these revisions and refinements. In any event, Minister Wladyslaw Baka [commissioner for economic reform] did a fairly thorough job of this in issue No 11 of IDEOLOGIA I POLITYKA. He wraps up his article with a brief summary, which is worth commenting on, since in a very concise way it addresses some crucial and--in my opinion--rather controversial issues.

So, let us look at the whole problem of the reform modifications from the perspective of business enterprises. Generally speaking, they yearn for the stabilization of the rules of the game, while not denying the need for changes in a wide range of laws and fiscal management mechanisms. Naturally, any changes that would make life easier for these enterprises would be most welcome, but their understanding of the need to tighten up on many strictures and force firms to find more efficient ways of running their operations is also fairly widespread. On the other hand, this understanding attitude is absent when it comes to the lack of consistency between certain broad programs and specific economic policies and the accompanying tendency to lay the blame for the various failures of these policies on business enterprises. Many expressions of this sort of impatience can be heard at any meeting held with executive directors of business enterprises and, lately too, at PZPR reports and election meetings.

Professor Baka also raised these problems. However, it is his belief that, for example, in the case of the priority given to the production of consumer goods, the various programs for institutional reform are on the right track, whereas the ineffective performance of these programs is attributable

to the scarcity of material resources when it comes to capital investment outlays and foreign exchange. Well, not everybody agrees with this assessment. As everyone knows, 90 percent of the funds committed to in-progress capital projects applies to industries in category A [heavy industry] as opposed to category B [light industry]. As a rule, then, banks are refusing to make capital investment loans to enterprises engaged in the production of goods designed to meet the needs of consumers, nor is there any lack of instances where when an enterprise tries to come up with its own funds for capital investment purposes it finds itself faced with a reduced line of working capital credit. This forces the enterprise to draw on its expansion fund in order to replenish its working capital fund. I have lately run across cases of this happening in light industries. It is no easy matter to come up with answers for representatives of enterprises in this sector when they ask what this practice has to do with the resolution of the Council of Ministers on accelerated modernization and increased production in this sector. These same people go on to say that the national government itself probably does not put much stock in the effectiveness of reform's institutional machinery, since appropriations of additional funds for payrolls in exchange for increased output are being funneled into their enterprises by way of back channels. So, what we are dealing with here is not so much a scarcity of material resources as it is a case of officially avowed economic policies, banking practices, and the institutional machinery of the reform all going their own separate ways.

One might suspect that what lies behind this criticism is a dislike for the policy of "tight money" for business enterprises, a policy which is being implemented slowly and with resistance all along the way. But to view these critical comments in this light only would be a gross oversimplification. The near-term goal of the tight money policy is to curb the rate of inflation, while the more long-range goal is to force an improvement in the performance efficiency of business enterprises. By the same token, though, this is a policy which makes it more difficult to boost output. If, on the other hand, this policy is meant to apply to firms which produce consumer goods, then it likewise serves to perpetuate a poorly structured, i.e., inflationary, product mix. As far as this goes, it is no secret that this output structure deteriorated during 1983, and there is not much evidence to show that things ought to change for the better this year. Consequently, enterprise executives say that something is "amiss" either with the reform machinery or with the way the national government is operating this machinery. This is because it is not very easy to figure out how limiting opportunities for boosting production in light industries is supposed to aid in the battle against inflation.

Professor Baka has announced that the current reform modifications are supposed to be more long-term in nature, remaining in force for at least 2 years and in some cases even much longer. Executives respond to this by saying: "Would that this were true!" But they go on to say that in order to bring about the fuller harnessing of untapped resources, both in terms of boosting output and also in terms of upgrading performance efficiency, it is also necessary to stabilize performance indicator base lines instead of always taking the performance record of the preceding year as this base

line. This is a problem which so far has not been debated very widely. But this is something that we probably ought to be thinking about.

And then there is one final matter which is most likely giving rise to the most "bad blood" and triggering the strongest criticism of the national government. This is in reference to the fact that up until the very end of December business enterprises had no knowledge of what specific actions were going to be taken to handle a number of problems with extremely important implications for their interests. Professor Baka stresses that the ground rules governing the revamping of the reform's institutional machinery were for the most part spelled out as early as October, while the quantitative or target indicator dimensions of the respective parameters were left to be written into the national annual plan and budget for 1984. Nevertheless, the executive directors of these firms say that the fact that the income tax is going to be assessed according to a flat rate as opposed to the former progressive schedule does not mean all that much to them, since they do not know how much tax they will have to pay on projected future earnings. And, for the same reason, they do not know how much they will have left over for allocation to their respective fund accounts. And it is hard to dispute them on this point, since in this case there can be no complaints about some scarcity of inputs in the form of foreign exchange, machinery, or raw materials. Rather, it is more likely that what we are dealing with here is some kind of intellectual paralysis. I do not think that this sort of red tape should be allowed to be thought of as something akin to the way we run our railroads. In other words, such delays should be the exception rather than the rule.

12270
CSO: 2600/526

ENERGY PLANS SUBMITTED FOR 1984

Belgrade EKONOMSKA POLITIKA in Serbo-Croatian 9 Jan 84 pp 13-14

[Text] Two days before New Year's, the Federal Executive Council adopted the Yugoslav Energy Balance for 1984. Certain details of the balance will definitely be clarified later, but the very fact that the document has been approved shows marked progress in the decisionmaking process. If we recall a few earlier years, or the practice of adopting the balance after several months have passed, or employing temporary measures or even adopting the plan at year's end, we must ask what has speeded up the current process. The fall crisis without a doubt had an impact, but the debate in the Yugoslav Assembly was even more helpful. After quite a bit of discussion, it was decided that the Federal Executive Council would adopt the energy balance in cooperation with sociopolitical communities, without worrying about the way it had been done in the past. The difference in terms should not be seen as too significant. Nevertheless, while the balance was approved with the agreement of the republics and provinces, it happened that because of a single refinery, or more precisely because of small deliveries of primary gasoline from a single refinery, a document of this significance was held up for months.

