are serious, and at least one million tons of coking coal per year have to be imported. Turkey places considerable emphasis on developing its mining industry. But, notes Kilic, "we do not accept foreign companies in the exploration stage for our minerals. For extracting and making plants to produce minerals and mineral products, we welcome them"

Another bottleneck is electricity. Turkey is now generating 18.3 billion kilowatt hours annually; in addition, 300 million kilowatt hours are being imported from Bulgaria. In an effort to expand consumption to 95 billion kilowatt hours, eight thermoelectric and ten hydroelectric power plants are under construction. In 1977, construction of 33 units that are both hydroelectric and thermal will be begun.

The Turks are also interested in moving rapidly into nuclear energy. According to Kilic: "We started actively working for it in 1968, but we were blocked until 1975. Now we have practically finished all the preparations: the site is selected, the license is issued, an advisory firm has been hired, and, by the end of this year, we will put up for bid two of the elements, so that actual construction of our first nuclear pwoer plant will begin at the end of this year." This, asserts Kilic, is but the beginning of Turkey's nuclear efforts; by the end of the century, an additional ten nuclear power plants will be in operation. Kilic has also noted that uranium exploration in mineral-rich Turkey has been going well. "It looks as though we are going to have good results and be able to supply all our future nuclear power plants' requirements."

Which 5-Year Plan?

The Fight For Egypt's Economy

EGYPT

Egytian President Anwar Sadat has in front of him an ambitious 1976-80 Five Year Plan for using $12.9 billion in investments from the oil producing nations and Western capitalists to rejuvenate Egypt's stagnant industrial base and renew its capacity for development. The plan includes a projected $20 billion investment in heavy industries such as petrochemicals, steel, aluminium, and in fertilizers and textiles.

The Rockefeller banks and the International Monetary Fund, however, have exerted constant pressure on Sadat since he came to power to squeeze the economy dry in order to maintain Egypt's debt payments. This high-powered campaign to collect Egypt's $17-20 billion debt has included personal visits from David Rockefeller, Sadat's official economic adviser.

On the other hand, Egypt has a strong Nasserite faction in the military and in the state bureaucracy that is committed to the kind of industrial progress and development initiated under Nasser's rule. This pro-growth faction is not limited to Egypt. A number of industrial companies are anxious to invest in Egypt and have stressed the importance of increasing the consumer market within Egypt.

Although Sadat's capitulation to the New York banks ground Egypt's development programs to a halt, and disabled the state sector industries, Sadat has not devalued the Egyptian currency 50 percent as demanded; he has not reduced or canceled food subsidies; he has not instituted a rigid system of price controls — all part of the IMF version of the Five Year Plan.

For Egypt's New York creditors, the 1976-80 Five Year Plan is viewed simply as an instrument to extract Arab oil dollars and the investments of Western industrialists. To the Chase bankers, "development" is seen only in terms of "Hong Kong"-local industries utilizing cheap labor, set up strictly for exports whose earnings would funnel directly into debt payments. To this end, Chase and other banks organized the U.S.-Egyptian Business Council, which along with the U.S. Agency for International Development set up an Investment Stimulation program to convince Western industrialists to invest in Egypt. The Business Council's December 1976 Report on Foreign Investment in Egypt informed potential investors that the Egyptian investment law (Law 43, "The Open Door") requires that all items produced must be exported, and stipulated that Egypt can't afford "import substitution" — domestic consumption of the goods produced.

The Egypt That Nasser Built

In 1967, Egypt was a more industrialized nation than it is today. Nasser's 1960-65 Five Year Plan, the model for the plan Sadat is now publicizing, called for a total expenditure of 1,697 million Egyptian pounds, with approximately one-third allocated to industrial and electrical development. As the accompanying table shows, the Five Year Plan was astoundingly successful, with production doubling and in some cases even tripling in a short time, reaching a peak around 1970. During this period, with Soviet aid, Egypt developed the most advanced infrastructure in the Arab community, the 1970 completion of the Aswan Dam for example), with a concomitant rapid development of its working class. The peasantry also began using fertilizers and machinery to increase agricultural production.

The 1967 Six Day War brought to a halt the plans of the Nasser government to continue a rapid growth economy, and by the time Sadat became President in late 1970, the idea of a Five Year comprehensive development plan was all but buried in the sand. Although much of the war costs were assumed by the Saudis and the Algerians, the war wiped out the most productive Egyptian oil fields, two old but still functioning refineries, and a vast tourist income. The tourist losses amounted to about $30 million a month, or half of Egypt's foreign currency earnings.

The U.S. put heavy pressure on Egypt after the war, calling in debts. Inflation rates hit 9 to 14 percent resulting in a collapse of investments. The wage levels of both industrial and manufacturing workers fell approximately 8-10 percent in the same period, never to recover.

