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JPRS 84333

15 September 1983

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# USSR Report

INTERNATIONAL ECONOMIC RELATIONS

No. 61

19980629 091

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USSR REPORT  
INTERNATIONAL ECONOMIC RELATIONS

No. 61

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## USSR-CEMA TRADE

### CEMA PROGRESS IN 1982 SPOTLIGHTED

Moscow APN DAILY REVIEW in English 8 Aug 83 pp 1-3

[Text] The member-countries of the Council for Mutual Economic Assistance (CEMA) have summed up the results of their economic and social development in 1982, the second year of the 1981-1985 five-year period. Under the guidance of their communist and workers' parties, last year the peoples of the fraternal countries have scored new successes in carrying out their socio-economic programmes. The aggregate economic, scientific and technical potential of the CEMA community has grown.

As in the previous year, in 1982 the economies of the CEMA countries accentuated intensive growth factors.

In 1982 the national income of the CEMA countries as a group grew by 2.2 per cent. Figures for individual countries follow: Bulgaria, 4.3 per cent; Hungary, 2 per cent; the GDR, 3 per cent; Mongolia, 7.4 per cent; Romania, 2.6 per cent; the USSR, 3.4 per cent; and Czechoslovakia remained close to the 1981 level.

Industry, the leading sector of the CEMA countries, grew steadily. Compared with the previous year, in 1982 the gross industrial production of the CEMA countries went up by 2.3 per cent. Below are figures for individual countries: Bulgaria, 4.9 per cent; Hungary, 2.2 per cent; the GDR, 3 per cent; Cuba, 4.8 per cent; Mongolia, 10 per cent; Romania, 1.1 per cent; the USSR, 3 per cent; and Czechoslovakia, 1 per cent.

The bulk of the increment in industrial output resulted from higher labour productivity which is the main gauge of performance efficiency. Labour productivity in the CEMA countries as a group rose 2.1 per cent in 1981.

Increase labour productivity accounted for the following increments in gross industrial production: Hungary, 100 per cent; Czechoslovakia, 90 per cent; the GDR, 80 per cent; and Bulgaria, more than 75 per cent. Within CEMA context, higher labour productivity in industry was tantamount to saving the labour efforts of over a million workers.

Attention was concentrated on investment construction. In accordance with the CEMA countries' investment programmes for 1982, their economic potentials grew mostly through reconstruction and updating programmes, faster completions and fewer starts.

Compared with the preceding year, in 1982 the fixed production assets of individual CEMA countries grew as follows: Bulgaria, 107 per cent; the GDR, 105 per cent; Mongolia, 109 per cent; Poland, 101 per cent; Romania, 109 per cent; the USSR, 107 per cent; and Czechoslovakia, 106 per cent.

On the whole, agriculture developed successfully despite unfavourable weather conditions in some of the countries. The implementation of the programme of strengthening the material and technical basis of agriculture ensured its greater stability. The increment of the gross output amounted to three per cent.

The active participation of CEMA member countries in the international socialist division of labour is evident from the growth of their foreign trade, especially mutual trade. On the whole, the foreign trade turnover of fraternal CEMA countries in 1982 reached 267,000 million roubles and the turnover of their mutual trade amounted to 149,000 million roubles, which exceeded the 1981 level by 6.6 and 11.5 per cent, respectively. In 1982 the mutual goods turnover accounted for 55.9 per cent of the entire volume of the foreign trade of CEMA member countries.

The growth of material production provided a basis for raising the living standards of the working people in CEMA countries. Real per capita incomes increased and the main source of them, like in previous years, was the wages and salaries of factory and office workers and also pay in agricultural cooperatives. The wages and salaries of working people in all CEMA member countries rise in a stable way.

The growth of the money incomes of the population and of the output of consumer goods conditioned the rise in the retail state and cooperative trade, including public catering.

Housing construction has assumed a large scope in CEMA countries. In 1982, on the whole, in these countries 2,817,000 flats were built, including 68,200 flats in Bulgaria, 30,100 flats in Cuba, 102,000 flats in Czechoslovakia, 187,100 flats (including modernized ones) in the German Democratic Republic, 75,500 flats in Hungary, 4,600 flats in Mongolia, 185,000 flats in Poland, 162,000 flats in Romania and over 2 million flats in the Soviet Union.

In 1982 the material basis of education, culture and health services continued to develop in CEMA member countries.

These facts and figures are taken from the July issue of ECONOMIC COOPERATION BETWEEN CEMA MEMBER COUNTRIES, an information bulletin of the CEMA Secretariat.

(PRAVDA, August 8. In full.)

CSO: 1812/254

USSR-CEMA TRADE

PLANT DIRECTOR VIEWS RELATIONS WITH CEMA COUNTERPARTS

PM190926 Moscow PRAVDA in Russian 27 Jun 83 First Edition p 4

[Interview with V.P. Kabaidze, general director of the Ivanovo Machine Tool Building Association, by special correspondent L. Zhmyrev: "Not Forgetting Commerce"--date not given; carried under the rubric "Socialist Manager Today"]

[Text] Ivanovo-Moscow--I last talked with V.P. Kabaidze, general director of the Ivanovo Machine Tool Building Association, the other day. Vladimir Pavlovich had stopped over for a day in Moscow en route from Paris where, with his friends--economic leaders from the socialist countries--he had taken part in an international exhibition of the output of the machine tool-building industry. The "handsome redheads," as the director lovingly calls his machine tools, are well known in Bulgaria, the GDR, Romania and the CSSR. In Paris deals were concluded for their acquisition by firms in the United States, Britain and other capitalist countries. A big success. But that was not what we talked about. Proceeding directly from the aircraft to the Ministry of the Machine Tool and Tool Building Industry, the director immediately plunged, so to speak, into the heated atmosphere of the first days of work after the CPSU Central Committee June Plenum and the USSR Supreme Soviet session.

In studying the materials of the plenum and session, Kabaidze began our talk; I singled out for myself several long-range propositions, so to speak. Above all, that place in the plenum materials which speaks of the need for the active formation of a new type of economic thinking. Yu.V. Andropov, general secretary of our party's Central Committee, aptly and opportunely said that much has to be learned in daily work and our main foes on this path are formalism, routine, timidity and sometimes also lazy thinking.

For me personally, the new type of economic thinking is connected with a feeling that many of us economic leaders are linked by invisible threads with the world economy and above all the fraternal countries' economies. Hence our different criteria for making assessments. A machine tool has been awarded the Seal of Quality? Good. But does it stand up to comparison with similar output from the fraternal countries? And what about on the world market? Instructions have been received to develop articles of a new type. How should they be fulfilled--should we do everything ourselves, down

to the last screw, or set up sharing and actively join in the international socialist division of labor? A good technical result has been achieved. But how will it tip the scales of commerce, and what has it cost the state and the people? The very conception of such questions is already, in my view, a manifestation of the new type of economic thinking mentioned at the CPSU Central Committee June Plenum.

In my practical work, my interlocutor continues, I attach great importance to direct contacts with economic leaders from the socialist countries. Sometimes it happens that interesting cooperation is planned, but correspondence and agreements proceed at a snail's pace for many months. And it is here that a personal meeting and direct talk will immediately get things moving.

I remember the following incident. From Ryazan, where I was working as chief engineer at the machine tool association, I was transferred to work at Ivanovo. When he learned of my appointment, a friend from the GDR, (G.) Shilling, director of the machine tool plant in the city of Aschersleben, telephoned me: "What do you need, how can I help?" He was able to travel to meet me and within a few months he had sent to Ivanovo, via Soviet organizations, a consignment of planing and grinding machines produced over and above the plan. How useful they were initially!