Seen as a whole, the 1984 energy balance foresees a better energy situation than last year. The energy shortage will not be completely avoided, but supplies to consumers will be steadier and more timely (as measures for realizing the balance aim at avoiding disturbances in advance, without waiting for crises to arise). If the necessary preparations are made in energy branches, economic organizations, responsible agencies and the Yugoslav Economic Chamber, energy distribution and adoption of self-management agreements can take place without shortages. Naturally, the consumers would have to do their part for rational energy consumption.

Markedly Higher Coal Production

As the most important domestic producers, the coal mines plan much higher production, going from less than 58 million tons last year to 64 million tons this year. That is fully 11 percent more. True, there is a small disagreement between the mines and the electrical energy system about the amount of coal needed by the thermal electric power plants. The miners assert that they can deliver 48.5 million tons, but the electrical power system wants 51 million. It has been suggested that the difference in tonnage is not crucial, for

deliveries of higher quality coal will provide the thermal units needed for electrical production. A larger problem is in even deliveries and timely payments for coal (with summer deliveries when the open pit mines can deliver the most but the thermal power plants need the least, and the opposite in the winter). Other consumers will have sufficient quantities of coal if they do not wait until late fall and winter to buy it.

The balance provides for 4 million tons of coking coal for ferrous and non-ferrous metallurgy, although specialists believe that 3.7 million tons would be sufficient.

Electricity the Only Shortage

The balance shortage of electrical energy has been reduced to 2.2 billion KWH. It would seem that adopting the electrical energy balance received the most attention. The measures anticipated are accelerating construction of new electric power stations, greater use of heavy mazut oil by thermal power plants, power storage installations, imports of required electricity when shortages occur and use of some facilities that need special arrangements to supply fuel. If there is no repeat of last year's drought, it is possible that the electrical energy balance will be improved and shortages avoided. If reductions cannot be avoided, it is nearly certain that things will be done differently than this year and that a good start will be seen, and that the situation will not be ignored until nothing remains to be saved.

Greater Petroleum Imports

The initial suggestion to import 9.6 million tons of petroleum has been changed to include another million tons. With the self-management agreement on even supplies to consumers, imports of certain derivatives, somewhat greater flexibility for the petroleum industry, and uncertain consumption coupons, we should not expect general shortages of derivatives. It remains subsequently to resolve the problem of exporting petroleum and derivatives that are in demand and supplying new petrochemical installations with petroleum raw materials.

Natural gas imports remain at their previous level of 3 billion cubic meters, but efforts will be made to import another billion cubic meters.

12131
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PERISIN DISCUSSES CAUSES OF INFLATION, URGES MORE POWER TO PRODUCERS

Zagreb DANAS in Serbo-Croatian 7 Feb 84 pp 26-28

[Article by Prof Dr Ivo Perisin, president of the Federal Social Council for Economic Development and Economic Policy]

[Text] This is not the first time that we have been faced with the question of how to check an inflationary process. Also on this occasion the difficulty lies in our not penetrating to the deeply hidden causes which are generating the process. We remain on the surface and inflation is interpreted as a simple disruption in supply-and-demand relations and one does not reach down to the causes of this disruption which can be varied. Often they are the thoughtless use of readily-available money. But more and more often this is a disruption which proceeds from hidden, spontaneous relations arising from the disproportion between actual and monetary accumulation, so investments exceed the bounds of reality. This rift, after a certain time, leads to a break in the movement of reproduction. In order to avoid recession, the state intervenes. This anti-recession policy, however, creates room for price increases, i.e., for inflation.

Today it could be said that also in Yugoslavia great theoretical-political-economic and economic-political confusion has arisen and this has happened after one could have gotten the impression that we had reached the right conclusions and had learned that uncontrolled inflationary financing of investments is the basic cause of instability, thus also of inflation, but at the same time that this is the result of centralization of monetary accumulation as the basis for the multiplication and distribution of investment credits in proportions which abundantly exceed real accumulation.

This inflationary disruption of ours, the basic cause of which lies in our specific method of financing investments was for a long time hidden behind a rigid system and price controls so it was expressed in shortages and administrative price increases and was alleviated by deficits in the market balance and balance of payments which were hidden by foreign exchange [hard currency] remittances and by indebtedness abroad. But this disruption, although hidden and alleviated, affected all material relations. It affected them not only in regard to their size but also in regard to the irrationality of the investments thus financed. First, it had an effect on all material costs and also on the final use of the social product, while the material coverage for all this was not real.

In this way a violent inflationary spring [coil] was built into our economic life. Once this spring was unfastened, it sprung with a force that made it impossible to meet real deficits by the capital inflow from abroad. Then we fell into an inflationary whirlpool and were pushed to an inflation which assumed a rhythm [ritam] of 100 percent, about which I wrote in the last SEDAN DANA supplement to VJESNIK.

