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Potential for reducing water wastage in the agricultural sector in Tunisia

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In a context of water scarcity increasing in the Mediterranean region, and taking into account population growth, the uncertainties of climate change and the economic and social changes, Tunisia needs to maintain the water management more efficient, sustainable and equitable to meet the populations needs for the present and the future. Because a low water availability can impede the economic development of the country. With over 80% of the of water volume raised by agriculture, it appears that this sector is by far the largest to create reflections on the water economies and the possibilities for its better use by the various sectors in competition such as cereals, tree crops, vegetables, citrus, date palm. In this context, nearly 800 farmer's surveys have been conducted to estimate the amount of water consumed by crops around the country. The main objective of this work is the water balance estimation of strategic irrigated crops in Tunisia to determine their influence on the water resources management and to establish patterns for improving it. The water balance was performed basing on farmer's surveys, crop and meteorological data, irrigation management and regional statistics. As a part of this work, wastes in irrigation and water deficit by crops and by regions were analyzed.

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