Machine tool builders travel to Ivanovo from many socialist countries. I am personally well acquainted with R. Winter, member of the SED Central Committee and general director of the F. Heckert Combine in the GDR, the directors of many of the machine tool plants belonging to the combine-- H. (Marra), (V.) Taubner, K. Weigelt and others. In Bulgaria I am well acquainted with Sh. Petrov, director of the ZMM Machine Tool Association, while in Romania I know A. Stan, leader of the (Elektronum) Association.

In the old days people used to say: Trade knows no friendship. But in our community we do not seek advantage at the other's expense. Direct ties and commercial deals are built on an equitable, mutually advantageous basis. Take the Ivanovo association workers' relations with the GDR machine tool builders. They are developing within the framework of the agreement on direct cooperation between the enterprises of the USSR Ministry of the Machine Tool and Tool Building Industry and the GDR Ministry of Machine Tool and Processing Machinery Building. The seriousness of our contacts is borne out, for instance, by the fact that we have carried out a barter deal quite rare in the sector's practice. We have sent the F. Heckert combine five Ivanovo machine tools of which there were none in the GDR, and received in return from the GDR five machine tools with no counterparts in Soviet machine tool building. We have also exchanged licenses.

We have accumulated much that is interesting in relations with the GDR machine tool builders, Kabaidze continues his story. We have conducted a joint analysis of the prospects and trends of machine tool building. We have initiated cooperation in creating a new, modern, heavy drill with digital program control for working locating parts. In relations with our friends from the GDR, we are also attracted by their great commercial experience. We have food for thought here.

After all, what happens with us? The enterprise's technical or production success is noticed and welcomed by everyone. Yet the commercial aspect remains obscured: It's not worthy of our consideration, people say. For their part, the foreign trade organizations, while sometimes saving trifles, often let slip a big bonus for the national economy as a whole.

Our advance, the CPSU Central Committee June Plenum noted, is being held back by faults in the economic mechanism and by labor productivity, which fails to satisfy us. Familiarization with our friends' experience makes it possible to spot our shortcomings through contrast.

We have frequently observed that GDR machine tool plants are very circumspect in investing money in capital construction: "Walls do not produce a profit!" I frequently remind my comrades of these words when I meet with their latest attempt to "bury" money which will be recouped who knows when. The experience of our friends teaches us to be mindful of commerce while we are still designing machinery. It has been necessary to break the designers' traditional approach. Now if one of them brings blueprints for a new machine tool with 1,000 components, he is told straightaway that it will not work, there should be half the number of components. The machine tool will be more reliable and cheaper.

One more observation. We long ago noticed that in the GDR equipment bought for hard currency does not stand idle on Saturdays and works during the night shift. Great provisions are made there to staff the night stints: a wages bonus, a nighttime buffet with free coffee, a minibus to fetch the machine tool workers and take them home. In the shops there are also elements we could borrow in strengthening labor discipline and improving visual agitation. At the GDR's machine tool plants everyone, right up to the director, punches a card at the entrance.

But let us return to commerce. There was a time when, meeting some of my plant's workers on their return from a foreign business trip, I would sadly form the opinion that they had mastered the technical characteristics of new machinery and the features of its design and operation very well, but sometimes had no idea of the commercial side. In general, when there is talk of this subject, I recall the old story. Two men were sent to a state to find out whether there was a demand for shoes there. One gave an unreasoning reply: There was no demand for footwear, the population was not accustomed to it. The other reported delightedly that there was an unlimited sales market: Everyone there went barefoot, it was just a matter of advertising.

To instill a taste for commerce, Kabaidze added, we have begun to subscribe to "the BYULLETEN INOSTRANNOY KOMMERCHESKOY INFORMATSIAA [Bulletin of Foreign Commercial Information], to receive the USSR Ministry of Foreign Trade journal VNESHNYAYA TORGOVLYA, and to strengthen our commercial services in every way, following the example of the Volga Truck Plant and other firms awarded the international Golden Mercury Prize. Our attitude toward Madame Commerce, as we sometimes call it in jest, has now changed. And here is

the result: The association gets several times more output from each invested ruble than the average for the ministry's kindred enterprises. In addition, the Ivanovo workers help to save hard currency because the Soviet client now has the opportunity to purchase processing centers not abroad but in Ivanovo.

As Lenin predicted, the international division of labor is a historical necessity which blazes its own trail. It must be admitted that our contacts with colleagues from the fraternal countries would develop even more effectively if the reciprocal information service were better organized.

The Central Committee Plenum rightly stated that delays and red tape are most tangible. Sometimes we visit one of our friends' plants. Talk turns to some machine tool of ours. Where is the documentation? Just a single leaflet. Yet capitalist firms in such an instance issue a magnificent prospectus with the most detailed descriptions. Our friends take this into account. Some fraternal countries also pay more attention than we do to advertising their output.

And one more detail. It is our habit to put small plates on a machine tool indicating who produced the machine and when. As a rule they are not placed prominently. Some 4 years ago a buyee from Sweden visited the plant. He carefully looked over the processing center on sale. During an informal conversation over lunch he said: "I don't understand you Russians. You seem to be embarrassed with your output. Nowhere can you see that it is your plant which produces such good equipment." The lesson was of use. Since then we have attached fine cast metal plates to our machine tools reading "Ivanovo." They can be seen from a long way away. To this day I am grateful to the "boss" for his frank comment.

The new type of economic thinking, the Central Committee Plenum noted, is aimed at initiative and socialist enterprise, at the enhancement of responsibility and the quest for paths leading to the best result with minimum expenditure. The modern socialist director works not for himself but for society. There are many really businesslike economic leaders with commercial skill in our country and the fraternal countries. They are united by common interests, but do they always rapidly find a common language? Not always.

Sometimes it is hard to get to speak to the economic leaders of the fraternal countries over the heads of many departments. I have already written recently in the journal KOMMUNIST that to produce a new machine tool we have to collect 100 signatures in all departments and every third signature is accompanied by a seal. Then collaborating with a fraternal country the number of signatures and seals doubles. The deadlines for setting up deals are disgracefully extended. "Mobile technology" runs up against immobile organization.

The recent USSR Supreme Soviet session adopted a law on the procedure for the activity of joint economic organizations of the USSR and other CEMA

countries on USSR territory. One more important prerequisite was thus created for intensifying socialist economic integration. But the economic mechanisms and some legal mechanisms for developing direct production and commercial contacts have nonetheless still not been finally settled. That is why experience of this cooperation is as yet so small. I remember how once, instead of spending a long time arguing the need to have director linked with us by cooperation and to visit us we made...a complaint to the plant. Only formally, of course. The director immediately came to Ivanovo and important questions of cooperation were resolved promptly.

Where is the way out? I believe that in the sphere of foreign economic ties the state should see the director as its agent and somehow expand the range of his rights, also enhancing his responsibility, of course.

In this connection I want to quote Yu.V. Andropov's words: "Recently a lot has been said about how we must expand the autonomy of associations and enterprises, kolkhozes and sovkhoses. I believe the time has come to embark in practice on the solution of this question...and to consider the fraternal countries' experience."

The decisions of the CPSU Central Committee June Plenum require a creative approach toward participation in the international socialist division of labor, and the role of the fraternal countries' economic leaders in this matter is growing with every passing year.

