

AL-KHABUR RIVER IRRIGATION PROJECTS DESCRIBED

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[Article by Khalid al-Ashhab: "The Transformation of 150,000 Hectares Into Irrigated Land"]

[Text] Al-Khabur River basin project is a step along the path of the agricultural revolution. Irrigation networks extend for 440 kilometers.

The year 1983 is the "year of agriculture" in Syria. This statement which was confirmed by the Higher Agricultural Council, reaffirms the great importance which is attached to the matter of agriculture in our country. The reason for this is that agriculture constitutes a basic and important part of the structure of our national economy. But in order for agriculture to really play this role, we must employ as well as possible the principal tool of agriculture--the land--and we must employ as well as possible the most important factor for utilization of the land--water. In addition to this, we must utilize modern agricultural technology as well as set up a system of cooperatives, and we must work with this system of cooperatives in the field of agriculture in accordance with the directives of the [Ba'th] Party.

The Euphrates Dam is considered to be the greatest achievement by the Revolution of 8 March to promote agriculture in Syria. The second most important project concerning utilization of water resources in the country--second only to the Euphrates Dam project--is the project for irrigation of the land in the Khabur River basin. This latter project will help provide great forward momentum for our agricultural economy if we achieve the objectives we hope to achieve by setting it up--objectives which involve full utilization of the water of al-Khabur River.

Last Thursday during the celebrations marking the 20th anniversary of the March Revolution, our prime minister, Dr 'Abd-al-Ra'uf al'Kasm, laid the cornerstone for the project for the irrigation of the lands in the basin of the Khabur River in the district of Ra's al-'Ayn in the province of al'Hasakah.

Irrigation of 150,000 Hectares of Land

According to a report submitted by the Land Reclamation Directorate concerning the stages and purpose of setting up the project, the plan calls for development of the northeastern part of the country. This is to be achieved by irrigating approximately 150,000 hectares of fertile land, extending from the town of Ra's al-'Ayn to beyond the town of al-Suwar in the province of Dayr al-Zawr, by means of utilization of the flow of al-Khabur River. Surface water resources [in al-Khabur River basin] are estimated at 1.6 billion cubic meters, and ground water resources are estimated at up to 400 million cubic meters of water. This will involve redistribution of the annual flow of the river, in accordance with an irrigation schedule, by means of utilizing reservoirs of sufficient storage capacity which will be served by the following three dams: 1. Western al-Hasakah dam; 2. Eastern al-Hasakah dam; 3. al-Khabur dam.

As for which phases of the project have been implemented so far, since the beginning of 1982 work has begun on the second and third phases. These two phases have involved completing the final designing of the project as well as the plans for implementing all parts of the project. There are three principal areas covered by the project, and they can either operate together as a working unit or can operate independently of each other.

The First Area and the Irrigation of 42,000 Hectares of Land

This area extends from the springs of Ra's al-'Ayn to the Western al-Hasakah dam. In this area the water from the current of the river alone will be used to provide irrigation for 42,000 hectares of land, and this area will have the following installations:

1. The outlet for the water from Ra's al-'Ayn, which will cost an estimated 50 million Syrian pounds.
2. The main canal called M1-1 and the fields which it will irrigate. This canal will be 64 kilometers long, and will have a maximum rate of flow of 45 cubic meters per second.
3. The siphoning channel. This siphoning channel will branch out from Canal M1-2 in order to feed Canal M1-1. It will be 3 kilometers long, will flow into al-Khabur River at its right bank, and will have a maximum rate of flow of 5,400 cubic meters per hour.
4. The main canal called M1-1 and the fields which it will irrigate. The length of the canal will be 44 kilometers, and it will have a maximum rate of flow of 15 cubic meters per second.

The overall cost of the first area will be 1.3 billion Syrian pounds, and the projects in this area are expected to be completed by 1988.

Storage of 324 Million Cubic Meters of Water

The second area covers the lands irrigated by the Western al-Hasakah dam and the Eastern al-Hasakah dam. The total amount of land involved here is an estimated 49,450 hectares, and this area will include the following installations:

1. The Western al-Hasakah dam, with a storage capacity of 92 million cubic meters of water.
2. An electric power station, with a capacity of 12.5 megawatts.
3. The Eastern al-Hasakah dam, with a storage capacity of 232 million cubic meters of water.
4. Pumping Station Number 7, a large pumping station which will feed Canal M2-4. This canal will be about 50 kilometers long, and will have a maximum rate of flow of 32 cubic meters of water per second.
5. Canal M2-3, which will be 30 kilometers long and will have a maximum rate of flow of 12 cubic meters of water per second.
6. Irrigation and drainage networks, roads, industrial works, and pumping stations.

The overall cost for implementing the projects of this area will be about 1.5 billion Syrian pounds, and they will be completed during the implementation of the initial phase and by the end of 1990.

Irrigation of 46,450 Hectares of Land

The third area involves the land irrigated by al-Khabur dam, which will be located 20 kilometers south of al-Hasakah. The total amount of land involved here is about 46,450 hectares, and this area will have the following installations:

1. Al-Khabur dam, with a maximum storage capacity of 665 million cubic meters of water.
2. An electric power station with a capacity of 8 megawatts.
3. A number of pumping stations.
4. Main irrigation networks, the total length of which will be about 300 kilometers.
5. Various industrial installations for the network. Implementation of this phase will cost a total of 2.2 billion Syrian pounds, and implementation of this phase is expected to begin during 1990.

Implementation of the entire overall project will cost approximately 5 billion Syrian pounds.

It should be mentioned that the springs of Ra's al-Ayn which were mentioned above are about 90 kilometers away from the city of al-Hasakah and all around the springs and to the south of them there are vast areas of fertile plains. These springs are where the work of the first phase will begin--involving the construction of the main canal, called M1-2.

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