

# Jordan Valley development: regionalisation in action

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AMMAN -- The Jordan Valley Authority's invitation this week to international contractors to pre-qualify for construction of the Maqarin Dam sets in motion a six-year construction programme that will cost at least \$1.3 billion.

More significant than this, however, is the importance of the Maqarin Dam and the entire Jordan Valley comprehensive development project in putting to the test the new "regionalisation" strategy that will dominate Jordan's socio-economic development drive in the coming decades.

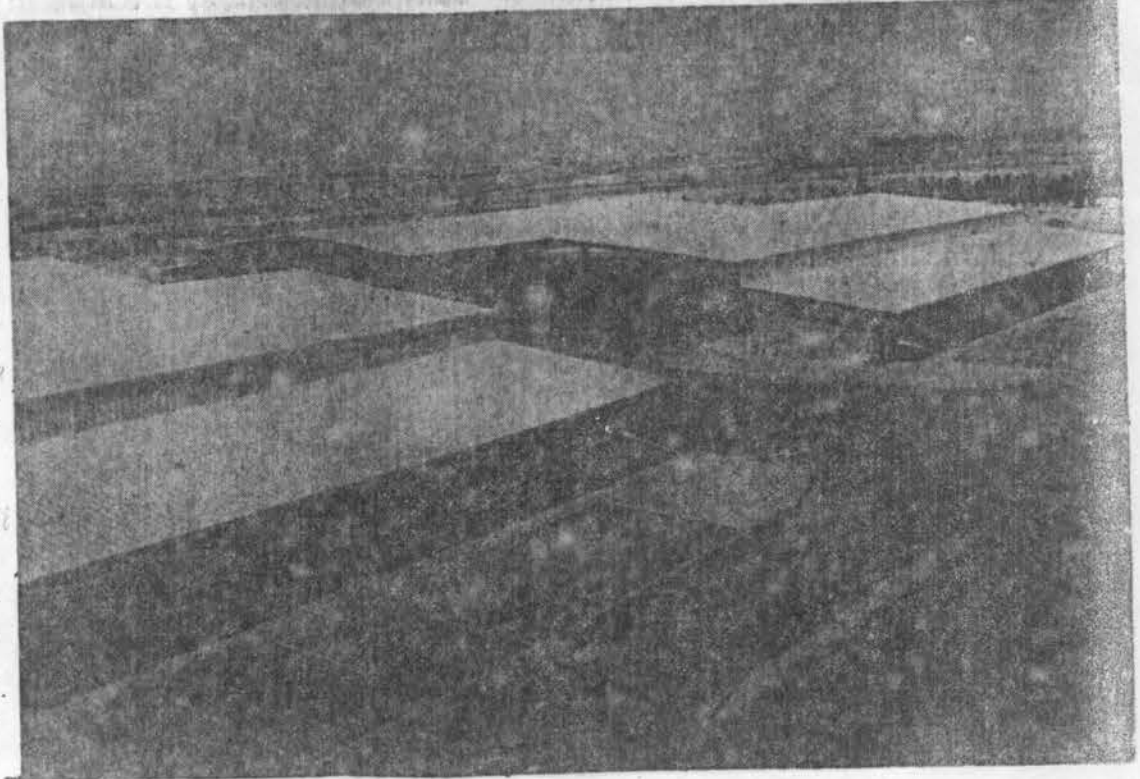
The Maqarin Dam structure itself will store 350 million cubic metres of water in its reservoir, providing water to irrigate a further 10,000 hectares of farmland in the Jordan Valley, and also providing 60-120 million cubic metres a year of domestic drinking water for the northern half of the country, in the area between Madaba and Irbid.

The Maqarin Dam itself its allied sprinkler irrigation network, other agricultural and social infrastructure systems and the domestic water project are all collectively known as "stage two" of the Jordan Valley comprehensive development project.

