



A groundwater overexploitation without sensitive impacts: technical approaches and social perception in central Tunisia

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In Central Tunisia, the Kairouan plain is considered as a region of major potentiality for the agricultural development. The supply of drinking water and the demand for irrigation are both satisfied by the exploitation of aquifers, which has led to their overexploitation since decades. In the same time, a significant decrease of the river flow in the upstream catchment has been observed. These phenomena, among others, emphasize the intense footprint of human activities on the regional hydrology.

Many models of surface runoff and of groundwater flows, sometimes coupled, have been built in order to represent the changes in the regional water budget, with various levels of complexity and relevance of initial assumptions. They are often of good quality and provide reliable estimates for future scenarios. Critical issues are expected in long-term trends.

Nevertheless the water exploitation and management did not really change over the last decades: farmers and regional authorities in charge of the water control do not base their strategies on modelling results. This questions the importance of the scientific input from researchers in the final decision making processes.