At that time new alarm and great confusion arose. And when one did not know what else to do, one froze prices, but this did not even touch the violent inflationary charge [i.e., explosive charge]; in the meantime the charge changed its character. It remained intact and threatened [either] to reach an inflation rate of more than 100 percent, or to greatly disrupt the courses of reproduction with resulting shortages, production stoppages, and losses.

This black picture came out on the basis of the knowledge that we still had not touched the now new real sources of inflation which, after a 3-year period of reducing the rate of investments and carrying out restrictions in the standard of living, are of an ever more marked expenditure-like nature.

Our therapy, however, continued with restrictions on expenditures (personal, joint, and general) and neglected the structure of expenditures [or consumption] and the enormous accumulations of purchasing power which had piled up through the years and which are so big that they a) neutralize that which is obtained by the fall in the personal and social standard of living by some of the population, and b) provoke dissatisfaction in society. Thus, it has continued with violent, unbalanced monetary restrictions which have had a negative effect not only on the rate of development of reproduction but also on the strong growth in the costs of production and life.

First and second, (along with the strong inflationary effect of the excessive floating rate of the dinar), not only was a new situation in regard to cost inflation created in the economy, but [this happened] under the conditions of economic stagnation and restricted commodity imports, while the large purchasing power on the part of some of the population created shortages and also a new inflationary climate of "buy now and as much as possible."

This, along with all restrictions on consumption and illiquidity of the economy, encouraged and fed inflation. Under the conditions of stagnation, nothing could compensate for the blow dealt by the increase in material costs in the economy. This blow in 1983 (compared to 1982) could be evaluated: on the basis of the increased cost for imported raw materials and reproduction material of about 1,350 billion dinars; on the basis of the increased cost of imported energy of about 800 billion dinars; the re-valuing of fixed assets of about 300 billion; increased interest of about 200 billion; and on the basis of exchange rate differences which the economy had to pay, amounting to about 200 billion--all of which totaled 2,850 billion new dinars.

This is about 28 pecent of the total funds spent in 1983. If one adds to this the increase in prices and costs of production of domestic raw materials and domestic energy and then the effect of lagging in production and losses--then the increase in production costs comes to about 40 percent. This was reflected in [higher] prices which then led to the fact that the allocations

for general and joint expenditure and for personal incomes had to be increased. This income, albeit truncated, on top of the 40 percent increase in production costs, led us to the annual inflation rate of 60 percent and an inflation rhythm of 100 percent. If economic policy is not changed and the doctrine on which it is based is not jettisoned, this will lead us in 1984 into even greater inflation or hopeless market-production chaos.

Where Are the Confusion and Mistakes Here?

First and fundamentally, that which has not been uncovered in our country, or better said, has not been recognized, is a basic systemic defect, and here nothing has changed for the better, but rather for the worse.

What does this basic systemic defect consist of? It lies in the complete systemic alienation, or better said, the extracting of monetary accumulation from the producers who, because of this extraction are becoming more and more dependent, more and more indebted, and increasingly powerless; although, taken objectively, they form a gross monetary accumulation sufficient to be able to pay their total real investments in fixed and current assets.

Thus, for instance in 1982, they formed a gross monetary accumulation (if we include here also interest paid to banks) of 826 billion dinars, while their total real investments amounted to 746 billion dinars.

Where is the problem here? The problem lies in the fact that this [capital] accumulation is being taken away in order to:

a) pay off credits and make interest payments. This item [of outlay] has expanded from year to year, even since [the time] the factories were transferred to workers' management when this transfer took place in such a way that the monetary capital was not transferred to the workers but remained with the state and banks, while they [the workers] were informed that they were in debt (in 1982 the economy paid out 473 billion dinars only for payments and interest on long-term credits for fixed and current assets);

b) finance numerous needs such as large economic infrastructures, undeveloped opstinas, undeveloped republics and the Province of Kosovo (75 billion);

c) make obligatory financial deposits in banks, in time- or restricted-deposits amounting to 244 billion dinars.

The items under (b) and (c) above amount to 320 billion dinars and represent accounts receivable of the economy but these accounts receivable which, cumulatively, amount to much more, the economy has almost fully blocked, and they can be "hung on a cat's tail" and be replaced with debts. Such a situation is almost unknown in world practice. When one adds to this sum of immobilized funds the amount of credit and interest payments, it comes to 793 billion dinars. And this means that the economy is left without any capital accumulation. The economy must even cover with credits that part of their accumulation which is used to make up the difference in paid and unpaid accounts.

As a result of all this (almost independent from the foreign exchange problems with which it has been faced), our economy has become incapable of developing as an independent and responsible economic subject. It has become ever more dependent, and under the conditions of monetary restrictions (these stupidly-directed limits), it has become impossible for it to operate normally and to carry out mutual linkage and to overcome its problems in this way.

This is the major problem and defect. The systemic conditions of interdependence and connectedness have not been created, so there is no room in which all the blows of [increased] costs which have come from all sides could be neutralized. Conversely, lagging in production has increased and supply flows are ever more problematic. Each has coped as best he could. Along with all else, everyone has built up reserves so that tomorrow he would not be without needed material. Thus, turnover of funds has slowed, use of capacities has become ever poorer, and costs have risen. Nothing was left to do but to push all this on to prices.

One example: In 1982 the economy paid in interest one-quarter of its gross accumulation at an annual rate of 12 percent. What happens when this rate increases, as it did in 1983, or when it approaches the "real" rate--and this, according to some interpretations, means the rate of inflation. I assume that the answer is too much.

