

Beginning in 1975, Iraq embarked on an aggressive bid to win its Arab neighbors over to an ambitious region-wide development perspective in which the developing states would coordinate their development strategies in order to overcome costly duplication of projects and maximize the growth potential of the entire region. Iraq forcefully argued that without such cooperation between Arab states, the Arab world would probably miss its opportunity for successful industrialization which its petrodollar income has offered.

Iraqi president Saddam Hussein declared earlier this year that if the nations of the region could agree on a unified development strategy, the Arab world would become an economic superpower by the year 2000. Shortly after taking power in mid-1979, Hussein stated that only through an economic buildup would the Arab world become powerful enough to challenge Israel and impose a just settlement of the Arab-Israeli conflict. He warned then and many times later that for this very reason, the Israeli government's prime minister Menachem Begin is committed to undermining Iraq's economic development, which has become the keystone to the industrialization of the entire Arab world.

In July of this year, Iraq won its first victory in its effort to forge a regional economic alliance when the Arab League finance ministers adopted an Iraqi proposal for a \$20 billion development fund for the Arab world

during a meeting in Amman, Jordan. Iraq's success at the Amman meeting was strengthened by its newly formed alliance with Jordan and Saudi Arabia. Shortly after the Amman finance ministerial meeting, Saudi Arabia announced its plans to call a heads of state summit of the Arab League just days after the American presidential elections, where a unified regional economic development strategy based on Iraq's proposal will be presented for ratification.

In August, Saddam Hussein made a sudden visit to Riyadh, the first by an Iraqi leader since the 1958 Iraqi revolution. During the visit, Hussein reportedly conferred with Saudi Arabia's King Khaled and First Crown Prince Fahd on a number of regional issues including stepping up security against the threat of insurrection sparked by Iran's Ayatollah Khomeini. Since then, Iraq has put itself forward in the Arab world as the defender of the right of the Arab nations to develop into industrial states. It is this right which Khomeini is overtly challenging.

Iraq is uniquely situated to be the foundation of an Arab economic renaissance. Iraq has not only the oil income, but the labor power, the agricultural potential, and the most aggressive commitment to the development of nuclear power as the basis for regional development.

Photo courtesy of the Planning Ministry of Iraq.

Figure 1
Number of students, classrooms and teachers on the primary level

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Year	No. of students	No. of classrooms	No. of teachers	
1974-75	1,544,334	48,650	65,387	
1975-76	1,692,313	51,878	70,804	
1976-77	1,841,915	55,073	76,097	
1977-78	1,991,055	58,215	81,154	
1978-79	2,043,507	58,675	82,065	
1979-80	2,188,265	60,785	87,626	

Total increase: 43% Average increase: 9%

Figure 2
Number of students on the secondary level

Year	No. of students	No. of classrooms	No. of teachers
1974-75	259,901	7,909	11,496
1975-76	298,810	9,086	13,212
1976-77	340,006	10,581	15,383
1977-78	389,535	12,121	17,626
1978-79	447,504	13,923	20,261
1979-80	501,463	15,601	22,688

Total increase: 90% Average increase: 18%

The government of France's Valéry Giscard d'Estaing has taken the lead in supporting Iraq's bid to leadership of the Arab world. A communiqué from a meeting between French premier Raymond Barre and Saddam Hussein last year stressed the positive precedent which Iraqi-French relations has established for future relations between the industrial sector to the so-called Third World.

The role of France

The centerpiece of Franco-Iraq economic relations is the commitment by Paris to build a nuclear training facility for Iraq. The newspaper *France-Soir* recently commented that the facility will produce a new cadre of scientific elites for the Arab world, and in so doing solve the most pressing problem of Arab development, the creation of skilled and scientifically trained labor power.

An American businessman with experience in Iraqi development recently commented that Iraq "has already become a key education center for the nations of the Arabian Gulf... Iraq is increasingly making itself a major component of economic life in the area." Both Iraq and France have charged Israel with attempted sabotage of Iraq's burgeoning nuclear industry.

In 1978, days before the French-built training reactor was to be delivered to Iraq, a terrorist bombing destroyed the reactor and the plant in which it was built. Israeli intelligence was widely accused by both official and unofficial French government sources as being guilty of the action. A few months later, during a visit to Paris, a nuclear physicist working for the Iraqi government was assassinated. Then, last month, both the Israeli chief of staff and the deputy defense minister publicly urged Iran to take advantage of the Iran-Iraq war by bombing Iraq's nuclear facility. Within 24 hours, the facility just outside of Baghdad was partially dam-

aged by an air attack, which both Iraqi and French sources declared was the work of the Israelis and not the Iranians.

