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LATIN AMERICA

THE GENERAL SITUATION

The revival of coffee exports, the rise in foreign investments and the economic aspects of political upheavals characterized the economy of Latin America in the recent past. Coffee exports, the area's major foreign exchange earner, picked up significantly in the third and fourth quarter of 1955 after having persistently lagged behind 1954 figures for the first seven months. Coffee shipments to the U.S. amounted to $ 861 million for the first 9 months, or $ 170 million below the same period of 1954 but since September U.S. coffee demand has increased at a very sharp rate due to stock depletions. However, for 1955 as a whole Latin American coffee sales to the U.S. will still be much lower, on a value basis, than in 1954. Thus, countries like BRAZIL, COLOMBIA and the CENTRAL AMERICAN Coffee states will continue to be short of the foreign exchange needed to finance their regular imports as well as their respective development projects. With current world supplies of coffee at a 15-year high (on top of the surplus carried over from last year) coffee prices are most likely to decline still further. However, an improvement of the situation could come if current efforts to create an international coffee stabilization pact meet with success.

The situation in Latin America's foreign investment sector is strikingly different from that prevailing in the coffee sector. The overall foreign investment climate has improved throughout 1955; a number of countries liberalized their foreign investment regulations or have liberalization proposals before their legislatures while none placed new obstacles in the way of such investments. The overthrowal of Gen. Peron in ARGENTINA and the election of Jascelino Kubitscheck in BRAZIL have added political power to the advocates of a free flow of capital since the new regimes in both these countries appear definitely committed to an enlightened over-all policy on foreign investment (with the notable exception of the oil sector).

A fairly recent development is the interest shown by Japanese investors in Latin America. Japanese capital has already made important investment inroads in the heavy equipment and textile field in MEXICO, BRAZIL, ARGENTINA and BOLIVIA and is currently negotiating for new projects in the steel, ore, shipbuilding and oil refining industries in BRAZIL, CHILE, ARGENTINA and BOLIVIA, respectively. A large Japanese oil concern - Teikoku Oil Co. - has just sent two representatives to Latin America to study investment possibilities in the oil industries of VENEZUELA, BRAZIL and BOLIVIA (see also p.11). The Japanese government is actively supporting such overseas ventures as a means of expanding the country's foreign trade.

Recent investments or investment proposals from other foreign sources were concentrated largely in the mining, heavy equipment and the motor vehicle sector. This last sector is increasing now particularly rapidly in BRAZIL where a number of European car and tractor manufacturers are about to establish or expand assembly plants which will considerably reduce the foreign exchange outlay necessary for motor vehicles. COLOMBIA which so far has no auto assembly plant may soon have nine if present plans of a number of U.S. and European manufacturers are given final approval. This would undoubtedly bring about a very sharp increase in Colombian motor vehicle sales. In Latin America's mining sector the biggest investment project currently under active consideration is a $ 200 million project for the development of southern PERU's vast copper deposits. Meanwhile, CHILE is negotiating with an American finance group for a $ 240 million multi-purpose industrial equipment loan for copper smelting, highway construction, electrification, etc. Both these projects call for large-scale purchases of oil-consuming equipment.

Road building in Latin America is also drawing an increasing amount of foreign capital, mostly from U.S. Government and from World Bank sources. The major road project at present is the Pan American Highway. Completion of this road from GUATEMALA's northern border to the PANAMA CANAL alone will cost an estimated $ 110 million of which two thirds is to be borne by the U.S. The impact of this project on the economy of the small Central American Republics is of major significance. $ 22 million of the total was expended in 1955 and another $ 40 million will be spent in the first half of 1956. Other CENTRAL AMERICAN highway projects under construction or soon to be started include a $ 40 million program in GUATEMALA to complete the Atlantic and Pacific coastal highways and a total of $ 60 million for projects in the other five republics. Further to the south, major road building programs are under way in PERU which has earmarked $ 25 million for new highway projects "of major importance to the national economy" (see W.B. Sept. 1955, p.13) while BRAZIL has presently a bill before Congress to spend $ 115 million on road paving projects in order to catch up with other Latin American countries most of which have in the past spent much more money on roads, on a per capita basis, than giant Brazil.

For the oil industry these projects will mean increased asphalt sales during the period of construction (in BRAZIL, for instance, the road paving program is dovetailed with the opening of the first big asphalt refinery at Cubatao), a greater emphasis on truck transportation when the roads are completed and, finally, better accessibility to exploration areas in GUATEMALA, PERU, etc.

Investment in Latin America's atomic energy sector is also of potential interest to the oil industry. The most significant recent development here is the announcement of the American & Foreign Power Co. that it will build three 10,000 kilowat atomic power plants in Latin America. These will be the first power stations of this type in any country south of the U.S. border. The total cost of the three plants which will serve as pilot projects for future atomic power plants is estimated at $ 25 million. One of the plants will probably be built in MEXICO, another in BRAZIL, while the location of the third is as yet undetermined. The interest of Latin American countries in developing atomic energy is shown by the fact that nearly every country is establishing an atomic energy commission of its own. Uranium and thorium prospecting is also taking on increased importance. Thus COLOMBIA, following the discovery of uranium in 8 provinces has now issued its first development concessions to private concerns while BRAZIL has started a complete study of its atomic fuel resources and the means of extracting them.

A more immediate aspect of atomic energy than its technical progress which is still embryonic is its psychological impact on Latin American fuel policy, especially oil. In COLOMBIA, for instance, the Minister of Mines has stated that the new law to encourage more private investment in the oil sector through increased depletion allowances is based on the philosophy that the rapid progress in the field of peaceful atomic energy makes it unwise to keep large untapped underground oil reserves for future development since their future value might well be a good deal less than their present value. A similar idea was expressed by a leading newspaper in GUATEMALA in commenting on the granting of the first oil concessions in that country. in BRAZIL the subject was recently touched upon by the head of the National Bank for Economic Development who urged a change in the law which keeps private capital from participating in the country's oil exploration. He declared that though petroleum would continue to be important as a "subordinate source of power........it seems ironic that Brazil should wait for an atomic world before she begins to produce petroleum". Regardless of whether there is any scientific or economic validity to this view, the tremendous world wide publicity given to all developments in atomic energy and the claims made in its name may well exercise a steadily growing pressure on oil-bearing countries, actual or potential, not to 'miss the bus' on whatever untapped oil wealth they may have.

LATIN AMERICAN OIL DEVELOPMENTS

MEXICO: The very heavy storms and floods which hit Mexico's oil center last September have caused a slight temporary setback to Pemex's ambitious oil expansion program. In the crude oil production sector the previously set goal of a 1955 production average of over 260,000 b/d has not been achieved due to the sharp decline in oil flow in the three months following the storm. By the end of November, production was still below 250,000 b/d compared with over 280,000 b/d just before the disaster. The average for 1955 is now estimated at around 245,000 b/d which is only 7% above the 1954 figure of 229,000 b/d instead of the previously expected 15-18% increase. Oil exports were also hampered by the storm which caused a 5-week shutdown of the country's major oil port of Tampico. It is estimated that this has cost Pemex $ 6 million in lost export revenues. The well-drilling target, on the other hand, was apparently not affected by the disaster. Pemex chief Bermudez reported late in December that the drilling program averaging one well a day had been maintained despite the adversities.

On the whole it appears that whatever damage was caused by the weather will have no more than a temporary effect on Pemex's expansion plans. The Tampico area is already undergoing a $ 40 million combined rehabilitation and expansion program which will give it a new and improved oil shipping port, will add a catalytic cracking unit to the Ciudad Madero refinery and improve facilities at two other local refineries. Pemex will spend another $ 40 million on refinery and pipeline projects in other areas during 1956 and 1957, including the building of a 2nd gas absorbtion plant to treat the natural gas from Tabasco state in the south which so far has never been commercially utilized. (The first gas absorbtion plant was recently opened at Reynosa across from the Texas border. It has a total capacity of 300 million cubic ft daily of which 1/3 will be exported to the U.S. and the rest will be used to supply industrial clients in northern Mexico which so far had to import most of their fuel from the U.S. Pemex estimates its annual income from the Reynosa plant at $ 10 million. However, with tentative projects to export additional gas to New Orleans and to build a pipeline to Monterrey this estimate might well be on the low side).