This major problem has been bypassed, but in fact it would require the firmest grasp in our system of financing reproduction in order for the economy to pull itself out of the mud of debt. This would not be difficult, despite everything, to carry out if it could be agreed that 1) the economy is excessively indebted but not because of its unruliness but because its complete gross accumulation is being extracted from it by the system and (2) if it could be agreed that its monetary funds and investments as well as mutual debts and accounts receivable, should be treated differently.

All these funds which are now blocked, while multiplying debts are rolled on the back of the economy, must be freed. These now-blocked funds then could circulate and become a bridge linking the producers who then, as financially liberated, would undertake responsibility for the total results--material and financial--and this means also for production, mutual relations, costs and prices, as well as exports and imports; in the same way that they will carry out the painstaking process of rehabilitating sick centers and changing the existing economic structure in these inter-connections.

Here is the main way of disposing of inefficiency and inflation. And this breakthrough cannot be neutralized by a floating rate of exchange, by increasing interests rates, by re-valuation, by the relative reduction of the personal or social standard of living, however much sterile parts must be cut away.

Furthermore, the policy of excessive floating of the exchange rate, of increasing interest rates, of re-valuation of fixed, and now current, assets, and the squeezing of personal incomes into the narrow limits of net income leads to even faster inflation and to social unrest.

Because of this one should insist that the above-cited basic systemic contradiction be understood and major measures be taken. Without this there will be no slowing of the violent increase in material costs which are higher than the social product and are hidden like the submerged part of an iceberg. Our analyses neglect this and examine, as if bewitched, only the visible part. Because of this, we do nothing in the system, in economic policy, that would increase material costs, but rather [try to] reduce them relatively. But here are the main possibilities for an anti-inflationary policy and they are linked with reform of the system of financing reproduction. Barter trade, which is being applied to everything and has contributed to increasing material costs, cannot operate in the small area of income of the economy which accounts for only 10 percent of expenditures, if one excludes interest paid and accumulation and funds.

It is clear that this does not exhaust all that is connected to expanding the costs of production. The large social spending (and this is the second [reason for confusion and mistakes]) should have the barriers around it taken down and should be reduced, but this is difficult to achieve under the conditions of production stagnation. The way out of stagnation should be sought in strengthening the power and responsibility of producers. Only in this way will a more efficient, continuous and larger production be possible, and only in this way will the fence be taken down around this enormous social spending which has sprung up like a weed from the bottom to the top of the social organization.

Along with these measures (and this is the third [problem]), measures must be introduced that mercilessly cut into those enormous accumulations of purchasing.

Huge empty areas and reserves which exist in our economy extend as far as the eye can see. We are not activating them. Furthermore, we are blocking them on all levels. As a result, the whole performance of our economy is poor which is expressed in our fragmented and disconnected economy's inability to export or to compete in price or even without prices. We have also become incapable of making technological changes which are forcefully knocking at our door. This time we do not even have the possibility of getting foreign interest [ino-kamata]. But just because of this we should have become conscious of the fact that we have enormous capital in the unused potential of the economy in the absence of strong inter-connections in the economy and that we must channel the economy in this direction. But in order for this channelling to bring results, and not be reduced to political activism, it must be supported by a reform of the system of financing reproduction. Here then room would be found also for that force of economics [bankruptcies, etc] about which so much is being discussed now. Without this [reform], some thoughts are leading us into economic and social chaos which, already as a potential possibility, fill the sails of etatism and apologetic normativism which is expanding and growing into a new secularized area.

Numerous mistakes of our economic policy have not been touched upon in the above, but they point to the fact that some foreign exchange earnings are

steadily drying up for us and some possibilities remain unused. An example of such a mistake is the decline in foreign exchange earned from tourism in 1982. Similarly, the example of shipping, especially since 1980. These two items, when we compare 1982 with 1980, have brought us a decline in foreign exchange of one billion dollars. [Other examples are] the games [maneuvers], statements, and changes which have not been thought out in the sphere of foreign exchange accounts and remittances; the energy collapse because of mazut, and, linked with this, the production stoppages in export industries which are special mistakes. Ruses involving the foreign exchange system and all that including the Molve 2 case are also examples from the rich treasury of ways we are managing to slow down all the processes and to damage ourselves very much at a time when we are being pressed by many things.

Because of all this, we have entered 1984 with a number of undefined relations and only now are we thinking very quickly of how to organize the economy in regard to foreign exchange relations, how to unfreeze prices, [the freezing of] which was obviously not a solution, and what kind of tax reform we should have. There are also dilemmas regarding the policy of the dinar exchange rate, and of interest rates. It is hoped that now, as we are "Waiting for Godot," waiting for continuation of the discussions with the International Monetary Fund, we will finally understand that we cannot play with all those measures which affect costs and that we will do everything possible to liberate the power of the producers and self-management because this is the only way that can lead us into more peaceful waters.

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LIVESTOCK, MILK PRODUCTION, FEED NEEDS PROJECTED TO 1985

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[Article by T. Jelic and D. Sretenovic]

[Excerpt] The social compact for implementing the policy governing development of the agroindustrial complex set forth in the Social Plan of Yugoslavia for the Period 1981-1985 projected that total meat production would reach 1.5 million tons by 1985, about 436,000 tons of which would be beef, 692,000 tons pork, and 76,000 tons mutton. The production of poultry meat has not been programmed. The compact projected that milk production would reach 5.25 billion liters and purchases 2.35 billion liters.

Starting with the actual production in 1982, the following growth rates would have to be achieved in order to attain the targets set forth in the compact during the period from 1983 to 1985 (Table 1).