The Iraqi government has identified Great Britain as being behind Israel's daring attacks on Iraq's efforts to develop nuclear power. Following a caustic attack on Iraq's nuclear development program by British parliamentarian, Winston Churchill, Jr., in early August, Iraq issued a strong series of attacks on Britain. The Iraqi daily Al Jumhuriyah editorialized on Aug. 11 that "British circles are launching a frenzied campaign against Iraq's peaceful nuclear development... and are thereby revealing their hidden hatred of Iraq and their complete partiality in favor of the Zionist entity."

Shortly thereafter, Iraq penalized Britain for its actions by withdrawing lucrative development contracts from British concerns, and re-awarding them to French companies.

Making the deserts bloom

The Iraqi News Agency, days after the British attacks on Iraq's nuclear program, issued a defense based on the impact of nuclear energy for the badly needed agricultural development of the Mideast: "Iraq intends to utilize nuclear energy notably to fertilize its western deserts.... [T]he transformation of this region will have important climatic and agricultural repercussions and will serve as a model for analogous experiences in other parts of the Arab world, which have the largest deserts in the world."

Iraq is putting a heightened priority on agricultural development in its new five-year plan for 1980-85. Iraq intends to renew the ancient agricultural belt known as the Fertile Crescent through a massive land reclamation and irrigation program that will bring 3.5 million hectares of land under cultivation by no later than 1990. If Iraq's agricultural plan succeeds, it will be able to be

Figure 3
Number of students in industrial education

Year	No. of students	No. of classrooms	No. of teachers	
1974-75	8,719	277	590	
1975-76	13,259	429	730	
1976-77	18,540	608	1,035	
1977-78	25,250	840	1,425	
1978-79	33,105	1,102	1,870	
1979-80	42,272	1,409	3,337	

Total increase: 385% Average increase: 77%

Number of students in agricultural education

Year	No. of students	No. of classrooms	No. of teachers
1974-75	4,176	150	237
1975-76	5,784	205	327
1976-77	8,268	289	439
1977-78	11,986	409	626
1978-79	19,490	554	851
1979-80	21,650	722	1,138

Total increase: 418% Average increase: 84%

not only self-sufficient agriculturally but will be able to feed the entire Gulf region and more by the turn of the century. The Arab oil-producing states have been particularly sensitive to developing their food-producing capability given growing threats from the West of withholding food to the oil-producing states in retaliation for their oil-pricing policies.

Saddam Hussein calls Iraq's immense agricultural potential "permanent oil," referring to its economic benefits after its oil reserves are depleted.

About one quarter of Iraq's total 438,000 square kilometers is suitable to agriculture. Though Iraq is the only Arab state with adequate rainfall and rivers to back up a major agricultural industry, it was not until the 1950s that Iraq began to develop its land. At that time 70 percent of Iraq's population was engaged in subsistence agriculture. By 1973 Iraq's growing agriculture sector was accommodated by 38 percent of its population. Iraq has adopted a plan of high-technology food and livestock production, and has begun to reorganize the once feudal land ownership into large cooperatives, known as agrobusinesses.

Statistics from the Iraqi government show that during British colonial occupation of Iraq in the 19th and 20th century, the percentage of rural Iraqis increased. Since the 1968 revolution which installed the current Baath Party regime, Baghdad has worked to steadily reduce the percentage of Iraqis engaged in agricultural production, through the introduction of Western technology.

In 1958 when the British-controlled Iraqi monarchy was ousted in Iraq's first nationalist revolution, the number of tractors in Iraq was 2,400. By 1973, five years after the Baathist revolution, there were 13,000 tractors employed in the agricultural sector. The number of water pumps for irrigation had climbed from 5,400 to over 15,000.

The 1972 nationalization of Iraq's oil industry marked a qualitative takeoff point in Iraq's development momentum. At this time, Baghdad inaugurated a series of massive water and land reclamation projects aimed at making the lands between the Tigris and the Euphrates rivers and the land north of Baghdad, south to Nassiriyah, cultivable.

In April 1973 the first major drainage project was launched, the purpose of which was to purify the highly saline soil between the lower area of the Tigris and Euphrates. The once fertile lands of the two rivers have become saline over the centuries due to lack of cultivation. In 1975, Iraq launched another canal project, known as the Tharthar Project, which was the first of its kind in the world in terms of its massive water discharge capacity. The Tharthar Project, which includes a manmade lake near the meeting points of the Tigris and Euphrates, is considered to be the most important project launched by Iraq, since it will allow for the control of the waters of the Tigris and Euphrates during flood and drought seasons.