Stage one has been in progress since 1975, and is largely completed. It include projects in water resources development, irrigation, transportation, electricity, domestic water, schools, health centres, housing, grading, packing and marketing centres for agricultural produce, and other connected projects.

The completion of stage one this year means about 21,000 hectares of farmland are potentially ready for irrigation in the valley, though not all this area is actually irrigated due to the lack of sufficient water at the start of this autumn season. Of that total, about 11,800 hectares are irrigated by traditional surface methods, while 9,300 hectares have been prepared for sprinkler irrigation.

The Maqarin Dam will provide water for converting the surface irrigated areas to sprinklers, and adding another 10,000 hectares of sprinkler irrigated farms, bringing the valley to a point in the second



The North Shouneh agricultural centre, to be used for grading, packing, and marketing of citrus fruits.

half of the 1980s where about 30,000 hectares of land will be irrigated by sprinklers. By then, it is also estimated that the population of the valley will have increased from the present estimated 85,000 to over 150,000 people.

In this respect, the valley is the most dramatic example of Jordan's strategy of promoting socio-economic development on the basis of a series of regions that are subjected to comprehensive and integrated development plans.

The government has already decided to divide Jordan into seven "regions", each of which would enjoy its own integrated development plan. These seven regions are Amman, Irbid, Karak-Mujib, Ma'an, Disi-Aqaba, the southern desert and the northern desert.

The Jordan Valley is being maintained as a separate unit until the development programme there is completed in the latter half of the 1980s, when it will be integrated into the two northernmost regions of Amman and Irbid.

In the valley, agriculture has been taken as the economic basis of life, with allied social services,

such as housing, schooling, water, power and health care, tied into it.

Stage one has seen the completion of the following social sector schemes:

--Phase one of the electrification project, including three high tension 33-kilovolt electricity lines feeding into the valley and a 110-kilometre-long, intra-valley 33-KV line running down the centre of the valley, and low voltage power networks serving 26 villages.

--Phase one of the domestic water supply project has been completed to 21 villages, with work on ten other villages about 55 per cent completed. Phase one covers pumping stations, chlorinating units and main pipelines with concrete reservoirs. Phase two, soon to start, will install smaller pipelines of less than 75 millimetres diameter to connect the phase one works to individual homes. Phase two work is expected to get underway in January 1980 and be completed in March 1981.

-- In the transportation sector, the main 105-kilometre north-south road running down the centre of the valley has been completed as a 7.2-metre-wide dual carriageway. In addition, 100 kilometres of five-metre-wide farm roads have been completed.

--Four grading, packing and marketing centres for agricultural produce will serve the valley. The centre at North Shouneh already exists and will be used for citrus fruits. The Arda centre is the first of the others to be built; it was completed in May of this year. Grading and packing lines are now being installed, with the centre scheduled to start operating in February, in time for the winter harvesting season. Work is to start next month on the Wadi Yabis centre, while the South Shouneh centre will be the last to be built.

### Village Development Project:

-- Twenty-six schools of various sizes have been completed, and many have started operations this academic year. They contain a total of 274 classrooms that can accommodate 9,864 students.

--A total of nine health centres have been completed and are now being equipped and furnished. The Ministry of Health is expected to start operating most of the centres by the end of this month.

--Three hundred housing units for government employees have been completed, and are being allocated and occupied.

--Seven local administrative buildings have been completed and are being furnished. They should start operating later this month.

--One community centre has been built and is being equipped. A pilot programme plan has been adopted for the centre, which started running a sewing class for women last September. Other training schemes to start soon include skills for electrician, makers of sanitary fixtures for buildings and home economics.

Phase two of the village development project will see the construction of 29 new and expanded schools to accommodate 13,644 students in 37 classrooms, three health centres and three administrative buildings.

## Housing programme:

In its house-building programme, the JVA decided to start by building 2,100 units which would be sold to farmers at long-term, low interest rates. The contracts were awarded covering construction of houses in 20 different villages. Work is complete at three sites, covering 400 houses. It is 90 per cent completed at six villages, covering 710 houses and 80 per cent completed at one village with 50 houses. At two villages, work is 75 per cent completed on 150 houses, while four other villages with 400 houses are half completed. Site preparation is underway at three villages covering 250 houses, and the last two villages' 140 houses have yet to get under way.