Table 1

Indicator	1982 Actual	1985 Projected	Growth Rate
Meat, total	1,274	1,500	5.5
Beef	362	436	6.4
Pork	486	692	12.5
Mutton	59	76	8.8
Milk	4,596	5,250	6.2

Present Status of Livestock Production

The status of the branches of animal husbandry varies essentially both from the standpoint of breeds and production characteristics and also from the standpoint of the level of organization of production, which has an essential effect on the possibility of fulfilling the plan.

The composition of cattle herds with respect to breeds is unfavorable, with primitive breeds making up about 43 percent of the cattle population and pedigreed and upgraded domestic breeds making up 57 percent, while the annual production of 1,623 liters of milk and about 120 kg of meat per cow shows

that their production capabilities are very low. Meat and milk production per cow does not depend solely on the breed structure of cattle herds, but also on the quality of feed, care and health protection, as well as the final weight of cattle for slaughter. Calves represented 1.1 million, or 45.6 percent, of the 2.33 million cattle slaughtered, which considerably diminished beef production.

The breed structure of swine herds is not satisfactory, but it could be changed quickly, since about 9 percent of the sows are raised by socialized organizations which are capable of producing quality young animals for breeding. The average production of about 365 kg of pork per sow is unsatisfactory and results from the slaughtering of a large number of suckling pigs. As a consequence the average sow annually produces only six swine which are fattened and four suckling pigs.

Sheepraising is the most lagging branch of animal husbandry. Private farmers raise more than 97 percent of the sheep, more than 80 percent of which belong to primitive domestic breeds. No sort of zootechnical measures whatsoever are applied in the tiny herds of private farmers, and the result is low meat and wool production per sheep, and about 85 percent of the wool does not meet the needs of the textile industry with respect to quality.

Poultry production is the most progressive and best organized branch of animal husbandry. The socialized farms are supplying specialized hybrid chicks to private farmers for the production of meat and eggs, furnishing them feed, offering professional services and organizing purchasing, which is making it possible to develop this production rapidly.

The production of coarse livestock feed has stayed at the same level for years, which is resulting in increased consumption of corn and other concentrated animal feed. Corn production is growing, but not to keep pace with the growing needs of livestock raising, so that in recent years the demand has been greater than the supply. Protein-rich animal feed is not produced in sufficient quantities, and the quantities missing in the balance are imported irregularly and are insufficient.

The discrepancy between the production of livestock feed and the needs of animal husbandry and also the demand for meet and milk which considerably exceeds production are causing disruptions on the already disrupted market for animal feed, livestock and animal products, which is making it more difficult to achieve the projected volume of output. Not enough protein-rich livestock feed is produced in the country, and the amounts lacking in the balance are imported irregularly and insufficiently.

Retail meat prices are set on the basis of producers' sales prices of livestock regardless of the level of purchase prices on the market, which are considerably higher than those prescribed. As a consequence the slaughterhouse industry is operating with losses, which it is mitigating by relinquishing foreign exchange to the livestock feed industry at unrealistic prices. Given those unstable conditions on the market, the steady and uneven rise of prices has resulted in price disparities among livestock feed, livestock and

animal products. This has adversely affected the economic motivation in animal husbandry, has caused fluctuations and stagnation, especially on farms with extensive and very small-scale production. However, the demand for livestock and animal products has grown steadily and has been causing new disturbances on the market because of the ever more pronounced discrepancy between supply and demand.

Table 2

Indicator	1982	1983	1984	1985
Cattle slaughtered:				
Thousands of head	2,417	2,502	2,590	2,681
Average final live weight, kg	277	284	292	300
Total gross weight, thousands of tons	669	711	756	804
Total meat production, thousands of tons	363	386	411	437
Yield, %	54.3	54.3	54.3	54.3
Meat production per head, kg	150	154	159	163

If the volume of production set forth in the social compact on development of the agroindustrial complex in 1981 to 1985 is to be achieved, an examination will have to be made of the material conditions and organizational and other measures to promote and consolidate production as well as the economic measures to ensure conditions for more rapid development of livestock raising. The measures proposed would be aimed at bringing the production of livestock feed into line with the needs of animal husbandry, the volume of livestock production into line with the demand of the domestic market and planned exports, and the economic measures would improve conditions for development of all branches of livestock production.

A 6.4-percent annual growth rate of beef production might be achieved by a lasting increase in the number of cattle for slaughter and a rise in their final weight:

By increasing the number of cattle for slaughter at an annual average rate of 3.5 percent	50,000 tons
By increasing the average final live weight of cattle for slaughter from 270 to 300 kg (annual rate 2.7%)	44,000 tons

If the program is to be achieved, the total breeding of calves would have to increase from 2.56 to 2.91 million head from approximately the same number of breeding cows by 1985 by using heifers being fattened for one cycle of reproduction and by increasing average final weights, by organizing the fattening of young pedigreed beef to higher final weights, by increasing the size of animals of the primitive breeds by crossing them with the quality breeds and by delaying the slaughter of calves. If production for the market is to reach about 60 percent of total beef production, aside from increasing the volume of output on socialized farms, cooperative production also has to increase and reach about 1.4 million head by 1985.

Milk Production up to 1985

The basis for increasing the production of milk from 4,596 million liters in 1982 to 5.25 billion liters in 1985 is an increase in the average milk production per dairy cow at an annual rate of about 6 percent, which would yield the following pattern of growth of production (Table 3).