Important progress is also foreseen for the industry's drilling sector. The target for 1956 is almost two wells a day, or a record total of about 700 wells. Drilling will take place in several new areas including the West Coast of Lower California where after 25 years of exploration oil was encountered for the first time late in 1955, according to Pemex. Other states where new oil or gas fields will be developed are Chihuahua and Coahuila both of which border directly on Texas. Pemex is to be aided in its operations in this area by the U.S. drilling contractor E. W. Pauley. The extent to which past drilling operations have already changed the geographic pattern of importance of Mexico's oil deposits is seen by the fact that the Poza Rica area, the tradional main supply source which in 1951 still accounted for over 68% of total oil production, had dropped to less than 35% by the end of 1955, despite an increase in its output.

The total effect of all these activites will change Mexico in 1956 into a net oil exporter in both value and volume. In the first half of 1955 Mexico exported already $ 29.2 million worth of oil, compared to $ 15.7 million in the same period of 1954 (see also W.B. Sept. '55, pp. 14-15). The virtual cessation of oil imports (with the exception of fuel oil for West Coast areas which can not be run through the new trans isthmus pipeline) will save the Mexican economy an estimated $ 40 million in U.S. dollar expenditures. The main share of this went for gasoline imports which amounted in 1955 to 30,000 b/d. By 1957, when at least three refineries will have catalytic cracking units, the country may even be able to export some of its gasoline. Next to gasoline, the biggest import reduction is taking place in lubricants and paraffins due to the beginning of full operations at the Salamanca lube plant in 1956. In the past, Mexico spent about \$ 21 million a year on the imports of lubes and paraffins. In 1955, an estimated \$ 15 million of this amount was substituted from domestic sources and in 1956 such imports will cease altogether. Mexico's petro-chemical imports are likely to be reduced soon in view of the completion of an \$ 8 million chemical fertilizer plant in Vera Cruz. In the past, the country bought at least 100,000 tons of nitrogenous fertilizer from the U.S. at a cost of about \$ 10 million.

The end of oil imports will also mean that Pemex need no longer use its funds for price subsidizing purpose. Since the government-set retail prices for oil products in Mexico are generally below the import price - super gasoline, for instance, retails at 19.7¢ per gallon, incl. tax - Pemex suffers a loss on the sale of most foreign oil products. Last year the loss amounted to \$ 21 million. By switching to cheaper domestic supply sources this loss will be largely eliminated but the rising costs in all phases of production will probably necessitate higher oil retail prices even for Pemex's domestic products.

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ECUADOR: Anglo-Ecuadorian Oilfields whose output accounts for 85% of the country's total crude oil production (about 3.6 million barrels in 1955) has just signed a new agreement with the Ecuadorian Government which should greatly improve its position. Under the new contract which runs to 1987 (at which time the concern's other concession agreements will also lapse) the firm will be permitted to construct a new refinery by mid-1958 with a capacity sufficient to meet all anticipated Ecuadorian domestic oil requirements. Up to now the difference in the patterns of local refinery yields and domestic consumption - both of which amounted to about 2.2 million barrels in 1955 - has necessitated the annual import of about 20% of all oil product needs. With gasoline accounting for over half of the total domestic oil consumption, Anglo-Ecuadorian was forced to import over 250,000 barrels of gasoline under the existing contract and had to resell them at government-fixed prices which resulted in a net loss to the company. The government itself imports most of the heavier oil products.

Under the new agreement a price formula has been worked out which, in the words of the company's chairman, "takes into consideration all operating expenses and overheads, depreciation and a reasonable profit on the investment". The company is also granted permission to import crude production. This is important in view of the fact that the country's crude production is increasing at a somewhat slower rate than consumption. If both these rates of increase continue the country will be a net importer of oil by 1959 or 1960. A new geological survey, to be completed early this year, will help to determine whether the company's crude oil output can be increased at a more rapid rate.

The necessary funds for the new refinery will be largely provided out of very substantial tax savings resulting from the recent decision to move the residence of the firm from London to Ecuador. The move which has been approved by the British Treasury will take place in the near future.

Other news about Anglo-Ecuadorian concern the recent purchase of almost 70% of its stock in equal shares by the U.S. concern South American Gold & Platinum Co. and the British firm Lobitos Oil Fields which has a production of about 8,000 b/d in neighboring Peru. Ecuador's second oil producer, Pantepec's Manabi Exploration Co. is also getting ready to expand its operations and has just issued \$ 1.5 million in bonds for this purpose.

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GUATEMALA: Despite the fact that most oil companies consider Guatemala's new oil law not especially favorable, the country has been so swamped with concession applications that it requested a 2 months breather in December before processing any new applications. So far, 30 firms have requested 90 concessions, the bulk in the northern province of Peten. However, it will be a long time before the final boundaries of most of these concessions are fully established. With Peten's total area covering only 36,000 square kilometers (9.5 million acres) and concession requests reportedly totaling 80,000 square kilometers it is believed that at least six months will go by before the overlapping problems have been straightened out enough to justify actual exploration expenditures by the various firms. Once the companies get going they expect to spend $ 25 - 30 million on exploration and surface reconaissance over a two-year period.

Besides the problem of overlapping concessions, difficulties are also likely to arise from the fact that some of the concessions extend into British Honduras which borders on Peten and over which Guatemala has in the past occasionally claimed sovereignty. With the coming oil search in Peten this claim is now being revived and Guatemala's President Castillo Armas has just decided to ask the new Organization of Central American States to study its claim to British Honduras and has also sent an appeal to the U.N. to the same effect. It would seem that Guatemala will actually grant concessions extending into the British colony though they will presently not be enforceable. If oil in commercial quantities is encountered in the Peten district, the possession of British Honduras would be of added significance to Guatemala since Peten is a vast landlocked jungle area with no surface roads leading into it (although the first road contracts have just been let in anticipation of the explorations) and no accessibility from the outside except by air. Therefore, the transportation of any crude oil out of this area would present a most difficult and expensive problem, especially since Guatemala's only Caribbean Sea port, Puerto Barrios, is quite out of the way from Peten. British Honduras, on the other hand, has a good 70-mile road from the Peten border to its Caribbean Sea capital of Belize. Therefore, either truck or pipeline transportation from Peten to Belize would be the most economical way of getting the oil to a tanker port. However, Guatemala has already made it clear that it will not allow any of its oil to be shipped through the "occupied territory" of B. Honduras. If the country insists on this policy it may cost the U.S. oil companies in Guatemala a tidy sum.

In British Honduras itself, all oil exploration is in the hands of Gulf Oil which has started its first wildcat last fall near the Peten border.

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Other oil news from CENTRAL AMERICA come from PANAMA whose government is reportedly studying a plan to build a $ 40 million oil refinery and tanker dock at Colon in the U.S. Canal Zone. The project would be financed by a group of U.S. investors. In 1955, the Canal Zone consumed about 12-13,000 b/d and the Panamanian Republic about 5-6,000 b/d. U.S. investors are also still interested in a $ 3.5 million project to build a 4,000 b/d refinery in COSTA RICA (see W.B. Sept. '55, p.9). At present there is no oil refinery in any of the Central American states.

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LATIN AMERICAN COUNTRY BRIEFS:

ARGENTINA: The publication of the anxiously awaited economic report of Dr. Raul Prebisch, the new President's economic advisor, in November destroyed the last Peron-engendered illusion about the strength of the country's economy. In Prebish's view -

and very few people now would dispute him - General Peron's ten years of dictatorship have left Argentina in the worst mess it has ever been in its entire history.

Here are some salient points of Dr. Prebisch's economic diagnosis:

National income per capita in 1955 is barely 3.5% higher than a decade ago. The balance of payments shows a substantial deficit: at the end of 1955 it amounted to $ 186 million (Prebish has since revised this figure to $ 200 million). Total foreign liabilities at the end of 1955 amounted to $ 757 million (revised to $ 771 million). All but $ 75 million of the total comes due between 1956 and 1959. Against these commitments, foreign reserves amount to only $ 451 million.

At the end of the war the country's exchange reserves amounted to $ 1.68 billion. The decline since then is due to balance of payments deficits, to repatriations of foreign capital and also to the fact that reserves have been deprived of $ 150 million to meet the consequences of the suspension of overseas payments in 1949.