An opportunity for U.S. business

It is precisely within this area of agricultural development that Iraq is increasingly looking for American technology and know-how. A Commerce Department source reports that in the last 12 months, Iraq has increasingly begun to waive its anti-Israel boycott in order to get "the best America can offer." According to Foreign Economic Trends and Their Implications for the United States, a publication released by the Commerce and State departments, Iraq's developing agricultural sector offers the greatest opportunities to U.S. business. A consultant working with Iraq in developing a new canal and drainage system commented: "If done right it will last for hundreds of years and is a good long-term investment."

The French trade journal MOCI reported in August that each new irrigation project Iraq will develop over the next decade will irrigate no less than 15,000 hectares. Included in this plan will be a number of dams that will provide a major source of hydroelectric power. In its 1980 budget alone, the Baghdad government has increased the budget for irrigation and land reclamation by 30 percent to over \$700 million. At present Iraq is putting emphasis on completing projects already under construction. During the next five years Iraq will initiate projects of unprecedented size. Most important will be the giant \$1 billion plan for the Mosul area in northern Iraq, which will include a multipurpose hydroelectric project centered around a 12,800 cubic meter capacity dam, a hydroelectric station which will produce 975 megawatts of electricity. The project will irrigate 230,000 hectares.

The Bokme Dam, presently under construction in northern Iraq on the Greater Zab River, will produce 1,000 to 2,000 megawatts of electricity. By 1984, Baghdad hopes to have completed the Haditha Dam on the Euphrates River near the Syrian border.

Iraq's nuclear program

The 1956 establishment of the Iraqi Atomic Energy Commission was the initial step toward developing the capabilities required to bring Iraq into the nuclear age. According to government statements, Iraq intends to utilize nuclear technology for desalination purposes and in medicine, as well as electrical power production.

Research and isotope production became possible with the 1968 creation of an institute for nuclear research at Tuvait, near Baghdad, with assistance from the U.S.S.R. Iraq signed the nuclear nonproliferation accord a year later. Since 1975 Iraq has signed accords for cooperation in the sphere of peaceful utilization of nuclear energy with the Soviet Union and France and has established relations along similar lines with Italy and Brazil to obtain uranium and technological know-

Iraq's research center is planned to be fully operation within the next two years. It will train 600 engineers and technicians and will operate two nuclear reactors, Tamuz-1 and Tamuz-2, with French-supplied enriched uranium. Plans for a 600 megawatt power plant are now being negotiated with Italian and French firms.

Water development has been given high priority by a number of other Arab states. Saudi Arabia is expected to spend \$2.3 billion on agricultural development and \$4 billion on water development and desalination between now and 1985. Recent reports indicate that Jordan will be increasingly dependent upon Iraq's water resources in order to expand its own agricultural productivity. This summer Jordan initiated a project to draw literally hundreds of millions of cubic meters of water a year into Jordan from the Euphrates in Iraq. The London Financial Times reports that the Jordan Valley Authority has requested a study on the water transfer project that would consist of "several pumping stations, large diameter pipelines, water treatment plants and water storage reservoirs." Earlier this year the JVA circulated a report warning of the long-term prospects for a water shortage which it concluded only Iraq could remedy.

Education, the key to sustained growth

The Baghdad government has increased its fight against illiteracy, as demonstrated by the increasing government expenditures for education and the dramatic increase in the number of schools throughout the country. According to Iraqi government statistics, there was a 43 percent increase in the number of primary students in Iraqi schools between 1974 and 1980, and a 90 percent increase in the number of students at the secondary school level.

The biggest increase has come in the category of Iraqi students learning industrial skills. Between 1974 and 1980 the increase was 385 percent, from 8,719 students to 42,272 students. Agricultural training schools saw the biggest increase of 418 percent from 4,176 students to 21,650 students over the same period of time.

Over the last three years, the Iraqi budget for education, which includes allocations for education and for higher education and scientific research, nearly doubled. According to Middle East Economic Digest, the number of students enrolled in Iraqi schools increased by nearly 9 percent in 1979 over the previous year to 3,646,791—almost a quarter of Iraq's total population.

