

### THIRD TIHAMA DEVELOPMENT IRRIGATION PROJECT IN YEMEN ARAB REPUBLIC

The \$ 87.6 million project seeks to accelerate modernization of agriculture in Wadi Mawr, to raise agricultural production and farm incomes, and to improve the health of the people in the area. The project comprises among others: (a) construction of diversion structures in Wadi Mawr for regulating the Wadi's flow; (b) construction of feeder canals and remodelling of existing canals; (c) installation of about 20 tubewells.

It would introduce the use of modern inputs, increase production, and encourage a shift towards the cultivation of higher value grains, cotton, fruits, and vegetables. Some 53,000 residents of the Wadi, about 55 per cent of whom are in the relative poverty group, will benefit. The project, besides the country's government is being co-financed by the World Bank, IFAD, EEC and other co-financers.

The project is likely to be completed by 1984 at an economic rate of return of 17 per cent.

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### LAND RECLAMATION AND WATER RESOURCES ENGINEERING IN REPUBLIC OF IRAQ

#### 1. First National Conference on Water Resources Engineering

The Ministry of Irrigation and the Iraqi Society of Engineers sponsored the first National Conference on Water Resources Engineering during March 10—13, 1979. Various papers on water resources and hydrology, river dynamics, hydraulic structures and irrigation and drainage were presented.

A number of distinguished specialists in these fields attended the Conference.

#### 2. Symposium on Land Reclamation

The State Organization for Soils and Land Reclamation organized a Symposium on Land Reclamation in Iraq from March 26—28, 1979 and the following topics were discussed:

- a. Land Resources
- b. Water Resources
- c. Land Reclamation
- d. Economics of Land Reclamation
- e. Agricultural Utilization of Reclaimed Lands
- f. The Role of Modern Technology and Mechanization in Land Reclamation
- g. Fertilization and Fertility Survey and their effect on Agricultural Development.

Several Iraq and International Specialists submitted papers.

3. The Minister of Irrigation, head of the Iraqi National Committee of Irrigation and Drainage attended the International Water Resources Conference which was held in Mexico City from April 21 to May 2, 1979.

#### 4. Seminar on Treatment of Canals in Gypsiferrous Soils

The Ministry of Irrigation had proposed to hold a Seminar on Treatment of Canals in Gypsiferrous Terrain during October 13—18, 1979, at which the following topics were to be discussed.

1. Definition of gypsiferrous soils and the chemical physical and mechanical properties.
2. Effect of water movement in gypsiferrous soils.
3. Field investigation and laboratory testing of gypsiferrous soils.
4. Designs of canals.
5. Construction of canals.
6. Various methods of treatments of canals in gypsiferrous soil.
7. Synthetic material as a method of canal protection.
8. Maintenance of canals in gypsiferrous soils.
9. Hydraulic structures in gypsiferrous soils.
10. World experience in irrigation gypsiferrous soils.

Several International specialists and specialized companies in this field were invited.

5. The Ministry of Irrigation signed in April 1979, a contract with the Japanese Consultant company (EPDC) to provide a comprehensive water resources study for the Upper Zab which is one of the Tigris tributaries and contributes 30 per cent of the Tigris River flow. The project involves construction of several dams for multi-purposes.

### EXCHANGE OF INFORMATION AMONG DEVELOPING COUNTRIES

There is a growing realisation nowadays that solutions to specific problems concerning development in developing countries could be usefully employed in similar situations in other parts of the Third World.

A promising solution to this problem is emerging at the headquarters of the United Nations Environment Programme (UNEP), Nairobi, Kenya with the establishment of the International Referral System for sources of environmental information (IRS). The system, which became fully operational in 1977, aims to put in touch those who seek information on environmental issues with those best able to provide such information.

Although the central unit of IRS is located in Nairobi, the system functions through a world-wide network of national, regional and sectoral information systems. National offices appointed by governments of