In the export field Argentina is suffering the consequences of an exchange and price policy that has discouraged agricultural production and has not encouraged the development of industrial exports. Total Argentine exports during the 5 years 1950-54 amounted in physical volume to only 64% of those of the 5 years immediately preceeding World War II.

The slowness with which the production of petroleum has increased relative to the growth of consumption has also contributed to the present balance of payments situation. Imports of oil and coal have come to form almost a fifth of the total value of imports during the last 5 years, compared to 10% in the last 5 years before World War II. To the growing dependence on foreign oil supplies should be added the shortage of electric energy which has become more serious from year to year.

In short, the State has neither made the investments needed to provide the country with the energy supplies required for its economic growth nor created favorable conditions for private enterprise to make such investments.

The foregoing descriptions are indications that the country has not used its resources wisely nor has it directed foreign credit to productive ends. A large portion of the gold and exchange reserves was in fact devoted to the repatriation of foreign capital already established in the country instead of its being used to acquire new capital assets. The value of such repatriation is $ 764 million.

Besides the mistaken investment policy, certain patterns of state intervention have been progressively applied and have bureaucratically perverted the running of the economic system. Inflation and the exchange permit system have created spurious sources of profit for large classes of employers that have taken away all incentive to costs. To this should be added the state expenditure which in 1954 has reached 22% of the gross national income.

Not all the various social groups have felt the wage-price inflation equally much, though. Industrial workers managed to increase their real per capita income by 47%. However, agricultural producers and extensive sectors of the middle class have suffered a corresponding decline in real income.

The following immediate measures are recommended:

1. Agricultural prices should be appreciably increased by an adjustment in the exchange rate. This would transfer to agriculture a part of the real income of the other sectors of the economy.

2. A free foreign exchange market should be established.

3. The production of petroleum and natural gas which was about 33.4 million barrels in 1955 might be increased by 1958-59 to about 63 million barrels. The present serious supply problem lies not so much in production as in distribution. It will therefore be necessary to build pipe lines in addition to other investments. Plans should also be drawn up for further explorations and new development wells. This would represent extraordinary investments above the requirements for present production, of some $ 200 million in imports and 3 billion pesos in local expenditure. However, an increase in domestic oil production would mean a saving of foreign exchange that might exceed $ 100 million annually.

4. It is not supposed that Argentina can make all the necessary investments from her own sources. If the country is to emerge rapidly from the present crisis, private loans and investments from abroad are needed. Otherwise Argentina must be content to continue indefinitely in its present precarious position. It must therefore establish conditions that are favorable to the advent of foreign capital but Argentina should refuse private arrangements that are onerous or incompatible with its national prestige.

In a subsequent report Prebish stated that minimum capital needs for the next three years would amount to $ 1.2 billion which would require long-term credit facilities from foreign suppliers or institutions. He recommended that first priority be given to purchase of railway equipment, second to electric generating plant, third and fourth to agricultural and industrial machinery and fifth to oil equipment and pipe lines.

The government has already carried out several of the recommenations of Dr. Prebisch. It has undertaken a drastic exchange reform which substituted 18 pesos to the dollar for the previous system of a theoretical basic rate of 5 pesos on which a wide range of preferential rates had been superimposed. The new official rate will apply only to the exports of primary produce and the imports of essential goods, including all fuels. All other foreign trade transactions are to be financed in the free market where the peso rate will fluctuate with the interplay of supply and demand. The government has also permitted the remittance abroad, at the free market rate, of all profits earned on foreign investments from June 1955 on. The previous exchange rate for such remittances had been 14 pesos to the dollar which was decidedly more favorable than the current free market rate. However, the previous regime had not permitted financial remittances of any size for a number of years.

Despite the strong emphasis on the need for foreign capital, the oil sector will continue to be barred to all such investments. Dr. Prebisch in his report did not suggest the possibility of foreign capital participation in the exploitation of Argentina's oil resources and President Aramburu reaffirmed his fate in the government oil agency Y.P.F. by stating recently that "even during the 10 years of weakness and difficulties the physical and spiritual qualities of Y.P.F. had it made an impregnable bastion of Argentina's economy." He also critizised the now defunct S.O. (Cal.) contract as "a danger which threatened possession of our own oil". He declared further that funds would be provided to Y.P.F. for the purpose of achieving a reasonable self-supply in oil and that the government would replenish these by the "ill-gotten" gains of officials and favorites of the deposed regime (including, apparently, also the Kaiser- Willy's concern which may now have to pay retroactively for any special treatment accorded it by Peron when he was trying to lure foreign business back to Argentina).

With oil imports for the first nine months of 1955 amounting to 5.42 million tons, or 20% above the same period of 1954, and total oil import costs for 1955 estimated at $ 190 million, the government is very pressed to increase the domestic oil flow and curb imports. Since it is the belief of Dr. Prebisch and YPF that a doubling of the country's annual crude production is mainly a question of transportation, first emphasis will probably be on pipelines, especially from the Campo Duran field, Salta Province, to San Lorenzo on the Parana river and also from Mendoza to San Lorenzo.

The foreign exchange for these projects may come partly from U.S. sources. Following recent conversations with Assistant Secretary of State Henry Holland, Prebish said he hoped the U.S. would supply Argentina with about $ 200 million of Export-Import Bank loans and other aid for the purchase of drilling equipment, oil production equipment, pipeline material, etc.

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BRAZIL: Jascelino Kubitscheck, Brazil's new president is an energetic man who has come into the presidency on the basis of his slogan of "power, transportation, nutrition' his good record as governor of the state of Minas Gerais plus the aid of half a million Communists whom he is now trying to shake off.

He is taking over a country whose main export commodity, coffee, had to face a world-wide uncontrolled oversupply situation last year and may well do so again this year. Kubitscheck must also face the problem of how to pay off the country's outstanding short & medium term foreign debt, totalling $ 1.5 billion, 71% of which comes due between 1956 and 1960. He must cope with a rapid inflation which has caused prices to rise by 30% in the last 11 months, must tackle the country's power problem which is the most serious obstacle to further industrialization and, finally, he must deal with an internal budget deficit that might reach 10 billion cruzeiros for 1956.

Sr. Kubitscheck seems not to be overwhelmed by this staggering list of problems. In fact, he has already advanced some ideas of how to solve them.: He will attempt to stabilize world prices and supply of coffee, he will try to get a consolidation loan for Brazil's foreign debt so that not too much comes due too soon and he will undertake a big campaign to entice more foreign capital to Brazil. He also hopes that by 1960 the extremely heavy drag of oil imports ($ 260 million in 1955) on the available foreign exchange can be substantially reduced. Other targets for 1960: an increase in coal production from 1 million to 2.5 million tons, an increase in hydro-electricity from 3 million to 5 million kw, the exportation of 10 million tons of iron ore against 1.6 million at present and the domestic production of 100,000 motor vehicles per year.

The new president's attitude towards private business is illustrated by the fact that even before his inauguration he undertook a trip to the U.S. and Western Europe for the specific purpose of "attracting foreign capital to Brazil." He also stated that his policy would be one of unrestricted support of private enterprise. Foreign capital has shown a very strong interest in Brazil already under the previous government, and in the first 9 months of 1955 brought over $ 26 million of new capital equipment to Brazil thus testifying to the view that despite its temporary difficulties Brazil is essentially a healthy country with a tremendous economic growth potential.

Despite the importance of foreign investments, Brazil's economy is still largely shaped by developments in the one sector of the economy which excludes foreign capital - oil. Virtually all of the new industrial projects will result directly in the consumption of more oil. In the future, oil demand may therefore increase by more than the 10%-12% registered annually in the last few years. For 1955, total oil consumption averaged 178,000 b/d. Less than 3% of this amount was covered by domestic crude production even though the latter doubled over 1954. In the first half of 1955, 17% of the country's total imports, by value, went for the purchase of crude oil and major refined products, compared to 13.5% during the same period of 1954. The increase would have been even greater had it not been for the switch from refined products to crude oil with the coming on stream of the new refineries in 1955. In the first half year, Brazil purchased 1.55 million tons of foreign crude compared to none in the same period of 1954.