CSO: 1825/76

## USSR-CEMA TRADE

### SOVIET, CEMA COOPERATION WITH CUBA

Moscow APN DAILY REVIEW in English 29 Jul 83 pp 1-6

[Article by V. Morozov, first vice-chairman, USSR State Committee for Foreign Economic Relations: "Internationalism in Action"]

[Text] July 26 marked the 30th anniversary of the heroic storming of the Moncada barracks--the date celebrated by the entire Cuban people as the National Uprising (Revolution) Day, which ushered in a new era in the history of the struggle for the national and social liberation of Cuba. This struggle was crowned with the victory of the Cuban revolution and with the formation of Latin America's first state of workers and peasants.

#### Fraternal Cooperation Projects

The relations of fraternal friendship and fruitful cooperation between the Soviet Union and the Republic of Cuba become ever wider and stronger. Today this cooperation embraces practically all spheres of the national economy. Economic and technical cooperation is maintained on a large scale. It assumes an ever more multifaceted and comprehensive character. In the 1961-1982 period dozens of major economic projects were put into operation in Cuba with Soviet economic and technical assistance and 108 centres for training national specialists were set up and fitted out with equipment. In the same period 135 sugar refineries were modernized. Projects of Soviet-Cuban cooperation account for more than 10 per cent of the gross output of Cuba's industry. They produce the country's entire rolled stock, 95 per cent of Cuba's steel output, 45 per cent of her generation of electric power, over 12 per cent of the production of the machine-building and metal-working industries, 30 per cent of the manufacture of fabrics and more than 50 per cent of the output of yarn. The plant of sugar-cane harvesters built in the city of Olgin has reached its design capacity and annually turns out 600 combine harvesters. It is worth noting that at present the harvesting of roughly half of the areas taken by sugar cane has been mechanized.

Such major cooperation projects as the plant of metal structures in the city of Las Tunas and the plant of steam boilers in Sagua la Grande are mastering their design capacities. The output of television sets and transistor radios at

the plant in Havana is growing. The indices of the operation of electric power stations in the cities of Mariel and Santiago de Cuba are among the best of the country's projects of the power industry. A station of communication via artificial earth satellites has been built, with the aid of which Cuba maintains uninterrupted communication with many countries.

Cuba is poor in energy resources and, therefore, the problem of providing the country with oil and petroleum products has always been acute there. Geological prospecting for oil and gas carried out with the assistance of Soviet specialists has brought about the discovery of oil reserves in Cuba, which makes it possible in the short term to raise the output of oil considerably. Already in 1982 Cuba extracted 540,000 tons of oil which surpasses the 1981 level practically two-fold.

### Impressive Prospects

In the process of Soviet-Cuban cooperation much has been done for the development of industry in Cuba, for the elimination of serious disproportions in the economy inherited from American neocolonialism. However, the prospects for cooperation between the two fraternal countries are even more promising.

Under the current five-year plan, in accordance with the inter-governmental agreement on economic and technical cooperation between the USSR and the Republic of Cuba for 1981-1985 and for the period afterwards, the Soviet Union renders technical assistance to the development of the key branches of the Cuban economy--such as the generation of electricity, ferrous and nonferrous metallurgies, oil refining, light, food, machine-building and construction industries, transport, radio engineering, as well as geological prospecting, land reclamation and training of national specialists.

The task of raising farm output is assuming great importance for Cuba. Jointly with other CEMA member-countries the Soviet Union takes part in the development of Cuban agricultural production and industrial processing of citrus plants and also production of sugar within the framework of corresponding long-term goal-oriented cooperation programmes.

Among the major projects which are being erected under the current five-year plan with the USSR's assistance one should mention the construction of an atomic power station with a capacity of 850 megawatts in the vicinity of the city of Sienfuegos. The putting of this station into operation will sharply reduce the present shortage of electric power in Cuba and will also considerably cut the consumption of mazout as fuel for the generation of electricity.

The problem of raising the output of petroleum products in Cuba is being solved in cooperation with the Soviet Union. Oil refineries in Havana and Santiago de Cuba are being modernized which will make it possible to raise by 1.5 million tons a year the capacities needed for the refining of crude oil. In addition, the construction of a new oil refinery is under way in the vicinity of

Sienfuegos. The annual capacity of its first section will amount to 3 million tons. At the same time, Cuba is solving the problems of creating port facilities and bases for receiving oil and handling petroleum products, including the construction of wharves where large tankers will be unloaded.

Soviet-Cuban cooperation in the field of the further development of ferrous metallurgy is being expanded. Actually this branch of industry has been established anew. The expansion of the Jose Marti steel plant, which is now under way, will enable Cuba to raise the annual capacity of this plant from 350,000 to 600,000 tons of steel and from 300,000 to 510,000 tons of rolled stock. It can be noted for the sake of comparison that in 1958 Cuba's steel output amounted to about 26,000 tons, while the output of rolled stock was slightly more than 40,000 tons.

The development of Cuba's nickel industry occupies a special place in economic and technical cooperation between the two countries. For Cuba which possesses considerable stocks of nickel ores the increase in the output of nickel-bearing concentrates means the growth of the country's export funds. In its turn, the Soviet Union is interested in Cuba's nickel-bearing products, including those obtained as the compensation for assistance rendered in the construction and modernization of nickel plants.

The modernization of two nickel plants is being completed in the towns of Moa and Nicaro with the increase of their overall annual capacity by 9,500 tons. The construction of the nickel plant at Punta Gorda is also in the final phase. Its annual capacity will be 30,000 tons. Besides, together with other CEMA member-countries the Soviet Union is helping Cuba build a nickel plant at Las Camariocas with the annual capacity of 30,000 tons. Upon the commissioning of these enterprises Cuba's nickel output will nearly triple as compared with the pre-revolutionary level.

The development of the power industry has become a traditional line of Soviet-Cuban cooperation. Suffice it to say that the Soviet Union helped put into operation more than 1,000 megawatts of power generating capacities which at present account for more than 40 per cent of all installed capacities of Cuba's power stations. Such cooperation projects, as the Mariel and Rente thermal power stations, account for almost half Cuba's output of electricity.

Along with the construction of the nuclear power station the expansion of existing thermal power stations continues. In the Havana Province the construction of a new thermal power station with a capacity of 1,300 megawatts has been started, and the construction of the power transmission lines and other projects of the power industry is under way.

In the light industry the construction of Cuba's largest textile complex with the annual capacity of 80 million square metres of fabrics at Santiago de Cuba and of the cotton spinning mill with a capacity of 15,000 tons of yarn a year in Havana is nearing completion. When these enterprises reach the design capacity, the output of fabrics in Cuba will go up by 1.5 times.

Work aimed at raising the sugar output occupies a prominent place in cooperation. Being the main export commodity, sugar ensures up to 80 per cent of Cuba's export receipts. Under the current five-year plan and in subsequent years the Soviet Union will render Cuba technical assistance in the construction of new sugar mills and in the modernization of existing sugar mills, in the creation of new capacities of machine-building plants of the sugar industry and in the expansion of existing capacities, in the modernization of railway transport and also in development of the automation of the sugar industry.

Prospecting for solid minerals, oil and gas on Cuba's territory is under way; aid is given in land reclamation and in training national specialists for industrial and other economic projects.

#### A Partner to the Soviet Union

The Soviet Union's all-round assistance in building up Cuba's industrial production considerably contributes to the expansion of Cuba's export opportunities, to the strengthening of her external economic ties with socialist and other foreign countries. The output of enterprises, built and modernized with Soviet technical assistance, makes it possible to meet more fully the requirements of Cuba and other CEMA member-countries in individual types of manufactured goods and foodstuffs.

