

A comparative study of water productivity in joint stock and agricultural companies in relation to the squireen of neighboring villages to optimize water consumption in the agricultural sector (case study: Torbt-e Jam)

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ABSTRACT:

Increasing productivity in agriculture will increase the level of villagers, reduce their immigration to cities and finally sustainable rural development. In this research, we have focused on the issue of water productivity in the light of recent droughts in Iran and the water shortage crisis in agriculture and the impact of this on rural livelihoods. So we chose joint stock and agricultural companies as an exploitation system with modern cultivation and irrigation at a large and integrated level against the squireen of neighboring villages with traditional cultivation and irrigation in small and scattered parts and then compared them with each others in a partial index of water productivity. The research method is causality and comparative method and the calculations of partial water productivity are computed by comparison of the means and the use of the T test, the Loon test, and generalized average productivity. Required data were collected through a questionnaire and among the joint stock and agricultural companies and the squireen of neighbouring villages in Torbat-e-Jam for two products of melon and barley in the crop year 2016-2017. The results showed that water productivity in the joint stock and agricultural companies are higher than the squireen in both barley and melon products using partial productivity and generalized average productivity.

Keywords:

Water productivity, Joint stock and agricultural companies, System of squireen.