Over 2,300 purchase applications have been received to date for the available 2,100 houses. A total of 730 applications have been approved, after examination by the JVA and the Housing Bank.

Another JVA programme lends money to valley residents wishing to build their own houses. To date, 19 loans have been extended, for JD 36,600.

Stage one projects will be completed in the coming year, while attention shifts to the giant Maqarin Dam scheme. According to the prequalification announcement published in local newspapers this week, the dam will be 150 metres high, of the earthfill type, and with a volume of 20 million cubic metres. It will include a 22-megawatt hydroelectric power station, a 21-kilometre-long 132 kilovolt electricity transmission line, and two concrete spillway tunnels each 930 metres long.

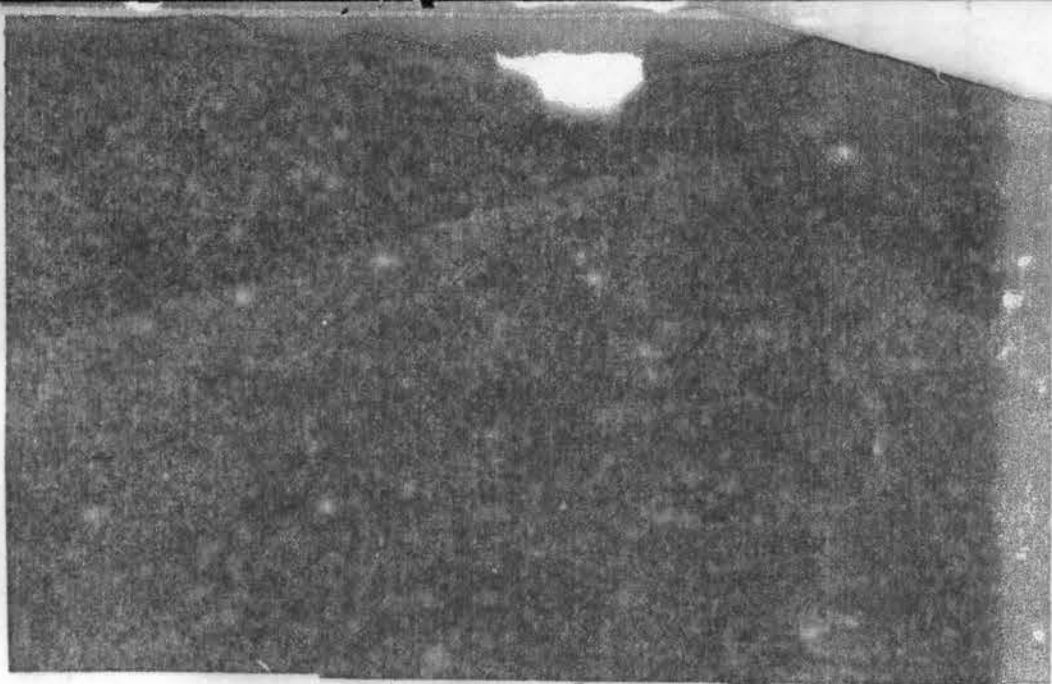
The JVA's present schedule is to award the contract for the dam's construction by January 1981, with construction work expected to take about five years.