The USSR is the biggest importer of Cuban sugar. Annually, the export of Cuban sugar to the Soviet Union stands at more than three million tons. Nickel-bearing concentrates delivered from Soviet-Cuban projects are of great importance for Soviet metallurgy. Shipments of citrus fruit and products of their processing from Cuba to the Soviet Union rise with every passing year. In 1982 their volume reached about 85,000 tons.

The lines of the development of Cuba's economy mapped out by the Second Congress of the Communist Party of Cuba reflect the prospects for the further expansion of economic and technical cooperation between the two countries.

The community of the aims and interests and of the social and economic system is a determining factor of the successful development of Soviet-Cuban cooperation.

The period which has passed since the victory of the Cuban revolution has been filled with the Cuban people's selfless work aimed at turning the country into the first socialist state in the Western Hemisphere. Fraternal internationalist assistance by the Soviet Union and other socialist countries is a weighty contribution to the upbuilding of socialist society in Cuba.

(EKONOMICHESKAYA GAZETA No 30, July 1983. Abridged.)

CSO: 1812/254

## USSR-CEMA TRADE

### CEMA SPECIALIZATION, INTEGRATION NOTED

Moscow APN DAILY REVIEW in English 12 May 83 pp 1-5

[Article by N. Syomin, Cand.Sc.(Economics): "On the Basis of Division of Labor"]

[Text] At the CPSU's Twenty-sixth Congress and at the congresses of the fraternal parties of the other member-countries of the Council for Mutual Economic Assistance (CEMA), which have drawn up programmes for economic and social development for the current five-year period, the need was pointed out for deepening socialist economic integration as a mighty factor of progress of the national economies of the countries of the socialist community. In the Soviet Union and in the other CEMA member-countries, persevering work is under way in that direction.

#### Coordinated Policy

Specialisation and cooperation in production are among the basic lines of deepening socialist economic integration. The agreed strategy of developing this process for the period ending in 1990 has found an expression in the appropriate long-term purpose-oriented programmes for cooperation and in the bilateral long-term programmes for specialisation and cooperation which the Soviet Union has concluded with the other European member-countries of CEMA. In pursuance of the policy coordinated by the fraternal parties and recorded in the said documents, the organisations of CEMA member-countries concerned have agreed on multilateral specialisation in the manufacture of roughly 8,000 items of machine-building, a series of major kinds of chemical products, and also in the production of selection seeds and planting stock for crop farming.

These understandings are being implemented on the basis of an ever larger number of bilateral and multilateral agreements. In the past decade alone, more than a hundred multilateral and more than a thousand of bilateral agreements on specialisation and cooperation were concluded between CEMA countries.

Under the bilateral programme concluded with the Soviet Union, Czechoslovakia, for example, shall specialise in the manufacture of drives for numerical programme-controlled machine-tools, a number of types of electric motors, items

of professional radio, computer and radar facilities. Nearly 160 inter-governmental and inter-departmental agreements have been concluded on the basis of the programme for specialisation and cooperation in production between the USSR and the German Democratic Republic for the period ending in 1990. More than 170 treaties and agreements have been signed with Bulgaria in pursuance of the general guidelines for specialisation and cooperation between the two countries up to the year 1990. A series of similar agreements has also been signed with other European CEMA member-countries.

A distinctive feature of the agreements concluded is the comprehensive approach to specialisation and cooperation, covering the entire cycle--from research and development to the coordinated manufacture of products, in the first place, in the more advanced industries. All this makes it possible to extend and to modernise production, to increase it to optimal proportions, to improve working conditions, to save on capital investments and scarce resources, to raise the quality and technical standard of products, and to effect concentration in the manufacture of specialised products in individual countries. For instance, the USSR and Poland account for the output of nearly 95 per cent of all excavators; Hungary and the USSR, about 80 per cent of buses; and Bulgaria, almost 100 per cent of storage-battery trucks and electric telfhers.

The output and export of products of many kinds is growing on the basis of specialisation and cooperation. This is true, specifically, of the manufacture of equipment for atomic power stations and for metal-working in the CSSR, and of equipment for oil production and oil refining in the Socialist Republic of Romania. Efforts are being pooled to solve the question of supplying the fuel-and-energy industry with up-to-date machinery and equipment. What is meant here are, for instance, dump trucks of 110-180 ton carrying capacity, heavy 500 h.p. tractors, powerful bulldozers and wheel excavators.

Among the major accords are the multilateral agreements on cooperation in the manufacture of plant for atomic power stations, and metal-cutting machine-tools, including programme-controlled ones.

Specialisation and cooperation in the automobile-building industry are now practised on a large scale. The multilateral agreements cover some 125 kinds of motor vehicles, units and parts for them, and also equipment and instruments for servicing.

Cooperation in the fields of industrial robots and microelectronics is now some of the more important lines of production. Specialisation and cooperation in respect to 58 types of industrial robots are developing between the CEMA member-countries. Collaboration in this promising sphere also covers a wide range of tasks--from designing that pre-supposes the standardisation of the technical and norm bases to production.

#### Specialization and Trade

The successful development of specialisation and cooperation is evidenced by indicators of foreign trade. Suffice it to say that the scope of the mutual deliveries of specialised products carried out by the CEMA countries on the contractual basis grew from 330 million roubles in 1970 to nearly 25,000 million roubles in 1980.

The proportion of specialised commodities in the export of the German Democratic Republic to other CEMA countries in 1981 exceeded 31 percent. At the same time, more than 80 per cent of the GDR's total export of products manufactured on the basis of specialisation and cooperation in production falls on products of machine-building, electrical engineering and electronics. The export of products manufactured on the basis of specialisation and cooperation by Czechoslovakia to other CEMA countries was in 1981 roughly 54 per cent higher than in 1976.

The mutual deliveries between CEMA countries of electronic computers in the 1971-81 period grew almost 14-fold. In 1981, the proportion of products manufactured by CEMA countries on the basis of specialisation and cooperation exceeded 34 per cent of the total scope of their mutual export of products of machine-building.

The socialist division of labour is also developing and gaining in strength in other lines of production, for instance, in the chemical industry. In the last decade, the growth rate of trade between CEMA countries in chemicals was nearly twice as fast as that of their mutual trade turnover as a whole. Moreover, in the aggregate volume of deliveries there is a steady growth in the proportion of chemical products made on the basis of specialisation. Their proportion in the total scope of the export of chemicals in trade between CEMA countries grew from 12 per cent in 1975 to almost 35 per cent in 1981.

The agreements in the field of chemicals, just as heavy industry, concern in a number of cases energy-consuming lines of production. Therefore, such agreements are concluded not only with account for the raw materials base, but also for the energy balance-sheet of the participating countries. For instance, the inter-governmental Soviet-Czechoslovak agreement provides for the export from the USSR to Czechoslovakia of products of the energy-consuming lines of production, while that from the CSSR to the Soviet Union of small sized (light-weight) chemical commodities.

#### Mutual Benefit

The development of specialisation and manufacturing cooperation between CEMA countries brings appreciable economic benefits. One of these is the higher degree of concentration and intensification of production.

Giving their due to achievements in the field of economic cooperation, CEMA countries believe, however, that the level of specialisation and cooperation in production at the present stage of development is not yet fully in keeping with the existing potentialities.

Problems of further deepening integration are to be discussed at an economic meeting at summit party and state level now being prepared.

(EKONOMICHESKAYA GAZETA No 17, April 1983. Abridged.)