Sadat's Destroyer Role

Sadat's political policies were weighted heavily toward maintaining the debt payments at the expense of infrastructure and productive capacity. By 1973, Sadat had reduced the foreign debt to a mere $150 million from its 1969 figure of $3,6 billion. At the same time, the movement of both raw materials and finished products ceased — and essentially no raw matérials were imported for Egyptian industry.

Even more devastating to the economy, Sadat weakened and then abolished the centrally coordinated state-run General Organizations, for which he was rewarded with a large number of long-term loans. Essentially Sadat's regulations made the heads of state-run companies — basically heavy industries, petrochemicals, transport — responsible for planning on the *local* level. Law 64 and subsequent laws removed from the decision-making process the layer of trained engineers, economists and planners that had been part of the Nasser bureaucracy and opened up Egypt for speculative looting instead of planned investment. Sadat's rationale for this crippling legislation was more "private investment," and he called his policy the "Open Door."

In destroying the state sector's political and economic power, Sadat ensured economic chaos, fragmenting the planning process that had followed the Soviet model, and leaving decision making in the hands of less (or un-) experienced persons. Ironically, the New York banks are now attacking the remaining Nasserite bureaucracy on the basis of the chaotic muddle legislated for them by Sadat.

Sadat's Egypt, as a result of his policies, is in a state of collapse. Visitors report that the gains made after the postwar period have visibly eroded: the transit system (bus and rail), health care, the communications system no longer function; the housing shortage is so acute that people are sleeping on rooftops and on tombstones in graveyards. The new era of industrial development conceived of by Nasser and made possible by the Aswan Dam is falling apart because Sadat has cut back on necessary capital imports.

Overall, industry is running at most at 50 to 60 percent capacity — a dollar loss calculated at $600 million back in 1973. By 1975, the industrial share of the GNP has dropped to 20 percent, the level of the early 1960s.

To compound the problem, Sadat's anti-Soviet policies have cost Egypt billions in hard currency outlays for raw materials and arms purchases made from the West. State companies, in particular, have had to scrounge for funds, and replacement parts for Soviet-built machinery. (About 137 industrial companies rely on Soviet technology.)

The Nixon Faction

While the Rockefeller financial interests maneuvered to turn Egypt into the Hong Kong of the Mideast, other U.S. industrial factions were working toward investments in a development program along the lines Nasser had laid out. In June 1974, U.S. President Richard Nixon issued a joint statement with President Sadat on cooperation between the U.S. and Egypt for future developments at an estimated value of $2 billion. The statement said that "American technology and capital combined with Egypt's absorptive capacity, skilled manpower and productive investment opportunities "would strengthen the Egyptian economy. The joint statement also proposed cooperation in the field of nuclear energy under agreed safeguards that would "make it possible for Egypt by the early 1980s to generate substantial additional quantities of electrical power to support its rapidly growing development needs."

The Western industrialists who backed this Nixon overture for development are the faction now fighting to push through an operational Five Year Plan based on development. Despite the chaotic situation of Egypt's economy, the specific firms have been able to work out investment deals that do not follow the Rockefeller ban on import substitution or the IMF conditions for the exchange rate. Goodyear and the Union Carbide, for example, won out over the banks on the question of import substitution (essentially this means that the goods produced by these firms cannot be sold domestically in Egypt.

The Union Carbide project is a joint U.S.-Egyptian venture, another arrangement that the IMF has tried to outlaw. Other companies, like Michelin, have compromised and agreed to make 50 to 60 percent of their products export oriented with the rest for the domestic market.

Despite the laws governing foreign investment that Sadat instituted, the Egyptian pro-development forces were able recently to battle through arrangements for 60 foreign business ventures, many of them joint ventures. The Egyptian official responsible for this success is Dr. Abdel Meguid, the head of the General Authority for Foreign Investment and Free Zones. Meguid was emphatic regarding the nature of these business deals. "They will produce machinery destined for the domestic market in Egypt," he said.

Domestic Consumption Key

The Sadat-Chase "Open Door" policy required investors to export all they produced in order to pay all their foreign exchange needs for materials, capital goods, etc. Furthermore it set up currency exchange regulations that if followed by the investors would actually force a 50 percent currency reduction within Egypt.