Financing for the dam project is still being arranged, though at

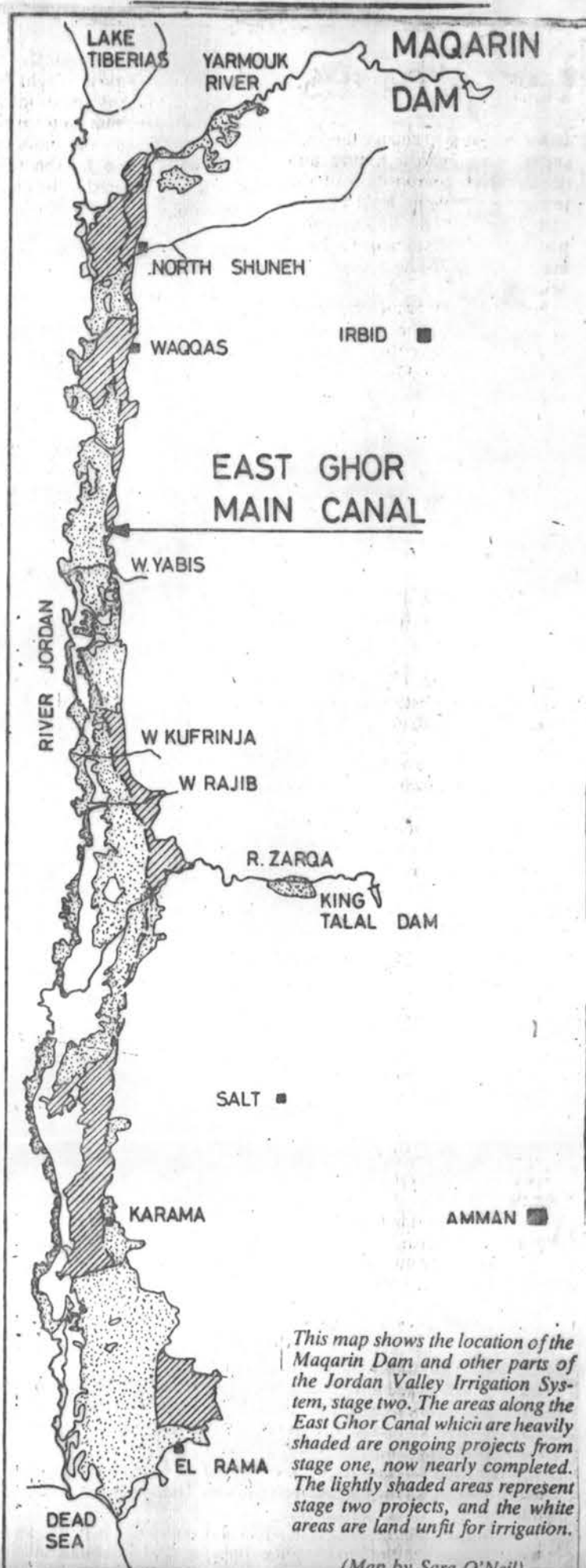
least 15 international financing bodies are already expressing interest in the project. These bodies sent representatives to a meeting in London in mid-October, where stage-two projects were reviewed. It was decided that a World Bank mission would come here to make an on-the-spot evaluation, which in turn would be submitted to the potential donors for final agreement on their individual shares of the total financing package. The World Bank team has been in Jordan for the past three weeks carrying out its evaluation.

JVA officials have told the Jordan Times that the Maqarin Dam and its allied irrigation systems would cost in the neighbourhood of \$850 million. The domestic water project for north Jordan would cost in the range of \$350-\$400 million. Among the interested financing agencies are the World Bank, the U.S. Agency for International Development (USAID), the British and West German overseas development aid agencies, the EEC and the European Investment Bank, the International Fund for Agricultural Development, the OPEC Special Fund, the Kuwaiti, Saudi, Iraqi, and Libyan funds, the Islamic Development Bank and the Arab Fund for Economic and Social Development.

Prequalification for the north Jordan domestic water contract is expected to take place in the very near future, perhaps as early as later this month.



The East Ghor Canal: bringing life to the valley



This map shows the location of the Maqarin Dam and other parts of the Jordan Valley Irrigation System, stage two. The areas along the East Ghor Canal which are heavily shaded are ongoing projects from stage one, now nearly completed. The lightly shaded areas represent stage two projects, and the white areas are land unfit for irrigation.

(Map by Sara O'Neill)