CSO: 1812/254

## TRADE WITH LDC'S

### SOVIET-IRANIAN TRADE EXAMINED

NC050834 Moscow in Persian to Iran 1700 GMT 4 Aug 83

[Excerpts] In connection with the 20th anniversary of the signing of the first Soviet-Iranian economic and technical cooperation agreement, our correspondent asked Nomik Yakubov, chief of the Middle East Department of the State Committee for Foreign Economic Relations, to state his view on cooperation between our two neighboring countries during the past 20 years.

Nomik Yakubov said: The Soviet Union and Iran are two neighboring countries with a 2,500-km border. Since the very first days after its inception, the Soviet Union took and takes all the necessary steps for the border between our two countries to truly be a border of peace and goodneighborliness.

The first Soviet-Iranian economic and technical cooperation agreement was signed in Tehran 20 years ago, thus starting a new phase in the vast cooperation between the two neighboring countries in various economic fields.

When speaking about Soviet-Iranian economic and technical cooperation during the past 20 years, it should be especially stressed that the Soviet Union pursues the principles of equality of rights, nonintervention in each other's internal affairs, respect for sovereignty, and mutual benefit in its economic relations with Iran. The Soviet Union has never been nor is after special privileges with Iran. All the production units built in Iran with Soviet technical assistance have been placed under the ownership of the Iranian people and meet the Iranian people's interests. The Soviet Union has never tied, nor does it now tie, its economic assistance to Iran to any political condition. This approach is one of the major characteristics of the Soviet Union's relations with all the countries of the world.

Ending his remarks, Nomik Yakubov said the Soviet Union and Iran are two neighboring countries. Many years of experience show that the more we trade and cooperate, the more the people of the two countries benefit. Everyone knows that neighbors should live in peace. Unfortunately, there are now some people in Iran who try, every now and then, to prove that our cooperation is allegedly unilateral and not always to Iran's benefit. But only those who do not want to see the positive elements achieved in our relations after long years of cooperation can make such allegations. Cooperation is to the benefit of the two neighboring countries. This is a fact and

does not need to be proven. Those who now oppose Iranian-Soviet relations based on the principle of goodneighborliness are, first and foremost, pouring oil on the fire of Iran's enemies, who wish to see Iran isolated and weak. We fully believe that economic cooperation is to the benefit of our two countries. If they agree with us on this in Iran, this cooperation can be expanded further in the future.

CSO: 1825/77

TRADE WITH LDC'S

ECONOMIC, TECHNICAL COOPERATION BETWEEN USSR, DEVELOPING COUNTRIES IN THE '80S

Moscow EKONOMICHESKOYE SOTRUDNICHESTVO STRAN-CHLENOV SEV in Russian, No 3, Mar 83 pp 60-66

[Article by Ivan Kapranov, chief of the Planning-Economic Department, USSR State Committee for Foreign Economic Relations: "The USSR and the Developing Countries: Economic and Technical Cooperation in the 1980s"]

[Text] As was noted at the 36th CEMA Session, cooperation between CEMA and the developing countries increased noticeably in recent years. This reflects the consistent course followed by the members of the socialist commonwealth of supporting the liberated countries in their struggle against neocolonialism and for the accelerated development of their national economies and international economic relations on a just and mutually profitable basis.

The Basic Directions in the Economic and Social Development of the USSR in 1981-1985 and the Period Through 1990 call for expanding cooperation with developing countries through continuing to render them economic and technical assistance in building industrial and agricultural projects and training national cadres. This is the purpose of inter-governmental agreements, providing for long-term cooperation.

Particular attention is being paid in this case to interaction with socialist-oriented countries. Its purpose is to support their efforts to eliminate the positions held by the imperialist monopolies, to give the national economy command positions in the country's economy and to ensure a turn to the planned development of production forces. With USSR help a number of liberated countries have laid the foundations of a national industry and secured conditions for further economic development.

"Solidarity with the countries freed from colonial oppression and the peoples defending their independence," Comrade Yu. V. Andropov, CPSU Central Committee general secretary, noted at the November 1982 CPSU Central Committee Plenum, "was and remains one of the fundamental principles of Soviet foreign policy."

The projects completed with Soviet assistance account for about 35 percent of the overall steel smelting capacities in India, 70 percent in Iran and 95 percent in Egypt; 70 percent of the overall electric power generation in Syria, 60 percent in Afghanistan, 50 percent in Egypt and up to 55 percent in Irak. Between 1981 and 1985 the volume of exports of complete sets of Soviet equipment to the developing countries will increase by more than 1.4 fold

compared with the previous five-year plan. Aid will be given in the construction of more than 400 national economic projects and the planning of hundreds more will be undertaken. Ferrous and nonferrous metallurgy and the fuel and energy sectors will account for more than 60 percent of all deliveries of equipment and materials. Compared with the last 5-year plan, with Soviet assistance the developing countries will increase their power generating capacities by 16 percent; cast iron smelting, by a factor of 2.2; steel production by a factor of 1.5; and coal extraction by a factor of 3.6.

Currently, thanks to Soviet assistance, more than 50 projects are functioning in Afghanistan, accounting for about 70 percent of the factory-plant production in the state sector and more than 40 percent of the country's budget revenue from domestic sources. The natural gas deposits in Jarkuduk, with a capacity of 1.5 billion cubic meters per year, and a baking plant in Kabul were completed, the Kabul house building combine was reconstructed, and a bridge for automotive and rail traffic was built across the Amudarya River, in the Hairaton area as early as 1981-1982. The capital's airport and the Jangalak automotive repairs plant are undergoing reconstruction. A 220 kV power cable is being laid from the USSR border to Kabul. Petroleum depots, automotive transportation enterprises, car service garages, a plant for citrus fruit and olives processing in Jalalabad and seven machine-tractor stations are under construction. Vocational technical centers are being equipped and geological surveys are under way.

The Aynak Ore Mining and Concentration Combine, which will be built near Kabul at the site of copper deposits discovered by Soviet and Afghan geologists, will be the biggest result of such cooperation. A petroleum refinery for up to 500,000 tons per year, fuel and energy enterprises based on the Shebashek coal deposits and enterprises in other sectors will be built as well.

In India Soviet and Indian organizations will cooperate on the basis of long-term programs in the creation of two large power complexes in the eastern part of the country. One of them will include the large Vindyachal TES [Thermoelectric Power Plant] with a 3,000-megawatt generating capacity, the Nigahi coal mine (14 million tons per year) and a power transmission cable; the second will include the Mukuinda coal mine, which will produce 12 million tons of coal per year, including the extraction of cokable coal, and the building of coal concentration factories and TES. A complex of enterprises based on petroleum and natural gas will be built at one of India's promising petroleum deposits. Petroleum extraction will be increased from idling wells as a result of their repair and use of modern extraction methods. Cooperation will be continued in the construction of a large metallurgical plant in Vishakhapatnam with a 3 million-ton steel production capacity per year. India will receive aid in enlarging the capacities of the metallurgical plants in Bhilai and Bokaro through the use of new technology and equipment updating. The construction of an alumina plant in the state of Andhra Pradesh, with a 600,000-800,000-ton annual capacity per year, will play an important role in economic development. Further cooperation between Soviet organizations and the largest plants for heavy machine-building in Ranchi, ore mining equipment in Durgapur and heavy electric power equipment in Hardwar, built with Soviet assistance, is contemplated.