The new refineries have now a capacity of about 120,000 b/d which is equivalent to 70% of the 1955 consumption. By 1960 they are scheduled to produce at least 175,000 b/d, according to President Kubitscheck's plan. At the same time domestic crude production is to rise from its present 6,600 b/d to 90,000 b/d. In the refinery sector the president's target is to be reached by expanding the capacity of the 60,000 b/d Cubatao refinery by 15,000 b/d and that of the Mataripe refinery from 5,000 b/d to 15,000 b/d by 1957 and to over 30,000 b/d by 1960. Mataripe will also get a lube oil plant large enough to fill most domestic needs (in the first half of 1955, 108,000 tons of lube oils were imported). Other refinery projects include the coming on stream of the 5,000 b/d Manaus refinery early next year and of a 3,500 b/d asphalt plant at Cubatao. The Capuava refinery which has recently received permission to double its capital may also be expanded.

In the crude oil sector the target for 1960 which would supply about one third of that year's domestic consumption is to be achieved by undertaking the biggest exploration push "any firm ever put into any country outside of the U.S. or Canada", according to Walter Link, chief geologist of Petrobras, the Government oil trust. The major effort will be in the Amazon basin where nine geophysical crews have been contracted with 2 U.S. and 1 German firm. The northeastern zone, between Maranhao and Rio do Norte will also be explored.

Other activities planned by Petrobras will include the enlargement of the tanker fleet by 180,000 tons by 1960 (capacity on Jan 1, 1955 was 233,000 tons) and the possible construction of dock facilities in the Santos Bay to accomodate large tankers. This last project would be financed through dollar facilities provided by the petroleum suppliers on a five-year basis. Petrobras will also popularize LPG as a substitute for wood and charcoal burning which is threatening to deplete the country's timber reserves.

The general financing of the various projects is supposedly assured by a resolution of the Brazilian foreign exchange office which gives Petrobras annually \$ 50-60 million in foreign currencies for research and development. Interestingly, Petrobras in its last annual report claims that in the matter of financing, above all, the Brazilian oil industry fares better under its state monopoly than it would under private international firms. For "in no part of the world do the big corporations invest such a sum in a phase that is merely one of research. It is not likely that an exception (to this) would be made in Brazil which has always remained outside the interests of the great trusts with regard to oil prospecting".

Is there any chance of a change in the Petrobras law? At present definitely not, though Petrobras certainly has its critics. The director of the National Bank for Economic Development, one of the country's key officials, last October critizised sharply the kind of Brazilian nationalism which feared foreign capital in the exploitation of petroleum. More recently, a large Sao Paulo newspaper questioned whether Petrobras with its total of about 23 rigs was really big enough to carry out an exploration program which should employ 40 rigs in the Amazon basin alone "to obtain the greatest satisfaction from the oil discovery there".

The new president has confined himself to stating that it was his duty to carry out the law in regards to Petrobras. He has, however, refrained from praising it or advocating its continuation. With his general emphasis on private capital it would seem quite possible that if Petrobras fails to achieve its set goals he may actively support an alternate solution to Brazil's oil problems. But it won't be in the near future.

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BOLIVIA: The new law permitting private oil exploration and exploitation in Bolivia is another important step towards substituting oil for tin as the country's major foreign exchange earner. Though Bolivia produces 20% of the world's tin the income from the export of this material has sharply declined since the expropriation of the large tin mines in 1952. This is due partly to a generally declining tin market (which, however, has strongly reversed itself in recent weeks) and partly to the fact that the high cost Bolivian mines can not compete successfully with tin producers in the Far East. As a result tin exports have to be heavily subsidized by the government. This in turn is one of the major causes for the country's skyrocketing inflation (living costs doubled in 1954 and rose by a further 60% during the first 10 months of 1955). At present only the U.S. Government's controversial tin smelter in Texas, designed especially to process Bolivian tin, keeps the country's tin market up while U.S. aid payments - $ 18 million in fiscal 1955 plus $ 5 million in Export-Import Bank loans - are the main support for the rest of the economy. In the long run the country's large untapped iron ore deposits may well become an important source of foreign exchange but exploration of this resource is still in a preliminary stage.

Bolivians look therefore to the combination of oil and foreign capital for their economic salvation. The new oil law which was drawn up with the aid of a U.S. legal expert - Wortham Davenport - seems quite favorable to foreign concerns. However, operating details are still not known. Furthermore, it has yet to be approved by the National Congress and though this will probably be the case early in 1956, the presidential election which is to take place next May could possibly drag a law of such vital importance into the arena of campaign politics, particularly since the past nationalizations of U.S. oil and mining property had general popular approval.

Available information indicates that the new law has a 27% depletion allowance and a 50/50 profit-split similar to that applying in Venezuela. Non-exclusive surface rights are granted from one to two year's, exploitation rights are given for 40 years and exploration rights from 4 to 8 years, depending on which of the three open zones they are applied for. The fourth zone where all of the country's current production of 10,000 b/d comes from is reserved exclusively for the government oil agency YPFB. However, YPFB may make contracts with private groups for developing its zone, provided it retains at least a 51% interest in any such combined venture. It is not clear what effect, if any, the new law will have on the concessions of Glenn McCarthy which are located in the reserved zone. All concession agreements carry with them the right to build refineries and pipelines (such rights can also be secured by firms holding no crude oil concessions) and/or use of the YPFB pipeline network in return for payment of a "rationally established" transport fee. Private concerns may be called on to supply a pro rata share of domestic oil requirements but only if YPFB can not meet all inland needs - now 5,000 b/d - from its own concessions. All oil exports and imports of equipment are to be free of duty.

Pending the issuance of further details no foreign concern has officially reacted to the new decree with the exception of the Japanese firm Teikoku Oil which has sent 2 experts to Bolivia to carry out a preliminary geological survey prior to establishing a joint Bolivian-Japanese venture. Teikoku is to provide the necessary technicians and the equipment if the deal goes through.

Meanwhile, YPFB is going ahead with its own plans to increase production and exports and expand its pipeline system. The seven rotary rigs drilling at present are about to be supplemented by four more from the U.S. in order to increase development drilling. Oil exports to a number of neighboring countries are increasing. Crude shipments via pipeline to Argentina are to be increased in January to 5,400 b/d from 1,900 b/d in previous months. They will be further increased when the present Argentinian rail tank transportation method is replaced by the projected pipeline from Salta to the San Lorenzo refinery. Shipments by railroad to the state of Matto Grosso in Brazil which started last August are now made at the rate of over 7,000 barrels of gasoline per month and will be increased periodically until they reach about 12,000 barrels monthly by next July. Kerosine shipments to Brazil are running at 1,300-1,400 barrels monthly. The f.o.b. tank-car price in Bolivia is 11¢ per gallon for the gasoline and 10.7¢ for the kerosine. For the first full year these imports should save Brazil about $ 3 million in dollar or sterling exchange. Bolivia has also signed a new economic agreement with Chile under which it will boost its oil shipments to that country.

An interesting project is also under active consideration by McCarthy who plans to build a 450-mile pipeline to the Paraguayan city of Concepcion where he would construct a 3,000 b/d refinery. This would also create an outlet for sales to Uruguay by way of the navigable Paraguay river. Uruguayan authorities seem to be interested in this possibility. The entire project which has the approval of the Paraguyan government hinges on finding the necessary funds, estimated at $ 10 million. In this connection, the recent U.S.-Paraguyan investment guarantee agreement may help the McCarthy group since it eliminates some of the investment risks.

YPFB's big pipeline project which would take its oil to the Chilean sea port of Arica has now received official Chilean approval in return for a Bolivian guarantee to give Chile preference in the sale of up to 3,000 b/d with an option to double this quantity; all payments are to be made in U.S. dollars.

In the refinery sector, the current major project is the addition of a lube oil plant to the Cochabamba refinery. Bolivia now consumes about 18,000 barrels of lubes per year most of which are imported from the U.S.

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THE MIDDLE EAST

THE GENERAL SITUATION

The Middle East continues to be the world's foremost trouble spot. The area's three primary conflicts - the Arab-Israeli war, the Soviet penetration and Britain's attempt to preserve some of its former power there - have simultaneously gathered momentum over the last few months, partly by feeding on each other, until today the whole area is seething with intertwined turmoil and agitation. The main beneficiary, as usual, is the Soviet Bloc.

Here are some of the Soviet Bloc's recent "achievements" in the Middle East:

1. It has become the major cotton purchaser of EGYPT while EGYPT's Western cotton exports - particularly to Britain - declined sharply. For this the blame is put publicly on U.S. cotton surplus policy. EGYPT has said that if Soviet cotton buyers had not jumped into the breach it would have suffered a major economic slump.