Table 3

Indicator	1982	1983	1984	1985
Foundation herd, thousands of head				
Total	3,060	3,060	3,060	3,060
Heifers	428	459	490	520
Cows (2 - 3)	2,632	2,601	2,570	2,540
Average increase in milk production, liters/year	114	122	130	141
Average milk production per lactating cow	1,737	1,859	1,989	2,130
Total milk production, millions of liters				
Omitting milk sucked by calves	4,572	4,835	5,112	5,410
Including milk sucked by calves	5,661	5,919	6,176	6,462

Aside from the production of about 500 million liters of milk on socialized farms, a larger portion of production for the market will be organized on private farms, which have about 600,000 cows (Table 4).

Table 4. Organization of Milk Production for the Market

	Production Sector			
Indicator	Socialized Farms	Private	Private	Total
Number of cows	100,000	30,000	570,000	700,000
Average milk production, liters	5,500	5,500	3,500	3,871
Average production for the market	5,000	5,000	3,000	3,371
Average production for the market, tons	500,000	150,000	1,710,000	2,360,000

In physical terms 2.36 million cows would product about 3.05 billion liters of milk.

Producers' and purchasing districts should be established for each milk processing plant for production for the market in business communities for animal husbandry. Within the district as established the milk processing plants would directly, or in cooperation with farmer cooperatives and basic organizations of cooperators, develop their own raw materials base by organizing more intensive and larger-scale production based on up-to-date technology, which will help to raise labor productivity, make production more profitable, and motivate producers to engage in this production.

Material Conditions and Organizational Measures for Achieving the Projected Volume of Production in Cattle Raising

It is indispensable to undertake up-to-date zootechnical measures in all the herds of producers for the market in order to improve the genetic characteristics of the domestic cattle population. Young breeding animals will be produced on socialized farms for replacement and expansion of the foundation herd of the socialized farms and to meet the needs of farmers in the private sector. To that end the number of cows with monitored milk production on private farms should increase from 435,000 to about 1.5 million head, and about 520,000 quality heifers for breeding should be produced.

Artificial insemination is the basis for advancement of cattle raising and the most effective method of increasing the number of pedigreed animals, milk and meat production per cow, and the most purposive steps possible should be undertaken for broad application of this zootechnical measure. The monitoring of sterility should be organized in the same way as the network of primary stations is organized for artificial insemination of cows and should cover all cows which are unsuccessfully inseminated more than twice. In settlements without roads, where artificial insemination stations cannot be established, the productive characteristics of cattle are to be improved by the licensing of bulls, that is, by replacing the primitive bulls with purebreds.

Organization of the production of young male and female breeding animals is a very extensive and complicated job, one in which the data need to be gathered on the needs of the underdeveloped regions and on possibilities of the advanced regions to produce a sufficient number of quality young breeding animals. Organization of the production of young breeding animals can be done successfully, then, only through a Yugoslav program for improvement of cattle raising for several reasons, two in particular.

First, the regional programs are ineffective, since in some regions cattle with low productivity are dominant, and they are unable to produce quality young breeding animals. Some republics and provinces raise only quality breeds, more or less selected, and all the young animals not chosen for breeding are sent for slaughter, although in their productive characteristics they exceed the primitive breeds being raised in regions where livestock raising is lagging.

The second reason is that producers for the market have to be able to buy quality heifers in calf, which will be all the more successful if the heifers are purchased from a broader production region, especially from regions which have a larger number of registered cows and a more highly developed network of artificial insemination.

Production of sufficient quantities of livestock feed is one of the basic conditions for increasing cattle production, especially since the selection of animal feed crops, production technology, and the preparation and use of livestock feed are not being adapted to the conditions of production.

In order to increase the level of organization of livestock production business communities for animal husbandry should coordinate and guide the measures and actions of the slaughterhouse and dairy industry as the entity responsible for development of animal husbandry both because of the differing goals and also for the sake of more optimum and complete use of quality breeds to inseminate the domestic cattle population.

Conditions and Measures for Increasing Pork Production

If the program for production of pork is to be carried out, measures need to be taken to conclude contracts for the production of about 520,000 tons of meat on socialized and private farms, producers for the market have to be furnished young breeding animals and the livestock feed they lack, and the fattened swine have to be purchased regularly (Table 5).

Table 5. Conditions for Achieving the Programmed Production for the Market in 1985

Indicator	1981, Total	1985, Original Production (75%)
Number of sows	1,340,000	625,000
Number of swine per sow to be fattened	10	16
Number of fattened swine for slaughter	13,550,000	10,000,000
Average final weight of fattened swine, kg	76.6	110
Total gross production, tons	1,038,000	1,100,000
Total net production, tons*	794,000	841,500
Pork production, tons**	492,280	521,730

* The yield in slaughtering is 76.5 percent.
** Refrigerated sides consist of 62 percent of meat and bones and 38 percent of fats and other edible parts (head, legs and skin). Calculated in this way, the yield from 100 kg of live weight is 47.5 kg of meat and bones and 29 kg of fats and other edible parts.

Table 6. Organization of Pork Production in 1985

Indicator	Socialized Farms	Socially Organized Production on Private Farms	Physical Production	Total Production
Number of sows	150	475	472	1,097
Number of swine for fattening per sow	16	16	10	13.4
Number of swine fattened for slaughter	2,400	7,600	4,724	14,724
Average final weight of the fattened pig, kg	110	110	76	99

Table 6 (continued)

Indicator	Socialized Farms	Socially Organized Production on Private Farms	Physical Production	Total Production
Total gross production, thousands of tons*	264	836	359	1,459
Total net production, thousands of tons**	202	639	274	1,115
Total meat production, thousands of tons***	125	396	170	691
Distribution of meat production by source	18.1	57.3	24.6	100

* Live weight of swine for slaughter.
** Weight of refrigerated carcasses.
*** Production of meat without fats, skin, head and legs (dressed carcasses).