The important cooperated projects which were commissioned in 1981-1982 include important enterprises such as the petroleum refinery in Mathura, the country's largest, with a 6 million-ton annual processing capacity, the alumina plant in Korba, with a 100,000-ton aluminum annual production capacity and a 12-channel tropospheric communications line connecting transmitting and receiving stations in the area of Dushanbe (USSR) and Jammu and Kashmir States (India). A subway is under construction in Calcutta.

In Iran, the Isfahan metallurgical plant is undergoing expansion. Its steel smelting capacity will be increased from 550,000 to 1.9 million tons per year. Some equipment, including rolling mills, is being supplied by Czechoslovak and GDR foreign trade organizations. Major projects include the Isfahan TES with an 800-megawatt generating capacity (built jointly by the USSR, Hungary and Poland) and the Ramin TES, with a 1,260-megawatt capacity. The Soviet Union will be completing soon its obligation to build eight grain elevators with a combined capacity for 380,000 tons, mills with a capacity for 300 tons of flour daily, and the electrification of the Dzhulfa-Tabriz railroad. Equipment is being supplied for house building combines and training centers. The main long-term cooperation projects with Iran will include increasing the capacity of the Isfahan metallurgical plant to 4 million tons of steel per year, the construction of plants for ore mining equipment and castings, ingots and forgings in Kerman, the building of the Khodaaferin Hydropower Center, etc.

In Iraq, the An Nasiriya TES, with an 840,000-kwt capacity and three elevators were completed with Soviet help in 1981. Currently the Haditha Hydroengineering Center with a reservoir on the Euphrates River, a large petroleum storage depot in (New Kargh) and a 100-kilometer long petroleum pipeline between (Mishahda) and (Kargh) are under construction. Bulgarian and Polish organizations are participating in the last two projects. Drilling operations are under way in the Rumaila and Zubair oil fields. The construction of an important 65-kilometer long canal linking Tartar Lake with the Tigris River is nearing completion. Several other hydroengineering projects and elevators are under construction and so is an Intersputnik ground space communications station. A contract for cooperation in drilling operations in Western Qurna has been concluded for the development of an oil field with a capacity of some 30 million tons per year, which will increase the country's current petroleum extraction capacity by 15 percent.

The possibility of cooperating in the construction of a TES with a capacity of some 1,000 Mgw, a cement plant with a capacity of 1 million tons per year and petroleum and gas pipelines is under study. The Soviet organizations have already carried out a number of studies related to these projects. They include a program for the comprehensive development of Iraq's natural gas industry, a technical and economic plan for the development of irrigation and draining of 180,000 hectares in the (Kifl-Shifonia) area, a technical project for a water level raising dam on the Euphrates, in the Hindiya area, a general plan for the use of Iraq's ground water resources, and others.

In Turkey the Soviet Union is continuing to fulfill its obligations in the expansion of the Iskenderun Metallurgical Plant, which will increase its capacity from 1 to 2.2 million tons of steel per year (a medium structural section 700-mill has been supplied here from the GDR) and the expansion of the

Aliaga petroleum refinery from 5 to 10 million tons of crude oil per year. Equipment is being supplied for the expansion of the aluminum plant in Seidishehir from 200,000 to 260,000 tons of alumina and from 60,000 to 120,000 tons of aluminum per year. Plants are being built for hydrogen peroxide in Bandirma and sulfide and sodium bichromate in Mersin. A training center is under construction at the Iskenderun Metallurgical Plant. The joint construction of dams and water reservoirs along the Ahuryan (Arpachay) border river is nearing completion. The construction of the Orhaneli TES, which will run on lignite and will have a 200-megawatt generating capacity has been undertaken, and the Keles TES, with the same generating capacity is planned. They will supply power to the industrial enterprises in Turkey's western areas. Soviet organizations have completed projects for the construction of the Hasan Celebi ore concentration complex and blueprints for the construction of plants for high-grade steel, power transformers, turbines, generators and electric-power machinery, and steel zinc-plated pylons, most of which could become basic cooperation projects during the 12th Five-Year Plan.

In Syria, the construction of control dams with an 80-megawatt hydroelectric power plant was undertaken in 1981. Its purpose is to control the water runoff in the downstream part of the Euphrates Hydrojunction. The generating plant will be running at full capacity and provide additional quantities of electric power. The laying of a 220 kV 840-km long power cable is continuing. It will carry electricity from the Euphrates Hydrojunction to various parts of the country and to neighboring Arab countries. Assistance is being provided for the efficient use of the Al Asad reservoir for irrigation and development of 71,000 hectares of droughty land in the area of the Euphrates Hydrojunction. This will make it possible to increase the areas under irrigation by approximately 15 percent. A large dam on the North Khabur River and an irrigation system for 14,000 hectares are under construction. The fruitful cooperation in the petroleum industry, which started 20 years ago, is continuing. Petroleum, which accounts for some 70 percent of the total volume of Syrian exports, has become the main source of foreign exchange. The overall length of railroad tracks built, under construction or planned with Soviet cooperation totals 1,650 kilometers, more than 1,000 of which are already in use. Phosphates for export are hauled along the Palmyra-Mhin-Homs-(Akkara)-Tartus track; The Damascus-Homs and Homs-Aleppo railroads are used in international transit haulage of goods to neighboring countries. The Soviet Union is assisting in the expansion of the Latakia Maritime Port.

The construction of a twin-purpose 50-megawatt TES (to be increased to 125 megawatts) and a desalinization complex with an output of 28,000 tons of fresh water per 24 hours, to be raised to 42,000 tons in the future, are the main cooperation targets in the People's Democratic Republic of Yemen. Geophysical and petroleum surveys are under way. Extensive comprehensive projects are being carried out for the development of agriculture, including well drilling and installations. Hydroengineering projects are under construction, and assistance is being provided in the construction of a fishing port and a 300-bed hospital in Aden. A mechanized construction stone extraction and processing quarry, cement and lime plants and other projects will be built.

In 1980 an agreement was signed on giving Kampuchea priority economic and technical aid. This includes the rebuilding of most important national

economic projects based on grants and credits. Soviet organizations have done a great deal of work in this connection.

Equipment and materials were supplied for the ports of Kompong Som and Phnom Penh, and Soviet specialists were assigned to help in their operation, as a result of which port services and ship unloading operations have been organized. Materials and equipment were supplied for rebuilding roads and bridges, and supplying the country's cities and industrial centers with electric power. A state construction organization was set up and equipment for banks, fishing farms and other projects was procured. Reconstruction projects are under way at the Phnom Penh Higher Technical School, vocational-technical school and hospital. Equipment and materials are being shipped for replanting 10,000 hectares in hevea and 6,000 acres in cotton, the rebuilding of four interprovincial hospitals and sanitary-epidemiological stations and equipping 30 mobile medical detachments.

The possibility of providing aid in the restoration and construction of a number of other projects is being studied. This would include a chemical fertilizer plant and enterprises for the processing latex into rubber and developing hevea plantations on an area of up to 30,000 hectares (on a compensation basis), opening a stone quarry, building treatment systems for potable water systems in Phnom Penh and Kompong Som organizing a hydro-meteorological service and building a ground station for communications with the Intersputnik system.

The Gorazal TES in Bangladesh will be enlarged with two additional 210-mgw units. The station's output will account for about one-half of the entire electric power currently generated in the country.

The building of a steel smelting shop with two 130-ton convertors and an 800-rolling mill supplied by Czechoslovakia is being completed at the metallurgical plant in Karachi, with a 1.1 million tons of steel per year -- the largest construction project in Pakistan. The Cast Iron Complex was launched in 1981.