2. It has made serious and detailed offers to build EGYPT's High Aswan Dam on the Nile. These offers seem less advantagous for Egypt than the tentative U.S.-U.K.-World Bank offer. However, since EGYPT wishes to start work on the project, which it considers of the utmost importance for its economic welfare, by June or wait a full year, it is still possible that Soviet help, including a vast contingent of Soviet technicians, will be accepted.

3. It has signed a long list of trade agreements, some for the first time, with SYRIA, LEBANON, EGYPT, has offered economic aid to YEMEN, is bidding for the construction of an oil refinery in SYRIA and is reported to be negotiating with SAUDI ARABIA for the building of a railroad from Jiddah to Medina.

4. It has become the most outspoken ally of the Arab nations in the U.N., especially in regards to the Arab-Israel war. In addition, Russia's two top leaders have recently critizised the very existence of ISRAEL, a position which so far no other non-Arabic government has taken.

5. It has joined the Arab League in denouncing Britain's recent re-occupation of the BURAIMI OASIS, claimed by SAUDI ARABIA, and the British-backed action by the Sultan of MUSCAT and OMAN in ousting the pro-Saudi Arabian Imam of Oman for his separatist policies. The Soviet Union has even offered arms to SAUDI ARABIA to enable it to retake the BURAIMI OASIS.

6. It has definitely had its hand in the recent successful anti-U.S. and anti-British mass uprisings in JORDAN against the former government's tentative decision to join the Western-sponsored Bagdhad Pact.

7. It has sold weapons to EGYPT at a price reported to be 10 to 20% of what the Western nations would have had to charge for similar types of hardware.

All these activities have greatly increased the prestige of the Soviet Bloc in the Middle East, have identified the Soviet Bloc's interests with that of the Arab Bloc in the minds of millions of Arabs and have done much to undermine the prestige and reputation of the West in the area.

Meanwhile, the attempts to counteract the Baghdad Pact by creating a regional anti-Israel military organization as opposed to the Anti-Communist Middle East Treaty Organization (Baghdad Pact) are making progress. EGYPT, SYRIA, SAUDI ARABIA have now put all their military forces under a unified command headed by the Egyptian chief of staff and have signed mutual defense treaties. Negotiations to bring LEBANON also under the unified command are well advanced. The new organization is not only anti-Israel but is also becoming increasingly anti-Western. Attempts by the Baghdad Pact group to extend its influence in the Middle East by having JORDAN join it met with widely publizised failure. LEBANON also, has not accepted a British invitation to join the Economic Committee of the Baghdad Pact. IRAQ, the only Arab country belonging to the Pact, is now beginning to feel somewhat isolated. In consequence, it has publicly reaffirmed its anti-Israel stand and has stated that it would not hesitate to use weapons received under the Pact to help its Arab neighbors in case of renewed ISRAELI agression. Nevertheless, there seems to be some doubt among experienced Middle Eastern observers whether the Baghdad Pact is popular even in IRAQ or whether it is not just the personal policy of aging pro-British Premier Nuri El-Said, its chairman.

Oil plays, of course, a role in all this, though at the moment it is not in the center of the Middle Eastern struggle. However, it is, becoming of increasing significance in the current seesaw battle over JORDAN's allegiance. For JORDAN's economic viability is tied directly to outside financial aid. So far, all such aid has come from Britain which has just allocated it $ 35 million in military subsidies, grants and interest-free loans for 1956/57. However, EGYPT, SAUDI ARABIA and SYRIA have now offered to take over these financial commitments to free JORDAN of "the shackles of imperialism". If the offer is accepted, most of the money would come from SAUDI ARABIAN oil royalties which allegedly have also financed the recent JORDANIAN anti-Western uprisings. IRAQ also has made some financial ouvertures to JORDAN. However, since 70% of all IRAQUI oil royalties are specifically allocated to economic development projects IRAQ is at a disadvantage vis-a-vis SAUDI ARABIA which does little development work and whose King has a freer hand than the rulers of IRAQ in the utilization of oil royalties. According to a recent N.Y. Times dispatch from London, the British hope that since SAUDI ARABIA's oil royalties originate with a U.S. concern, the U.S.. Government can somehow use its influence to curb the anti-Western uses to which SAUDI ARABIA is now reportedly putting some its oil income. However, SAUDI ARABIA would undoubtedly reject any such step as an unwarranted interference with its affairs.

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MIDDLE EAST OIL DEVELOPMENTS:

MUSCAT & OMAN: The Trucial Coast border disputes are another instance where oil plays a part but is not at the center of the trouble. Following Britain's reoccupation of the Buraimi Oasis (see W.B. Sept. '55, pp. 2-3), a British-led native force reestablished the sovereignty of the Sultan of Muscat and Oman over the territory of Oman by occupying its tiny capital of Nazwa and ousting the dissident Imam of Oman whose claim to independence had been recognized by Saudi Arabia but who had been refused admission to the Arab League. This, however, was not the end of this miniature and bloodless desert war. Saudi Arabia protested the action violently, prepared to charge Britain with military agression in the U.N. and its King Saud declared that if the British do not leave Buraimi voluntarely "I would be the first go go to that region to wrest it back and I will not spare my life....." Saudi Arabia also warned all oil companies that it considered Buraimi its sovereign territory and that it would not recognize any concession granted there by any other government. The Arab League Political Committee also gave full support to Saudi Arabia in the Buraimi dispute (but not in the Oman independence dispute) and came out strongly against Britain's action.

On the diplomatic front the dispute has resulted in a refusal of King Saud to receive the new British ambassador in Jiddah who has now been waiting for over two months to present his credentials. At the same time, Soviet Union President Voroshilov has made a direct offer of "material and moral" help to King Saud while the U.S. State Department is frantically trying to get both sides to come to a compromise before the dispute reaches the U.N. officially.

One of the main reasons for the dispute is the inevitable clash of interest between Britain's attempt to fullfill its treaty obligations towards its Trucial Coast Protectorates (of which the Sultanate of Muscat & Oman is one) in order to prevent its prestige in the Middle East from hitting rock bottom and Saudi Arabia's lusty expansionist ambitions in this area.

Oil is also important because it is believed - but not proved - that the disputed area contains oil wealth. The fact that the Iraq Petroleum Co. (IPC) is about to spud a wildcat at Jebel Fahud in Oman, about 50 miles south of Nazwa, has added to Saudi Arabia's interest in the Oman dispute since an "independent" Oman would probably seek some form of protection from its Saudi Arabian neighbor and sponsor before long. Presently, the well closest to Buraimi is being drilled since January 1955 by IPC at Gezira in the Abu Dhabi sheikdom; it has already reached 11,000 ft without encountering oil. Even closer is IPC's Murban well, also in Abu Dhabi, which was abandonned for technical reasons in 1954 after traces of 42 API oil were encountered. Exploration is also going on in the off-shore area of Abu Dhabi and the adjacent sheikdom of Dubai where British Petroleum (B.P.) and the Compagnie Francaise des Petroles are currently searching for oil. In Doffar, the southernmost province of the Sultanante of Muscat & Oman, Cities Service and Richfield are currently drilling.

However, none of these wells lie in any territory claimed directly by Saudi Arabia. Nevertheless, the charge that the entire dispute boils down to a struggle for the possession of oil fields and is fought between British and American oil interests has been made not only by Moscow which has called "Britain's agression against Oman" further evidence of "the struggle between Britain and American over Arabian oil" and by Saudi Arabia which has declared "the reason for the new (British) colonialism can be expressed by only one word - oil" but also by less partial quarters. For instance, pro-Western Emile Bustani, Lebanon's richest and most influential businessman-politician and probably his country's next president has forwarded a settlement plan whereby Britain should recongize Saudi Arabian sovereignty over Buraimi in exchange for which Saudi Arabia would grant an exclusive oil concession over the area to an entirely British oil company on the usual 50/50 basis. British authorities have rejected such an approach as not germane to the real issue. Nevertheless, numerous newspapers both here and in Britain have adopted this interpretation of the dispute.