Measures and Conditions To Increase Production of Mutton

Limited success can be achieved through very well organized actions in the production of mutton, since more than 97 percent of the sheep are raised without organization on private farms. The slaughter weight of sheep cannot be greatly increased, since 63 percent of the sheep are slaughtered on the farm and 37 percent in slaughterhouses, and even for lambs slaughtered in slaughterhouses the final weight is often adjusted to the requirements of foreign customers. It is estimated that the total number of sheep slaughtered will increase at an annual rate of about 3 percent, without changes in final weights and yields, which makes it possible in 1985 for the production of mutton to reach 66,500 tons, instead of the planned 76,000 (Table 7).

Table 7. Estimated Mutton Production

Indicator	1982	1983	1984	1985
Number of sheep	7,605	7,833	8,070	8,312
Slaughtered sheep:				
Number	4,906	5,053	5,205	5,361
Average final live weight, kg	24.5	24.6	24.7	24.8
Total gross weight	120	124	129	133
Yield, %	50	50	50	50
Total meat production	60	62	64.5	66.5
Meat production per head, kg	12.25	12.30	12.35	12.40

Measures of importance to increasing the production of mutton are the following:

i. increase production of green matter by improving meadows and pastures and more optimum use of the feed produced by changing the system for preparing and using it (grazing rotation and putting by silage and haylage);

ii. introduce the basic measures of selection in all sizable herds: marking the animals and keeping records, measuring body weight and fleece weight, recording fertility;

iii. licensing rams as a general measure in all herds;

iv. increase herd size or increase the intensity of selection by pooling the herds of 10 to 20 producers, introduce artificial insemination and complete health protection;

v. in purebred herds and herds of crosses of quality breeds with domestic breeds organize production of 200,000-250,000 breeding rams, about 50,000 of them on socialized farms, and organize their regular movement from herd to herd in order to avoid close inbreeding if the same ram is used for a lengthy period;

vi. organize the testing of rams of all breeds with a uniform Yugoslav methodology.

Measures and Conditions for Increasing the Production of Poultry Meat and Eggs

Poultry meat production will increase at a rate of 4.4 percent and egg production at an annual rate of 5.6 percent by increasing the number of poultry, by disseminating hybrids specialized in the production of meat and eggs and by furnishing adequate quantities of protein-rich livestock feed.

It is estimated that the production program of 340,000 tons of poultry meat and 5.5 billion eggs in 1985 is being carried out at the rate and according to the pattern shown in Table 8.

Table 8

Pattern of Production	1982	1983	1984	1985	Index
1. Number of head of poultry, thousands	67,408	70,104	72,908	75,460	115
2. Total meat production, thousands of tons	295	310	325	340	119
Production in agricultural organizations, thousands of tons	142	157	172	187	143
Production in agricultural organizations, %	48.1	50.6	52.9	55	120
3. Total egg production, millions of eggs	4,600	4,850	5,115	5,500	124
Production per laying hen, number of eggs	129	131	133	136	107
Socially organized production, millions of eggs	2,050	2,200	2,350	2,600	137
Socially organized production, %	44.6	45.4	45.9	47.3	110

The needs for livestock feed given in the balance must be furnished in order to carry out the production program for poultry meat and eggs and measures need to be taken to replace imported poultry with selected domestic breeds.

Livestock Feed Production and Balance

The accelerated development of animal husbandry depends upon the production of livestock feed in quantities greater than current feeding requirements, which makes it possible to increase livestock populations, to feed more animals and to increase production per head. However, livestock feed production within the country is not in line with the needs given in the balance and is a serious check on the faster development of animal husbandry.

Table 9. Balance of Coarse Livestock Feed

Indicator	Nutrient Units, millions of kg	Digestible Protein, millions of kg
Total annual production	10,103	929
Needs of cattle and sheep raising	14,523	1,530
Shortage	4,420	601

Coarse fodder can be produced in the largest amounts on 6.4 million hectares of meadows and pastures, which account for 44.5 percent of farmland, mainly in the hilly and mountain areas of the country. However, these natural resources are not sufficiently utilized. The yields achieved are 2,200 kg of hay with low nutrient value on meadows and 470 kg on pastures. Use of up-to-date technology, combined with a change in the way of storing grass matter, may considerably increase the production of coarse livestock feed, but it takes 1 ton of manufactured fertilizers to increase hay production by 10 tons.

In the flatland areas of the country grains and industrial crops are more and more displacing feed crops, which are more and more being produced as catch crops and stubble crops. Sizable quantities of coarse livestock feed which can be used effectively in the production of milk, beef and mutton are obtained as by-products of field cropping and the food processing industry.

The shortage of nutrients to be obtained from coarse feed corresponds to the value of 8.5 million tons of meadow hay, the amount now produced on meadows and pastures.

In order to bring production of livestock feed into line with the needs of animal husbandry, incentive measures should guarantee an increase in the production of all types of bulky fodder so that the actual growth of production corresponds in terms of nutrients to the value of 8.5 million tons of meadow hay. The consumption of manufactured fertilizers will increase by about 850,000 tons in the performance of those tasks.