In the Yemen Arab Republic the largest cement plant in the country, in Bajil is being enlarged (from 50,000 to 250,000 tons of cement per year).

The Soviet Union is assisting other developing Asian countries as well.

The second section of the metallurgical plant in El Hodjar, Algeria, with a capacity for 1.8-2 million tons of steel per year, was completed in 1982. In 1981 the plant had already produced 80 percent of the steel, 100 percent of the cast iron, coke and hot rolled wire produced in the country. A wire making mill with a 540,000-ton annual capacity was delivered by the GDR to the project. The laying of one of the sections (421 km) of the 970-kilometer long Alrar-Hassi-R'Mel gas pipeline was undertaken in 1982. A contract for the laying of another section of the pipeline, 232-kilometers long, was signed. Dams are under construction and prospect drilling is under way. The organizations of both countries are discussing cooperation in the development of major projects such as the 630-megawatt "Jijel" TES, the laying of more than 500 kilometers of railroad tracks on the High Plateau, the construction of cement and glass plants and the delivery of a wide-panel

manufacturing plant for housing construction. Technical and economic specifications are being drafted for the building of a second metallurgical plant north of Algiers and a set of heavy machine-building plants. The plans call for the formulation of technical and economic specifications for the construction of plants for high-grade and special steels, two rolling mills and other projects.

In accordance with the Program for Economic and Technical Cooperation Between the USSR and Angola for 1981-1985 and Through 1990, cooperation will be increased in the power industry, agriculture, the petroleum and petroleum refining industries, geology and ore mining, transportation, fishing, geodesy and cartography, health care and communal economy and training of national cadres. The USSR will provide technical cooperation in linking the North-Center-South power systems by laying approximately 500 kilometers of power cables, the construction of the Capanda Hydroelectric Power Plant on the Cuanza River, with a generating capacity of about 450 megawatts, the formulation of recommendations on the efficient use of hydroelectric power resources and rural electrification.

During the first 2 years of the current 5-year period, Angola was assisted in the construction of oil depots in Malange and Porto Amboim, the construction and repair of fishing vessels, geological surveys, operation of extant power projects, irrigation, veterinary medicine and cattle vaccination, development of grain and cotton-growing state farms and training specialists in educational centers.

The extensive participation of Soviet organizations in Libya's industrialization program is based on a long-term plan. This applies particularly to the development of sectors such as the power industry, ferrous metallurgy, the petroleum, gas, petrochemical and chemical industries and the training of Libyan national cadres.

The Tagiura Nuclear Research Center was built in Libya. Assistance is being provided in laying a 424-kilometer 220-kV cable. The construction of the Marsa el Brega-Misurata (570 km) gas pipeline is nearing completion. Soviet drilling brigades have been successfully operating since 1979. A system for the development of a high-tension power grid through 1995 (for the establishment of a unified power system) and a general plan for the development of the country's natural gas industry through the year 2000 have been formulated and submitted to Libya. Agreement has been reached on the construction of the second section of the metallurgical complex in Misurata, with a 5-million ton capacity per year, complexes for the production of nitrogen fertilizers, magnesium and chlorine on the basis of the Marada deposits and enterprises for the production of protein on the basis of petroleum raw materials. Cooperation in petroleum refining will be developed further.

Extensive assistance will be given to Mozambique by the Soviet Union on the basis of the 1981-1990 Long-Term Program for Economic and Trade Cooperation in the development of cotton growing, including the organization of new state farms in Nampula Province, drilling for water for the cotton-growing state farms in the province, the construction of warehousing premises for the storage of cotton and drying and ginning shops at the existing cotton ginning

mills; developing the valley of the Limpopo River; coal strip mining by opening coal quarries; completing the first part of an enterprise for the production of farm implements in Beira; reconstruction and operation of existing concentration factories for the production of tantalum concentrate; the creation of a facility for the repair of fishing vessels, building four vocational technical schools and other projects.

An extensive program for economic and technical cooperation with Ethiopia is being implemented. The 150-megawatt Melka Vakana Hydroelectric Power Plant -- the largest power industry project in the country -- will be built in the 1980s. Extensive geological surveys are underway in the Adola area. The reconstruction of the Aseb petroleum refinery, built with Soviet assistance, is under way. Petroleum storage areas are being built in four cities and a network of grain and mixed-feed warehouses with a combined capacity for more than 200,000 tons is being developed. The construction of an earthen dam on the Alvera River and an irrigation system for the development of 10,000 hectares of land in the Baro-Akobo Valley will be a major undertaking. Five refrigerators with a 3,100-ton total capacity, six central tractor-repair workshops and a tractors plant will be built. The planning of the largest Ethiopian cement plant in Dire Dawa is nearing completion. It will have a production capacity for 600,000 tons of cement per year.

The construction of the first section of a metallurgical plant with a capacity for 1.3 million tons of steel per year is underway in Abeokuta, Nigeria. A small parts and wire extrusion mill will be commissioned in 1983 and deliveries of comprehensive equipment for all the shops of this project -- the largest in tropical Africa -- will be completed by the end of 1985. The machine tools for the plant will be supplied by the GDR and the medium-size items 900-mill will come from Czechoslovakia. The possibility is planned for the further gradual expansion of the plant's capacity to 2.6 million and, later, 5 million tons of steel per year.

The expansion of two very large cooperation projects is being completed in Egypt: a metallurgical plant in Helwan (from 0.9 to 1.5 million tons of steel per year) and an aluminum plant in Nag' Hammadi (from 100,000 to 166,000 tons of aluminum per year).

A milling combine is under construction in Tamatave, Madagascar, as is a 255-kilometer long highway.

The Kalana Gold Extraction Enterprise will be built in Mali, and the Selinge-Kalana (120 kilometers) power transmission cable was completed.

Soviet economic and technical assistance to Latin American countries will be developed in the future.

In Peru, the large Olmos hydroelectric power and irrigation complex will be built in the next few years. Some of the stock of the rivers flowing from the Andes to the Atlantic Ocean will be diverted to the Pacific side. The plan calls for the development of an irrigated area of 800,000 hectares and the construction of two hydroelectric power stations with a total capacity of 600,000 kilowatts. Soviet organizations have completed the blueprints for the

hydroelectric power parts of the project already approved by the Peruvian government.

In Argentina, Argentine specialists and Soviet organizations have developed a technical project for the first section of the Parana Medio hydroelectric complex which will include a power facility with a 3.1 million kilowatts generating capacity.

Documents on cooperation in the construction of the Ilha Grande 2.4 million kilowatts TES, an ethanol production plant and petroleum surveys were initialed with Brazil in 1981.

A contract for experimental drilling on Maracaibo Island with Soviet turbodrills, was signed with the Venezuelan state petroleum organization.

Nicaragua will be assisted with the construction of a hydroelectric power plant which will generate as much as 350 megawatts of power, two radio stations, five vocational training centers, a hospital in Managua, a ground space relay station for the Intersputnik system and a number of other projects.

The examples listed above hardly cover the entire extent of the cooperation between the USSR and the developing countries.

The Soviet Union currently has agreements for economic and technical cooperation with 65 developing countries in Asia, Africa and Latin America.

As was noted at the 26th CPSU Congress, cooperation with the developing countries will be continued in the future. Economic and technical cooperation with these countries for the implementation of national development programs will be correspondingly developed.