The oil conflict interpretation of the Buraimi and Oman issue seems to overlook two essential factors: (1) Standard Oil (N.J.) and Socony Mobil would in this case be on both sides of the fence since they own together 40% of Aramco as well as 23.75% of the "British" Iraq Petroleum Co. (2) Iraq Petroleu, though British-managed, can not really be called a British firm. British Petroleum controls only 23.75% of it, another 23.75% is controlled by British-Dutch owned Shell Oil while the remaining 52.5% are held by French and U.S. interests and by the Gulbenkian Estate of Portugal.

MIDDLE EAST COUNTRY BRIEFS:

SYRIA: With the ratification of the new IPC pipeline agreement Syria has ceased to be a "have-not" nation and has joined the group of Middle Eastern countries for whom oil is a major source of income. While Syria, and probably soon also Lebanon, will not receive the millions paid to the Middle East's big oil countries, it is slated to earn in the first year of the new agreement a total of at least $ 18.5 million, compared to less than $ 4 million on the basis of the agreement of 1931. In addition, it will receive a lump sum of nearly $ 25 million in settlement of all past claims against IPC (Syria has refused to accept any pipeline royalties during the three years of intermittent negotiations for the new contract).

The anticipated payment for 1956 is based on an estimated flow of 26 million tons of oil through the three IPC pipelines crossing Syria. The rate of payment is based on a 50:50 sharing of the theoretical profits made by transporting the oil over the given distance by pipeline instead of tanker. The agreed rates are 18.7¢ per ton per hundred pipeline miles plus 15.2¢ per ton of oil unloaded at IPC's Syrian pipeline terminal of Banias. In addition, port dues, security charges and other fees at Banias amount to about 12.8¢ per ton. Altogether, therefore, the 17-18 million tons of oil which will go from Iraq to Banias in 1956 will pay a rate of about 75¢ per ton; the eight million tons flowing through the 250 mile pipeline across Syria but terminating at Tripoli, Lebanon, will only pay about 47¢ per ton to Syria.

However, this is only the beginning of Syria's new oil wealth. It is almost certain to receive a similar type of contract from the Trans Arabian Pipeline Co. (Tapline) which crosses just over a 100 miles of Syrian territory before it enters Lebanon. At present about 15.5 million tons of oil flow through the Tapline which would give Syria an annual income of almost $ 3 million, on the basis of the IPC formula, compared to a present flat fee of $ 1.1 million. Furthermore, now that the pipeline problem has been settled, IPC will start transferring the two Kirkuk-Haifa pipelines - unused because of the Arab-Israel conflict - northward to Syria and Lebanon. Under present plans, the two lines whose combined capacity is 8 million tons annually will cross about 100 miles of Syrian territory before entering Lebanon where they will terminate at Sidon. In addition, IPC is about to lay a 75-mile pipeline with an annual capacity of nine million tons from the Syrian pipeline junction of Homs to Tripoli, Lebanon.

Thus, total IPC pipeline shipments from Kirkuk to the Mediterranean may well come to an annual rate of about 43 million tons, or about 860,000 b/d, by 1960 (in addition, Iraq shipped in 1955 an estimated 4.5 million tons of oil from its southern fields to the Persian Gulf port of Fao). Together with Tapline shipments this may mean a total annual pipeline income for Syria of $ 26-27 million. This would be equivalent to 14% of Syria's total imports in 1954 or more than 1/3 of its current annual budget.

The new treaty also includes an IPC guarantee to supply Syria with all crude for its planned first refinery (capacity 15,000 b/d). Syria is presently accepting bids for the refinery. The Soviet Union's bid, reported to be "extremely reasonable", is already in.

In view of the vast benefits which Syria can expect from the new IPC pipeline contract and the prospective new Tapline agreement, it is politicallly significant that very little public enthusiasm was expressed over the signing of the agreement. Syria's finance minister confined himself to the statement "I do not claim that we have attained all our demands but I can say that this agreement is what we achieved. Consequently, I neither praise nor condemn it". However, later the minister did admit that the agreement gave Syria "more than we imagined we would get". In the Syrian parliament the ratification vote was 56 in favor, 19 opposed and 66 abstaining or absent, showing that the overwhelming majority of the deputies considered it wiser not to be favorably associated with the contract. The reason for this is to be found at least partly in the vast popular feeling for phantastic royalty payments (up to $ 700 million per year), engendered by various demagogic elements whose real interest lay not in the welfare of Syria but the disruption of the operations of IPC and the harming of Iraq's economy.

However, now that the moderate elements have prevailed the benefits of the new agreement will accrue not only to Syria itself but also to LEBANON whose total incoming oil volume from Saudi Arabia and Iraq might amount to about 41 million tons annually when all present pipeline projects are completed. In addition, the agreement will help to raise IRAQ's royalty payments which amounted to $ 206.6 million in 1955 for a total export of 31.75 million tons of oil (an increase of 2.5 million tons over 1954). For 1956 royalty payments are estimated at $ 252 million on the basis of an early completion of the Homs-Tripoli line as well as increased output from the Basra fields. By 1960, royalty payments to Iraq might well be above $ 300 million.

Other oil developments from Syria include an official announcement from Damascus that recent geological studies in Gezira, north Syria, had proved the existence of oil in commercial quantities. A German oil expert, Herr von Shortt, who had been engaged by the Syrian government to report on the country's mineral resources claimed that besides Gezira, oil existed also in the coastal area of Lattakia. The Gezira area is currently under exploration by the U.S. drilling contractor J.W. Menhall (see also W.B. Sept. '55, p.4).

Syria's oil sector has recently also been affected by two developments across the border in Lebanon: (1) a strike of tank truck owners during November cut off oil imports from Lebanon's Sidon and Tripoli refineries until the Lebanese confiscated and borrowed 165 tank trucks to maintain their regular oil shipments to both Syria and Jordan; (2) a flood in northern Lebanon, late in December, put the 10,000 b/d Tripoli refinery out of commission for at least five weeks and caused an estimated damage of $ 2.5-3 million. The two events are likely to have an accelerating effect on Syria's and Jordan's national refinery projects.

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ISRAEL: The scheduled transfer of the Kirkuk-Haifa pipeline to Syria and Lebanon has no immediate economic effect on Israel but it does reduce the sphere of common interest between Israel and the Arab countries. Completion and activation of the never-used and still slightly unfinished pipeline would have been of importance not only to Israel but also to Iraq (which claims to have lost $ 240 million in oil royalties since 1948 due to the non-utilization of the line) and to Jordan in whose territory the major portion of the line lies. The potential economic benefits from the pipeline to all three countries was only recently put forth by British diplomats as one argument for a settlement of the Arab-Israel dispute. Of course, if and when the Arab economic sanctions against Israel cease, IPC may want to construct a new pipeline to Haifa to make use of the 80,000 b/d refinery owned jointly by Shell and B.P.

However, right now such a possibility is very remote. On the contrary, all Arab nations are taking steps towards eliminating any leackage of Arab oil to Israel. The Arab League Petroleum Committee met recently to discuss specifically the oil boycott problem. A memorandum to the meeting from the League's Central Office for the Boycott of Israel recommended the establishment of a licensing system on oil exports to prevent their reaching "enemy countries". The recommendation was endorsed and forwarded to the League member states together with proposals that all oil companies having relations with Israel be barred from new concessions and that all foreign companies operating in the Persian Gulf sheikdoms (which do not belong to the Arab League) be restrained from selling oil to Israel.

The League has denied any attempt to bar oil shipments from reaching Israel "from countries outside the Middle East." However, blacklisting of ships which supply Israel still takes place. Thus, it is reported that Egypt recently blacklisted the British tanker Volsella for having shipped an oil cargo from the Iranian port of Bandar Mashur to Haifa via the Cape of Good Hope. It has also been reported that Arab officials have recently requested Italy to call off a projected trade deal under which it would ship $ 1.5 million of oil to Israel. Presumably, the League's interest in this particular transaction is due to the fact that allmost all Italian oil products are made from Middle East crude oil. So far, no Arab League attempts have been reported to prevent Shell, Socony Mobil or Esso from selling Venezuelan crude oil to Israel.

A rapidly rising supplier who is likely to take away some trade from Venezuela is the Soviet Union which may this year supply one third of Israel's estimated 30,000 b/d, on the basis of a contract signed last November. However, the rising Soviet oil shipments seem to be in clear contradiction to the Communists' current policy of winning friends and influencing people in the Arabian Middle East. It is therefore not unreasonable to assume that the present high rate of Soviet oil deliveries to Israel is only of a temporary nature.