Alternatively, to get the Five Year Plan off the ground, Egypt's desperate foreign exchange situation (there is a massive trade deficit, largely because of the collapse of agriculture under Sadat), means that foreign investors have to bring in their own capital goods and materials to set up their plants. Even if they sell their products in Egypt, these capital goods for the first year and subsequent years have to be paid for out of the earnings the plant generates. The only way this situation will be viable in terms of Egypt's economic growth and the growth of the investing industries is if, as proposed in the Five Year Plan, the Egyptian government allocates the funds — via Arab petrodollar and other loans (reportedly

Egypt: Production Tables Of Main Industrial Sectors

Units: (Tons - Thousands)

Products	1957	1962	1963	1965	1966	1967	1968	1969
Iron and Steel	148.2	409.9	397.9	378.3	400.9	450.7	474.	487.
Iron Bars for Wires	99.0	189.2	196.9	162.2	176.2	176.3	202.7	212.8
Aluminum Sheets-Tons		94.	20.	289.	434.	323.	422.	570.
Fertilizers	425.7	779.4	754.4	906.	935.3	882.7	918.2	805.
Cement						1,929.		3,614.
Sulphuric Acid	87.2	94.4	113.0	194.3	212.9	228.8	260.5	29.1
Paper and Cardboard	38.5	88.	94.9	106.0	110.3	91.8	115.9	122.0
Cotton Yarn	8.6	121.0	122.0	138.8	142.5	158.5	157.4	162.5
Cotton Textiles	56.6	78.7	80.1	88.9	97.2	92.7	102.3	106.0
Refined Sugar	249.7	332.6	355.7	400.3	357.5	365.8	379.6	487.3
Iron Ore	245.1	460.9	489.0	507.0	440.1	422.8	447.2	460.3
Tyres - Thousands						26.1	27.7	32.2
Motor Vehicles						41.	158.	167.

Source: Egyptian Industrial Quarterly Bulletin.

Egypt: Investments In Various Sectors And Activities

(Current Prices - Millions Egyptian Pounds)

Total Economy	1959-60	1960-61	1961-62	1963-64	1964-65	1965-66		1971-72 Projected	Deflated Prices
Argiculture, Irrig. Effluent High Dam	29.9	38.2	51.9	101.1	89.0	82.3	68.5	57	40.7
Industry, Mining, Petroleum	49.3	67.8	50.3	105.4	99.6	94.0	77.0	122	87.1
Electricity	6.2	5.6	6.3	35.6	53.2	61.1	50.9	20	14.3
Construction				4.6	5.2	6.8	1.2		
Residential Housing	31.1	119.1	37.8	37.4	30.5	47.5	39.5	21	15.0
Public Utilities	7.5	7.7	10.2	8.2	11.2	12.4	10.3		
Transport, Suez	35.8	74.8	71.2	45.1	49.3	53.1	44.2	15	10.1
Insurance on Treasury Budget									
Other Services	12.0	18.4	18.4	27.6	21.7	19.2	16.	15	9.7
Grand Total	171.4	225.6	251.1	369.9	360.0	376.4	313.3	350	250.

Source: Egyptian Industrial Quarterly Bulletin. Egyptian Central Bank Reports.

PRODUCTS	1970	1971	1972	1973	1974	1975
Iron and Steel	434.	433.	594.	566.	555.	
Iron Bars for Wires	212.8					
Aluminum Sheets-Tons	668.					
Fertilizers	835.	909.	859.	676.	831.	
Cement	3,656.	3,924.	3,822.	3,617.	3,265.	3,600.
Sulphuric Acid	29.8	30.	28.	20.	31.	20.
Paper and Cardboard	124.9	144.	152.	149.	131.	
Cotton Yarn	164.5	171.	179.	183.	169.	180.
Cotton Textiles	110.4	114.	116.	118.	120.	114.
Refined Sugar	546.8	675.	604.	634.	577.	660.
Iron Ore	451.	473.	427.	656.	673.	520.
Tyres - Thousands	35.8	33.4	40.0	32.6	30.3	38.4
Motor Vehicles	333.	500.	404.	421.	748.	964.

Total Economy	1973	Deflated Prices	1974	Deflated Prices	1975 Projected	Deflated Prices	1976 Projected	Deflated Prices	1977 Planned
Argiculture, Irrig. Effluent High Dam	56	50.4	52	42.6	90	67.2	46	30.7	148
Industry, Mining, Petroleum	148	133.2	230	189.	256	191.	138	92.	520
Electricity	30	27.	30	24.6	28	20.9	36	24.	100
Construction	5	4.5	10	8.2	}58*	43.3	}122*	81.3	230
Residential Housing	20	18.	36	29.5					
Public Utilities	23	20.7	29	23.8					
Transport, Suez	116	104.4	183	150.	198	148	110	73	400
Insurance on Treasury Budget					25	18.7	751	501	
Other Services					46	34.3	32	21.3	
GRAND TOTAL	424	38.2	613	503	757	565	1,268	845	1,598

*Construction and Housing Combined

the Gulf Organization for the Development of Egypt has already put up $1.5 billion toward this) — to get the industries started. To make this possible Egypt must declare a debt moratorium.

The battle lines couldn't be drawn more sharply; thus the precariousness of Sadat's position as he tries to placate the development forces by waving his Five Year Plan — while he is still perched in David Rockefeller's back pocket.