Particular attention will be paid to the intensification of multilateral cooperation with countries which have chosen a socialist way of development. "The Soviet Union," as Comrade N. A. Tikhonov, USSR Council of Ministers chairman, noted in his address at the 36th CEMA Session, "supports the initiative of concluding general agreements between CEMA and interested countries with a socialist orientation, which define the procedure and principles governing their relations and call for assisting these countries in the development of their national economies by the members of the council and steps for the gradual development of their participation in cooperation with the members of the socialist commonwealth."

All of this will make it possible to upgrade the efficiency of the cooperation between the USSR and the other CEMA members, on the one hand, and the developing countries, on the other. It will broaden its structure, extent and directions and make it more profitable for the participating countries.

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CSO: 1825/49

## TRADE WITH LDC'S

### SOVIET-INDIAN COOPERATION VIEWED

Moscow APN DAILY REVIEW in English 8 Aug 83 pp 1-3

[Article by V. Korovikov]

[Text] A new stage is now beginning in Indian-Soviet space cooperation. Two Indian pilots are successfully training for a space flight in Stellar Town, near Moscow. One of them will join an international space crew.

Over the past decade India's scientists have scored world-class achievements in a number of industries. Allocations for research are growing there each year; in fiscal 1981/1982 they reached almost 8 billion rupees. About a thousand research institutes currently function in the country. In number of research and engineering specialists India ranks third in the world after the USSR and the United States.

The considerable effort to develop national science and culture in independent India is yielding good results. In April 1975 the Indian satellite Aryabhata was launched from a Soviet cosmodrome, and in July 1980 a four-stage Indian rocket, the SLV-3, placed in orbit the 35-kilogram Rohini satellite from the launching pad on the Sriharikota island in the Bay of Bengal.

The country's achievements in carrying out its space program have very strikingly revealed the maturity of Indian science and technology and underscored the value of the joint work of the scientists of India and the Soviet Union.

Soviet-Indian scientific cooperation today encompasses the most diverse areas-- from outer space to nuclear fusion, from genetics to pharmacology. An important place is being allotted to scientific and technological cooperation in the Treaty of Peace, Friendship and Cooperation, signed on August 9, 1971.

India's leading institution coordinating research work in many fields, the Science and Technology Department, has firm links with the Academy of Sciences of the USSR and its institutes.

One of the leaders of the department, Dr. D.Dhar, who has recently visited the Soviet Union, speaking of expanding scientific ties between the two countries, primarily noted the great scientific effect, the savings of resources and time

and the birth of new ideas and solutions that this cooperation gives. The modern scope of research is such, he said, that not one country can work in isolation and do without an exchange of experience and information.

Great prospects for mutually beneficial joint work are opening in the extensive area of agricultural science. In India these studies are being conducted in a big way: the country has 22 specialised agricultural universities, over 30 central research institutes, and a host of experimental stations and laboratories. The expenditures on agricultural research hold first place in the budgetary allocations for science. The country owes much of its successes in raising the yielding capacity of wheat, rice, cotton and sugar cane to its scientists.

The field of activity for exchanges of experience, ideas and information between the specialists of India and the USSR is truly immense. Soviet and Indian plant breeders are already regularly sending each other the seeds of hundreds of new varieties. There is a considerable two-way flow of information on the ways and means of combating plant diseases and pests. It is being planned to expand joint studies in the biology and agrotechnics of wheat, rice, sorgho and the castor-oil plant. A broad program of cooperation in irrigation has been drawn up. Specialists in silk farming, the mechanisation of farm work and livestock farming are also significantly benefiting from combined efforts.

The friendly relations of the two states have opened great opportunities for another area of intimate cooperation--the social sciences. Soviet Indologists are conducting extensive studies--from archeology to the present-day problems of India in the economic and cultural fields. Their firm contacts with their Indian counterparts will help a deeper understanding and revealing of the course of the history, the development of the modern economy and the original culture of the peoples of India. A Soviet-Indian commission for cooperation in the social sciences has been set up for the planning and coordination of these ties.

A large exhibition "Soviet Science to the National Economy" was held in New Delhi early this year. The scope of scientific investigations in the Soviet Union was very convincingly showed at it. Dozens of stands were devoted to various joint Soviet-Indian research projects.

Scientific ties help most effectively, at a contemporary technological level, to build and run the dozens of enterprises set up and being set up in India with the assistance from the Soviet country.

(PRAVDA, August 8. Abridged.)

CSO: 1812/255

## TRADE WITH LDC'S

### BRIEFS

TECHNICAL ASSISTANCE TO AFGHANISTAN--Soviet technical assistance to Afghanistan in constructing processing plants for the food, flour and cereals industries is of great importance for providing town-people with foodstuffs. Soviet organizations participated in building the Kabul grain processing complex consisting of two mills, an elevator and a bakery, as well as an elevator in Pul-i-Khumri. In 1981 one more bakery that can produce 65 tons of bread, rolls and buns a day was put into operation in Kabul. Two mills each with an output of 60 tons of flour a day were commissioned last November and December in Pul-i-Khumri and Mazar-i-Sharif respectively, in the latter town a bakery producing 20 tons of bread, rolls and buns a day was also put into operation. [Text] [Moscow FOREIGN TRADE in English No 8, Aug 83 p 37] [COPYRIGHT: "Vneshnyaya trgovlya" 1983 English translation "Foreign Trade", 1983]

USSR-GHANA ECONOMIC AGREEMENT--In December 1982 the USSR and the Republic of Ghana signed an agreement in Accra on economic and technical cooperation. Under the agreement the Soviet Union is to render Ghana technical assistance in completing the construction and commissioning of a gold-cleaning factory in Tarkwa, a vocational training centre in Tema, a factory making reinforced concrete structures in Accra, and some other undertakings dealing with the prospecting for raw materials required for cement production. The USSR also helped up-date, with account of current needs, the design of a hydro-electric station in Bui which Soviet organizations prepared in 1964. [Text] [Moscow FOREIGN TRADE in English No 8, Aug 83 p 37] [COPYRIGHT: "Vneshnyaya trgovlya" 1983 English translation "Foreign Trade", 1983]

SOVIET-MOZAMBIQUE ECONOMIC MEETING--Last November, in Moscow, the second meeting was held of the Soviet-Mozambican Intergovernmental Commission on Economic and Technical Cooperation to discuss matters furthering cooperation between the two countries. The sides signed a protocol providing for the Soviet Union's assistance to Mozambique in mining and processing coal and rare metal ores, geological prospecting, cotton farming, agricultural equipment engineering, training national personnel and in other economic sectors. V. G. Morozov, First Deputy Chairman of the USSR State Committee for Foreign Economic Relations, and M. Machungo, minister for planning of the Republic of Mozambique signed the protocol. [Text] [Moscow FOREIGN TRADE in English No 8, Aug 83 p 37] [COPYRIGHT: "Vneshnyaya trgovlya" 1983 English translation "Foreign Trade", 1983]

ETHIOPIAN PURCHASE--The geological instruments factory in Tashkent has accepted an order from Ethiopia for geological instruments. The order is the 18th the geological instruments factory has accepted from foreign countries. [GF180528 Tashkent International Service in Uzbek 1700 GMT 10 Jul 83 GF]

AGREEMENT WITH KENYA--The Soviet Union and Kenya have signed a trade agreement in Nairobi. At the signing ceremony the Kenyan trade minister, John Okwanyo, expressed confidence that the agreement would help to further mutually beneficial economic ties between the two countries. As he had received the Soviet delegation, President Daniel Arap Moi called for greater trade between Kenya and the Soviet Union. [LD121104 Moscow in English to Africa 2000 GMT 11 Jul 83]

CSO: 1825/77

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