Meanwhile, Israel whose per capita oil consumption is among the the highest in the world, is frantically trying to find more oil in its own soil. The Heletz 1 well, discovered last fall, was put in production in November and is currently flowing at a daily rate of about 350 barrels. A 4-mile pipeline from the well to the nearest railroad station is about to be completed. From there it is about 100 miles by train to the Haifa refinery. According to a production engineer from Tulsa who has just been put in charge of drilling and production activities, the current flow of Heletz 1 can be increased. No production has yet begun from the upper level of the well's two pay zones. Meanwhile, Lapidoth Petroleum and Israel Oil Prospectors, the two co-discoverers of Heletz, have started on two wells to define their field and will also shortly spud two wildcats in a nearby area. Several geologists on location have expressed the view that the Heletz field might support a total of thirty to fifty wells. Government officials, somewhat optimistically, see a chance that two years from now about half of Israel's oil requirements might be supplied from the Heletz field, Gas from the new well which is now burned off will reportedly soon be used by a Haifa plant of Imperial Chemical Industries for the production of amonia.

According to a consulting geologist from the United Nations, many areas in Israel contain geological prospects for oil just as promising as Heletz. The consultant pointed out that the work done by the U.N. Technical Assistance Program since 1953 had greatly improved the chances of finding oil in Israel. At present, a total of five wells is being drilled in Israel, all in the northern and central Negev, and three sites are being prepared for drilling. Altogether, 54% of the country's land area is now covered by exploration licenses. Many of these were issued for a three-year period in June 1953 and will therefore expire by next June, unless they are renewed.

Meanwhile, Israel has purchased four new drilling rigs at a cost of \$ 2.5 million from the U.S. and may soon get additional rigs from West Germany, if found suitable. These latter would be obtained under the German-Israel reparations agreement under which Israel will also get about \$ 18 million worth of sterling oil this year and has recently received its first sea-going tanker (18,500 tons). The country is also planning to set up its first lube oil plant which will have a capacity of 200 b/d.

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OIL DEVELOPMENTS

BEHIND THE IRON CURTAIN

(Caution: While PIRING believes its sources of information on oil developments behind the Iron Curtain to be fully reliable, it has no way of checking such information and can therefore not vouch for its accuracy.)

THE SOVIET UNION: The Soviet Union's Sixth Five Year Plan (1956-1960) has just been announced. This by itself would be of some significance to the West since announcements of the new Plans have in the past always provided us with at least a glimpse of the Soviet Union's economic progress. But most of the important information was generally kept hidden behind obscure statistical percentage increases, usually related to an unknown base-year quantity. During the last year, however, the Iron Curtain of economic secrecy has been lifted somewhat and a fair amount of actual production achievements and goals have become known to the outside world.

Now for the first time in almost twenty years, the Soviet government has accompanied its Plan announcement with a release of the production targets for 1960 in actual figures plus percentages relating these figures to output in 1955. Thus, we now have a fairly comprehensive view of Soviet industrial production (with the exception of the military sector). Of course, there is no assurance that the figures issued are really correct. However, most U.S. and U.N. experts on the Soviet economy are quite willing to take them at face value. Their view is that Soviet industrial production achievements in 1955, as now revealed, are not out of line with what had been previously known about the USSR economy.

On the whole, the figures reveal a very rapid rate of growth in the sector of heavy industry which is to be further accelerated over the next five years. The various figures of heavy industrial output are in each case smaller than comparable U.S. figures but are in some cases coming rapidly closer to ours. Roughly, the Soviet Union's total industrial production in 1955 was equivalent to somewhat less than half the U.S. production. By 1960 it will be equivalent to about 2/3 of our 1955 production. Since U.S. industrial output increases by about 5-6% per year, this means that by 1960 both the U.S. and USSR will have raised their industrial output by about 1/3 above 1955 so that their relative positions will be about the same as now.

However, in the steel sector, for instance, Soviet output will rise by about 53% to 68.3 million tons while our steel production is scheduled to increase by only 20-25% and will reach 135-40 million tons annually by 1960. In the coal sector, the Soviet Union's 1955 output of nearly 400 million tons is already quite close to our 1955 figure of 450 million tons. However, presumably the Soviet Union's figure represents capacity production while our coal industry had considerable idle capacity last year.

In the consumer goods sector, the Soviet record is a good deal less impressive than in the heavy equipment and basic commodity field. The consumer goods quantities to be produced in 1960 will not give the 230 million Russians a higher standard of living than they have now. This curtailment of the consumer goods sector at the expense of heavy industry reflects the full continuation of the Stalin policy, briefly interrupted when Malenkov was Premier, of giving producers' goods, essential commodities and, presumably, military goods an absolute priority over consumer items.

The Soviet Union's oil sector fully reflects this policy. Oil production in 1960 is to amount to 135 million tons (2,600,000 b/d) which would be almost twice the 1955 output of 70 million tons (1,400,000 b/d). This would be equivalent to an average annual increase of over 18%. Between 1945 and 1954 Soviet oil production rose from 22 to 58 million tons. This was also equivalent to an average annual gain of approximately 18%, compared to a gain of 7.4% per year for the Free World in general and 3.7% for the U.S. during the same period. Most Western oil experts had previously been somewhat sceptical about the Soviet Union's ability to achieve its 1955 oil production target. But it seems that the very sharp pressure put on the oil industry by top ranking government officials has achieved the desired results (see W.B. August'55, pp.13/14). For the current year production will again rise by 12 million tons to a total of 82 million tons (1,640,000 b/d), according to the Soviet oil minister.

Will this rise in output give the Soviet Union a larger oil export potential? An indirect answer can be provided by examining the projected increases in the production of oil-using equipments. Motorcar production in the USSR is still relatively small. It amounted to 445,000 units in 1955 and will rise to 650,000 units by 1960. This is a much smaller percentage rise than that foreseen for the crude oil sector. Tractors will fare somewhat better; their output will double within the Plan period. Thermal electricity output will also almost double but it will be mostly coal-fired. The largest increase in oil-consumption is for diesel locomotives whose output will increase from 136 to 1,630 units per year. Oil for house and industrial heating is not too common in view of the traditional availability of sufficient coal;and the use of kerosine for lighting, though still large, is not likely to increase.

Thus, given the general de-emphasis on consumer goods expansion, it is not likely that the Soviet Union's per capita oil consumption in 1960 will be considerably more than it is now. Since the annual rate of population increase is only 1.5% it seems logical that the quantity of oil available for export will increase,providing no major change in the international political situation takes place. This view was also reflected in Marshall Bulganin's recent statement about trade with Latin America in which he mentioned oil specifically as one of the commodities which the USSR would be willing to sell abroad. Of course, the most important thing about Soviet exports of any kind is not the volume but the motivation which generally is political rather than economic.

A reflection of the USSR's oil plans is also furnished by the announced figures on oil equipment production which is scheduled to increase from 48,400 to 120,000 tons per year within the next five years. Here too, exports are likely to be stepped up somewhat and the recent Soviet agreement to sell 20 drilling rigs to India may well foreshadow other deals of this sort.

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ROMANIA: Romania, too, came up with a new Five Year Plan last month. Under it, the average annual increase in industrial production will be about 10%. Since oil is Romania's major industry a large part of the new Plan's official analysis is devoted to it. Here are some of the oil facts and figures contained in the Plan:

1. Crude oil production in 1955 was 10,575,000 tons (216,000 b/d). This was 600,000 tons in excess of the original 1955 target and 2 million tons more "than the highest annual production achieved under the bourgeois-landowner regime".

2. The target for 1960 is 280,400 b/d, or a 28% increase over 1955.

3. Oil reserves have grown more rapidly than production so that today "geological crude oil reserves are much larger than those established in 1950".

4. All crude oil production is being processed in Romania.

5. Natural (methane) gas production is at present 3.9 billion cubic meters, equivalent in calorific value to about 80,000 b/d of fuel oil. By 1960 it is to be increased 2.6 times to over 10 billion cubic meters.

6. A big synthetic rubber plant with an annual capacity of 50,000 tons is to be built. It will use "cracking gases produced by the oil industry". By 1960 the plant will have begun production at an annual rate of 10,000 tons of rubber. The petro-chemical industry will also increase its nitrogeneous fertilizer manufacture four to five times and will make greater use of methane gas as a raw material.

