Abstract

In Mexico, water resources, apart from being limited, are badly distributed; on the coastal plain, with the exception of the Peninsula of Baja California and Sonora, there is an abundance of water, while in the rest of the country, it is scarce. With the transfer of the large irrigation districts to user organizations, it was intended that these districts become operationally and economically efficient organizations. In this way, decision-making passed from global planning, which covered an entire irrigation district, to fractioned planning, in which a small irrigation module is responsible for the administration of the water resource. Undoubtedly, the scarcity of this resource, together with the high demand of the agricultural sector and the low fees, is producing pressure for a change in the policies for management of this resource. In the management of the sources, it is not convenient to extract more water from the reservoirs than the average available volume; an additional volume generates less benefit, both economically and operationally, than what would be generated if it were stored for a dry year. In the case of the network, the deteriorated state of the infrastructure propitiates losses by leakage, infiltration in unlined ditches and inefficient water control in the channels. In the case of water management in the field delivery network, it is necessary to define actions to encourage the volumetric quotas and, in this aspect, the support of the government is essential; this means political will, which could permit a considerable increase in the availability of water and, as a consequence, higher productivity of soil and water resources, as well as increased agricultural production and better incomes for the producers.

Keywords

Water availability, productivity, water sources, efficiency, conduit network, distribution network.