Iraqi government statistics indicate a substantial increase in secondary schools over the last year by 15.6 percent. This signifies the highest-ever number of Iraqi students continuing their formal education beyond compulsory primary school level. MEED reports that the number enrolled in vocational schools for 1979 were double the 1976 total and climbed by 11 percent during 1978 to 53,420.

Saddam Hussein and his predecessor, Ahmed Hassan Abu Bakr, put primary emphasis upon achieving self-sufficiency in scientific and technical personnel. As a result, almost all industrial contracts that Iraq signs with a foreign concern include provisions for training local personnel to run and maintain the factory after it is completed.

Inter-Arab obstacles to development

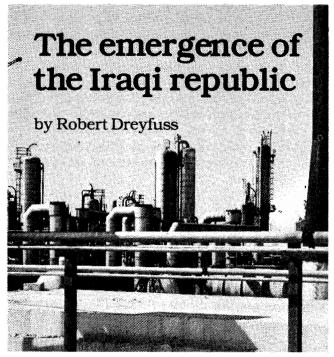
One of the most serious impediments to Iraq's development, and the economic growth of the entire Arab world, is the longstanding feud with Syria. Just before the outbreak of the Iranian revolution in 1978, Iraq and Syria were on the road to resolving their ideological differences. But it was pro-Khomeini elements inside the Syrian leadership who halted the Iraq-Syria dialogue.

A manifestation of that dispute has been uncertainty over the availability of water flowing from the Euphrates River from Syria into Iraq. Syria has withheld water by constructing a dam, which has sparked heated differences between Baghdad and Damascus. Furthermore, Iraq needs transit access to Syrian ports to relieve the bottlenecks which have jammed up Iraq's tiny port facilities on the Persian Gulf. During that brief effort on the part of Damascus and Baghdad to overcome their differences, a wide array of economic cooperation agreements were worked out; had they come to fruition, they would have made the Syrian-Iraqi alliance the most economically and militarily powerful in the Arab world.

Since the collapse of the Iraq-Syria dialogue, Iraq has increasingly turned towards Jordan. Since the 1978 Arab summit Iraq has begun to provide Jordan with a substantial yearly grant of \$1.1 billion. Not only are Iraq and Jordan talking about major water-sharing projects, but Iraq has made a sizable investment in the expansion of Jordan's port facilities on the Gulf of Aqaba, and has begun a series of projects to build transportation lines between the Jordanian port and

Jordan, Saudi Arabia, and Iraq are at the same time intensifying their cooperation to provide regional security. This cooperation has won the full support of France. It is expected that a new Arab Organization for Industrial Development, which will produce arms for the Gulf states, will be centered in Iraq. The French firm Thomson-CSF run by Philippe Giscard d'Estaing, the cousin of the French president, is expected to help create the AOI, with funds from the wealthy oil-producing Gulf states.

The decision to escalate regional security, which has vielded France close to \$8 billion in defense contracts with the Arab world, was the result of the perceived threat to Arab security by the regime of Iran's Khomeini, on the one hand, and the aggression against the Arabs in Lebanon and the West Bank by the Begin government on the other.



For many years, it has been a constant theme in the works of American, British, and Israeli political scientists that, as a nation-state, Iraq ought not to exist at all. Because of the long-established tribal and ethnic differences in Iraq, it has been commonplace in certain circles to declare that under the slightest pressure Iraq would disintegrate into a number of squabbling mini-states. "There is no 'Iraqi nation,' nor is there a tradition of cooperation to cement the various communities," wrote Uriel Dann, an Israeli intelligence officer, in 1968.

It was in that year that a political-military combination led by a relatively unknown civilian leader of the Iraqi branch of the Arab Baath Socialist Party, Saddam Hussein, established the government that still rules Iraq today. Since that time, despite great adversity and difficulties, President Saddam Hussein has confounded every prediction and forecast about the inherent instability and essential ungovernability of Iraq.

Against all odds, under Saddam Hussein, Iraq has emerged as a solidly founded, developing Arab republic which, in an area of constant turmoil and terrorist insurrections, is battling to secure its future against the threat of spreading Muslim fundamentalism and ultraleftist politics. The accomplishment of Saddam Hussein is that he has managed, with few resources, to do what was alleged to have been impossible: to hammer Iraq into shape as a nation, unifying its diverse communities and ethnic blocs in support of Iraq's national effort.

What makes the effort all the more remarkable is that Iraq has achieved what it has so far despite the lack of a qualified leadership cadre. The Iraqi leadership, most of

Photo courtesy of the Oil Ministry of Iraq