7. Oil drilling equipment production will be quadrupled. This will mean a sharply increased export potential since Romania was already an active oil equipment exporter in 1955.

8. The Soviet Union will sell its majority holdings in Sovrompetrol, the state oil trust, to the Romanian government" under the most favorable circumstances" (Soviet ownership of these holdings was acquired after World War II by outright confiscation - without compensation - of foreign oil properties in Romania).

What effect this last measure will have on Romanian oil exports is not yet known. Romania has, of course, a considerable surplus of oil. Since 1948 most of this surplus was taken to the Soviet Union under various war-damage compensation and trade agreements between the two countries. It will be interesting to see whether the official retirement of the Soviet Union from the Romanian oil industry will bring about a change in the direction of Romania's oil exports.

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SOVIET BLOC OIL EXPORTS

Sweden is reported to be currently negotiating for higher oil imports from the Soviet Union. Last year Sweden had contracted to buy 600,000 tons (12,000 b/d) of Soviet oil with an option to raise the quantity to 1 million tons.

Egypt has concluded a trade agreement with East Germany under which it will purchase, among other goods, a variety of oil refinery equipment.

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ANNEX

SUEZ CANAL PETROLEUM TRAFFIC

During the first 11 months of 1955 a total of 62,718 tons of oil (approximately 1,255,000 b/d) were shipped through the Suez Canal. This is an 8% increase over the same period of 1954. South-north shipments accounted for almost 97% of the total while the rapidly shrinking north-south shipments provided the balance.

The only increase in north-south shipments was again registered by Soviet Bloc shipments to Siberia, China, Egypt and, in November, to North Viet Nam. Soviet deliveries to Egypt accounted for all of the 131,000 tons of crude oil shipped north-south during the first 11 months. U.S. oil exports through the Canal amounted to almost 200,000 tons of which gasoline accounted for about 86%. The largest West European north-south oil shipper this year is Italy most of whose 302,000 tons went to Aden, Suez, East Africa and other Red Sea ports. Last year's major north-south supplier, Britain, is this year's smallest, due partly to Britain's increasing domestic need of fuel oil which in 1954 was its major oil export product to the area east of Suez.

Except for Egypt and the Communist Far East, the major recipient of oil shipments from Europe via the Suez Canal is now British Malaya. Over 75% of the 222,000 tons it received during the first 11 months of 1955 came from the Netherlands.

South-north traffic showed no major change. Products shipments continued to increase more rapidly than crude oil but still accounted for less than 7% of total south-north oil trade. The main refined product is now residual fuel oil which also showed the largest percentage increase. Among the oil producing countries, the smallest increase was shown by Kuwait. This is due largely to a 4% drop in Middle East oil purchases by Great Britain, Kuwait's major customer. Quatar was the only Middle East country showing an actual decrease in its oil shipments through the Canal, compared to 1954.

Outside the Middle East, the largest increase is shown by crude oil shipments from Indonesia and British Borneo. These accounted for 1.4 million tons of the 1.8 million tons total Far Eastern oil exports via the Suez Canal route. The bulk of the shipments went to the Netherlands.

The highest increase among the recipient countries of Middle and Far East oil shipments was registered by the U.S. whose oil imports via the Suez Canal rose by 37% over the first 11 months of 1954. The bulk of the shipments to the U.S. came from Kuwait. In Europe the major increase over last year was recorded by Germany.

SUEZ CANAL PETROLEUM TRAFFIC

January - November
1954 & 1955

NORTH - SOUTH TRAFFIC

I. Tanker Movements
(thousands of net registered tons)

	Jan. - Nov. 1954	Jan. - Nov. 1955	Rise or Decline in percentage 1954 - 1955
Loaded Tankers	3,491	1,156	-66.9
Empty Tankers	26,767	34,301	28.1
Total N-S Tanker Movements	30,258	35,457	17.2

II. Products & Crude Shipments
(thousands of metric tons)

	Jan. - Nov. 1954	Jan. - Nov. 1955	Rise or Decline in percentage 1954 - 1955
Gasoline	1,515	558	-63.2
Kerosene	1,017	463	-54.5
Gas/Diesel Oil	567	242	-57.3
Residual Fuel Oil	2,770	382	-86.2
Other Oil Products*	45	42	- 6.7
	5,914	1,687	-71.5
Crude Oil Shipments	----	131	

III. Countries of Origin
(thousands of metric tons)

	Jan. - Nov. 1954		Jan. - Nov. 1955		Rise or Decline in percentage 1954 - 1955
Great Britain	1,737		69		-96.0
France	958		152		-89.1
Italy	1,194		302		-74.7
Netherlands	427		248		-41.9
Total Western Europe		4,316		771	-82.1
U.S.	589		199		-66.2
Caribbean	569		80		-86.0
Total Western Hem.		1,158		279	
U.S.S.R. & Romania		337		747	121.7
Other Areas		103		21	-79.6
		5,914		1,818	-69.3

*Excluding Lubricating Oil shipments which amounted to 245,000 tons for the first eleven months of 1954 and 330,000 tons for the same period in 1955.

IV. Areas of Destination
(thousands of metric tons)

	Jan. - Nov. 1954		Jan. - Nov. 1955		Rise or Decline in percentage 1954 - 1955
India, Pakistan, Burma, Ceylon	1,730		180		-89.6
British Malaya	600		222		-63.0
Australia, New Zealand	545		111		-79.6
Total Far East		2,875		513	-82.2
Red Sea ports	889		576*		-35.2
Aden	1,474		123		-91.7
Persian Gulf	56		36		-35.7
Total Middle East		2,419		735	-69.6
East Africa		401		86	-78.6
USSR (Siberia), China		196		468**	138.8
Other Areas		23		16	-30.4
		5,914		1,818	-69.3

*of which 443,700 tons went to Egypt (Suez)
**includes 8,000 tons shipped to Viet Minh

SOUTH - NORTH TRAFFIC

I. Tanker Movements
(thousands of net registered tons)

	Jan. - Nov. 1954	Jan. - Nov. 1955	Rise or Decline in percentage 1954 - 1955
Loaded Tankers	28,661	33,432	16.6
Empty Tankers	877	392	- 55.3
Total S-N Tanker Movements	29,538	33,824	14.5

II. Crude Oil & Products Shipments
(thousands of metric tons)

	Jan. - Nov. 1954		Jan. - Nov. 1955		Rise or Decline in percentage 1954 - 1955
Crude Oil		50,150		56,686	13.0
Gasoline	333		588		76.6
Kerosene	194		405		108.8
Gas/Diesel Oil	573		1,010		76.3
Residual Fuel Oil	838		1,985		136.9
Other Oil Products	288		226		-21.5
Total Oil Products		2,226		4,214	89.3
		52,376		60,900	16.3

III. Countries of Origin
(thousands of metric tons)

	Jan. - Nov. 1954		Jan. - Nov. 1955		Rise or Decline in percentage 1954 - 1955
Kuwait*	38,071		39,172		2.9
Saudi Arabia	5,915		5,919		0.1
Iran	292		4,438		1419.9
Iraq (Fao)	2,583		3,615		40.0
Quatar	3,572		3,503		-1.9
Bahrein	851		1,704		100.2
Aden	25		633		2432.0
Total Persian Gulf		51,309		58,984	15.0
Egypt**		61		101	65.6
Indonesia, Malaya, Borneo	902		1,768		96.0
New Guinea	104		47		54.8
Total Far East		1,006		1,815	80.4
		52,376		60,900	16.3

*Including Kuwait Neutral Zone

**Mainly domestic transfer shipments from Red Sea to Mediterranean ports.

IV. Countries of Destination
(thousands of metric tons)

	Jan. - Nov. 1954		Jan. - Nov. 1955		Rise or Decline in percentage 1954 - 1955
Great Britain	19,042		18,860		-4.0
France	10,047		11,168		11.2
Netherlands	5,352		6,577		22.9
Italy	5,240		6,602		26.0
Belgium	1,595		1,837		15.5
Spain (incl. Canaries)	1,343		1,768		31.6
Sweden	1,283		1,719		34.0
Germany	850		1,194		40.5
Total, Major European Oil Importing Countries		44,752		49,625	10.9
U.S.		5,917		8,084	36.6
All Other Countries		1,707		3,091	81.1
		52,376		60,900	16.3