Corn Production. The social compact on development of the agroindustrial complex envisaged that in 1985 corn production would reach 12.36 million tons, and consumption 10.85 million tons. For the projected volume of

livestock production in 1985 the needs in the balance amount to 8 million tons of corn and 1.45 million tons of other grain and by-products from the processing of grain and sugar beets. If we also bear in mind other types of consumption--industrial processing, food, and seed, which amount to about 20 percent of the total quantities produced, it is estimated that in 1985 corn production would meet the needs of livestock production. However, feed rations with the optimum composition served as the basis for preparing the animal feed balance, although in livestock production corn is consumed inefficiently, above all to replace the quantities of roughage which are missing. The prices of hay are considerably higher on the livestock feed market than those of corn, which will mean that corn will continue to be used inefficiently in the future to feed livestock, so that economic policy measures of the republics and provinces should encourage more widespread planting of corn, the planting of high-yield hybrids adapted to the production conditions in the particular regions, and use of the appropriate soil and crop practices.

The Balance of High-Protein Livestock Feed. The social compact envisaged a sizable increase in the production of oilseed, which will help to increase the production of high-protein vegetable livestock feed, but the production of meat meal and especially fish meal will not experience any essential increase (Table 10).

Table 10. Production and Consumption of High-Protein Livestock Feed in 1985, in thousands of tons

Livestock Feed	Seed Production	Ground Oilcake Production		Need	Shortage
		%	Quantity		
Soybeans	183	80	146.4	975.4	-829.0
Sunflower seed	796	50	398.0	371.2	- 37.7
Rapeseed for oil	129	50	64.5	64.5	- --
Fish meal	--	--	4.0	154.9	-150.9
Meat meal	--	--	50.0	65.7	- 15.7
Powdered milk	--	--	10.0	17.4	- 7.4

The missing amounts shown in the balance, 829,000 tons of ground soybean oilcake and 150,000 tons of fish meal, must be imported. The 15,700 tons of meat meal and 7,400 tons of dry skimmed milk which are missing could be furnished through organized production within the country. The 26,910 tons of urea given in the balance for cattle and sheep corresponds in protein value to the amount of about 235,000 tons of ground sunflower oilcake. Nevertheless, the balance needs for high-protein livestock feed are considerably greater than the production which can be achieved and also greater than the balance needs in the last planning period. These differences have come about because of planned increases: 206,000 tons in the production of pork, 54,000 tons in the production of poultry meat and 1,073 million shell eggs. The need for high-protein livestock feed has been balanced for total poultry production and 75 percent of pork production. A large portion of total poultry production is commodity production whether it is sold through organized production, at the farmers' market or is intended for on-farm use. Of the total

needs in the balance, more than 58 percent of the ground sunflower oilcake, 92 percent of the ground soybean oilcake and fish meal and 100 percent of the meat meal will be consumed to produce pork and poultry meat and shell eggs.

It is especially important to the development of animal husbandry to find an effective system of furnishing foreign exchange to import the high-protein livestock feed which is lacking in the balance.

Meat and Milk Production and Consumption

The social compact envisaged for 1986 total meat production of 1.5 million tons, but this production does not include poultry meat, horsemeat, nor viscera. This has a bearing on adjustment of the total volume of meat production to its composition. If the projected volume of production of beef, pork and mutton is achieved, along with the expected production of poultry meat and other types of meat, total production would reach 1,627,000 tons. Were this program realized, effective export (exports minus imports) would reach 290,000 tons of meat, instead of the planned 150,000 tons.

The balance needs of the domestic market will be satisfied with the purchase of 2.35 billion liters of milk, whereby we would free ourselves from importing milk and dairy products.

Share of Livestock Production in Foreign Trade

A share of livestock production is intended for export, and a share of the foreign exchange realized through the export of livestock and animal products is intended for the importation of the missing quantities of high-protein livestock feed and additives.

If the volume of livestock production envisaged by the social compact on development of the agroindustrial complex is carried out, exports of meat and other animal products would reach a level of $690 million. However, the projected volume of production depends on the importation of high-protein livestock feed and additives valued at about $337 million. Another $73 million are need to import meat, hatchery eggs and poultry, so that total imports will reach $410 million.

Table 11. Exports of Livestock and Animal Products

Indicator	Thousands of Tons	Price	Value, millions of $U.S.
Meat	332	2,000	664
Other products of animal husbandry	--	--	27
Total			691

The foreign exchange was balanced without including funds to import raw materials and production supplies for the needs of the slaughterhouse and dairy industries. According to estimates of the dairy industry, imports of spare

parts for equipment not manufactured in the country will require $15.3 million in 1985 and imports of production supplies and containers about $26 million, or a total of $41.3 million. By 1985 certain quantities of rennet, paper and aluminum foils for Tetrapak and Brikpak containers are to be manufactured within the country, so that the increase in imports of containers will not be in proportion to the growth of purchases and processing. We do not know the needs of the slaughterhouse industry to import containers, additives and spare parts, but certainly they are considerably greater. These figures indicate the need to involve scientific research organizations and the domestic industry in organizing the production of containers and certain additives. It is especially important to take measures toward a quite considerable increase in the production of high-protein livestock feed, for which most of the foreign exchange realized through exports is being set aside.

Table 12. Imports of Livestock Feed, Meat, Etc.

Indicator	Thousands of Tons	Price	Value, millions of $U.S.
Meat	42.0	1,500	63.0
Breeding poultry and hatchery eggs	--	--	10.0
Ground soybean oilcake	975.0	240	234.0
Fish meal	155.0	500	77.5
Additives	--	--	25.5
Total			410.0

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CSO: 2800/172

END