A Review Of The Industrial Situation

Crude Oil and Gas

Foreign companies will spend $422.2 million for exploration in 1977 compared to $115.3 million in 1976. Phillips Petroleum and French and Italian firms are planning the first phase of an Egyptian petrochemical complex at Sidi Dreir near Alexandria. Union Carbide had proposed a polythylene plant for the complex, but this idea has been shelved.

Iron and Steel

As late as 1972 Egypt was the third largest pig iron producer in the Middle East after Turkey and Iran, reaching an output of 555,000 tons in 1974. Egypt was also the second largest crude steel producer after Turkey, with an output of 290,000 tons in 1973.

Today, the only fully integrated plant in Africa and the Mideast, the Helwan Industrial Complex in Helwan, is producing at 50 percent capacity. If the Soviets had remained in Egypt, the plant would have been producing more than 78 percent of the steel Egypt needs. Now Egypt exports only simple reinforcing steel bars; (400,000 tons were produced in 1976) and it is planned to increase this to 1.2 million by 1980.

A second integrated plant with a 3 million ton output is being talked of for the northern Mediterranean coast. This plant would use natural gas for sponge iron reduction instead of using fuel-intensive blast furnaces.

Two projects for sponge iron production are under study, one for Helwan of 800,000 tons a year and one for Alexandria with a 1.6 million ton capacity. The latter would be a joint venture with Japan, West Germany and Brazil. It was initially envisioned that the Alexandria plant could be part of a steel mill complex, planned in 1975 to use Soviet loan money.

Aluminum

The Nag Hammadi works in the Nile Valley near Qina are Soviet-built and a first in the Middle East. The plant which completed its first stage in 1976 and has a capacity of 33,000 tons, operates on bauxite and alumina imported from India. When the plant is completed, its capacity will be 100,000 tons using six electrolysis units. One-quarter of the output will be for domestic use and the rest for export, largely to the Soviet Union for repayment. Britain has signed a contract to receive 10,000 tons.

This plant is extremely modern using advanced technology and could be easily retooled for aerospace production. Along with the Helwan complex, it is the center of any potential development plans for increased industrialization.

Fertilizers

Before the 1967 War, Egypt had two plants producing nitrogenous fertilizers in the Suez area. Both plants were destroyed causing importation at market prices and a disastrous reduction in Egypt's use of fertilizer. In 1974 Egypt produced only 831,000 tons compared to 1,055,000 tons in 1966. Egypt now uses 1.6 million metric tons of fertilizer of an optimum of 3.0 million metric tons. There are three functioning fertilizer plants now with more planned. The largest plant is in the Talkha complex, where Talkha I produces 380,000 tons a year of nitrogenous fertilizer. Talkha II is being built by the Kuwaiti Fund for Development and a much needed Urea plant is planned.

The Kima fertilizer plant at Aswan has a capacity output of 380,000 tons, its 1973 output was down to a mere 100,000 tons because the plant had no capital for necessary repairs. When improvements were made in 1975, production went up to 300,000 tons that year.

Another plant is being built at Abukir to be fueled from the Abukir gas fields, that will produce 520,000 tons of Urea fertilizer a day by 1980. Another massive plant is planned for Alexandria to be linked to the SUMED pipeline, with a planned output of 12 million tons a year. This plant could make Egypt an exporter.

A phosphorous processing plant is planned at the Qina complex in the Eastern Desert where fresh reserves are said to be 1 billion tons. Egypt does produce a large quantity of super-phosphate for local consumption, and a joint venture project with Romania is on the books which would produce triple-phosphate at a capacity of 369,000 tons a year.

Textiles

The industry is in a state of collapse. Most of the output comes from two large plants that are closed four months of the year because there are no replacement parts. There are about two dozen fully mechanized mills, but much of the weaving is still done on hand looms. Located in Alexandria and Cairo, the industry accounts for one-third of all public sector production and employs half the public sector labor force, some 570,000 people.

The IMF is heavily encouraging the textile industry on the labor-intensive Hong Kong model. Although this sector was the showpiece of the 1950s, producing enough yarn and cloth for local consumption in addition to being an export money earner, it is the industry most hit by the triage of spare parts. It has also been badly hit by the reduction in locally grown cotton.

Sadat's plan is to put this traditionally public sector back on its feet by offering shares to private investors and returning many factories to their original owners before nationalization.

Light Industry

There are many reports and plans circulating for small, labor-intensive manufacturing industries like shoe factories, simple chemical factories and powdered milk factories, most of which are to be directed towards the free zones. Honda is considering assembly plants for export and Fiat is retooling its plant for the new model Fiat 132. The Nasr Automotive Company, which produces the Fiat under licence, dominates car production in Egypt and supplies 40 percent of the local market. There are plans to increase production from 5,000 per year to 25,000 per year.