

IRAQ

IRRIGATION, DRAINAGE PROJECTS BEGIN TO PAY OFF

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[Article by Clela Khoshaba]

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The Ministry of Irrigation undertakes the special task of building water dams irrigation, drainage and land reclamation projects. It is also responsible for maintenance work of existing projects, drilling Artesian wells and undertaking research, studies and designs for future water requirements.

Since its foundation in 1969, the Ministry of Irrigation has executed several important projects listed as priority projects within the five-year national development plans. It is currently carrying out some strategic projects which, when completed, will constitute a forward leap in the agricultural sector.

As for dams and reservoirs primarily designed to preserve available water resources in the country, the Ministry has built the following projects:

1.—Hamrin Dam on the Diyala River. This dam was completed in 1981 to control flooding and store water for irrigation of 1.2 million donum (2,500 square metres) in addition to generating 50 megawatts of electric power. The dam has a storage capacity of 3.95 billion cubic metres of water.

2.— Tharthar reservoir, was designed to control floods of the Tigris. It has a storage capacity of 85 billion cubic metres of water. The course of the Tigris has been linked to the reservoir so that surplus water can be diverted to the Tharthar valley pending completion of the Mosul and Bakhma reservoirs.

Two canals were built. The first links the valley with the Tigris and the other with the Euphrates. The second canal is 27 km long and 23-34 m. wide and has an outfall capacity of 1,100 cubic metre per second.

The Tharthar-Tigris canal is now under construction and is due to be completed by the end of 1986. It pours into the Tigris at a point near al-Taji, north of Baghdad. It is 65 km long with an outfall capacity of 600 cubic metre/second. It is due to be completed by the end of 1986.

3.—Falluja Dam was built on the Euphrates with an outfall capacity of 8,600 cubic metre/second. This dam was completed at the beginning of 1985 to regulate the water level for the irrigation projects of Abu Ghraib, Radhwaniya, Latifiya and Iskandariya.

There are, moreover, other reservoirs due to be completed by the end of 1986. These are Haditha strategic dam which has a storage capacity of 8.2 billion cubic metres, Dohuk Dam, which guarantees irrigation water for an area of 15,000 acres west of Dohuk city. Dohuk dam has a storage capacity of 50 million cubic metres of water.

Iraq's greatest dam, however, is Saddam (Mosul) Dam. When completed, it is expected to irrigate more than a million donums of al-Jezira land.

Saddam Dam is being built on the Tigris river with a storage capacity of 11.11 billion cubic metres of water.

A hydro-electric power station is also being built on the dam to generate 1,034 megawatt. The project will be completed in 1986.

There are, however, other projects under study. These include among others, Bakhma Dam on the Upper Zab River to irrigate the Makhmour plain in Arbil Province and al-Fatha Dam near the Town of Beji. The Beji Dam aims at stabilizing water level of the Tigris and its two

tributaries, the Upper Zab and Lower Zab.

The western desert of the country is now the site of a number of small water projects which could help to settle nomads. Designs for similar small dams in the northern Province of Nineveh and in Diyala Province are being drawn up. rages including seven barrages constructed on the rivers of Hilla and Daghara (opened in 1983) and four others now under construction on the rivers of Shamiya and Kufa. Meanwhile work started early in 1985 on the construction of new Hindiya Barrage.

The Ministry of Irrigation is in charge of reclaiming the land and setting up major agricultural projects. Among these projects are al-Jezira project in Nineveh and Saddam Irrigation Project in Tameem Province. These two strategic projects will irrigate a huge areas of farm lands, currently depending on rainfall.

The first stage of Saddam irrigation project was inaugurated in November 1983 primarily to irrigate 350,000 donums which is expected to increase to more than a million donums including 133,000 donums which will be drip irrigated.

Al-Jazira Irrigation Project covers an area of more than a million donums. Work began early this year on the first phase and the whole project is to be completed in the five-year-plan of (1986-1990).

As for drainage projects, the main drainage canal was built to receive all drained water of the saline lands in the central and southern parts of Iraq and dispose of the salty water into the Gulf. The first phase of the project which lies between the city of Nassiriya and the town of Mussayab was completed in 1977. The second phase is now underway. It extends from Nassiriya to Shait al-Basra down to Khor al-Zubair. This course would make 172-km-long canal.

Land reclamation to desalinize the soil and prepare it for planting is a real challenge in Iraq due to the diversity of soil composition and climate.

The overall area of reclaimed land since the inception of 17-30 July Revolution until April 1985 totalled 1.24 million donums.

The Ministry is, moreover, taking the lead in introducing modern techniques in its projects. Canals are now lined with reinforced concrete to minimize the loss of water. The Ministry has also set a precedence by introducing drip and sprinkler irrigation in Iraq an area of 48,000 donums are now irrigated by sprinkler system while another thousand donums are drip-irrigated.