

Joint management of the facilities in an irrigation district in North Tunisia

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Geographical level : irrigation districts

Rational allocation of water resources is an absolute necessity given the scarcity of water in the country as well as the high cost of this resource, a cost that has become more and more onerous before the water reaches the parcels of land.

This paper refers to the collective management of the Ras Jebel coastal irrigated district, an area of 2060 hectares in the north of Tunisia. When considering the quality of the water and the development in the exploiting of this water between 1966 and 1993, it can be noticed that water salinity has grown relatively high. This goes together with a decline in the piezometric level which is a sign of growing over-tapping of the resource. Samples taken are not spread out uniformly throughout the area. Available reserves are often only sufficient in the lower parts of the area. On the other hand, a decline in water quality limits them. Continuous overall lowering of the piezometric level due to increased tapping of the resource is an irrefutable indication of overexploitation. Historically, the Ras Jebel area belonged to the traditional farmer-owned farming regions. It is part of the villages where intensive agriculture (market gardening and fruit-growing) is part of the distant past. Nowadays, small family enterprises dominate. A project to protect Ras Jebel was set up in 1992. The irrigation water comes from the releasing of the Sidi Selem dam in Oued Medjerda. The land structure is characterised by considerable parcelling out of the usable agricultural area and these parcels are irregular, so that the irrigation units are not standardised. Sprinkling was chosen as the irrigation method for the project. In order to obtain good management performance, associations for irrigation by sprinkling were set up (GUI). The key to the organising of these associations was joint purchasing of tertiary piping. Collective management of the boundaries is a particularly complex operation and has led to new forms of cooperation to make the farmers more responsible by inviting them to create associations (AIC) so as to be able to undertake certain tasks such as the upkeep of the collective network, the distribution of water at each boundary, and so on, and at the same time preserving the availability of the water resources both in terms of quantity and quality.

Key words : irrigation districts, overexploitation, sprinkling, management.