

**Farmers' knowledge of irrigation water rationalization practices in Abu Tesht
and Naga Hammadi centers of Qena Governorate**
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Abstract

The research aimed mainly at identifying the knowledge level of the respondent farmers about the studied irrigation water use rationalization practices, and to determine the relationship between the knowledge level of the respondent farmers about the studied irrigation water use rationalization practices and some of the independent variables studied, to identify the problems facing the respondent farmers with regard to the practices of rationalizing the use of irrigation water, and their proposals to overcome it from their point of view, and the research was conducted on a sample of farmers in the centers of Abu Chit and Nagaahammadi of Qena governorate, consisting of 100 farmers, and they were chosen randomly, and data was collected from the respondents through a personal interview using a questionnaire form, and it was used in displaying and analyzing the data, frequencies and ratiospercentile, the relative congruence test (χ^2), and the compatibility coefficient. The data were processed and analyzed using the statistical software package for the Social Sciences (SPSS). The research reached many results, **the most important of which are the following:**

- Nearly three-quarters of the respondents (73%) had a low overall level of knowledge about the practices of rationalizing the use of irrigation water, while nearly one-fifth of the respondents was 19% whose level of knowledge was medium, while 8% of the respondents had a high level of knowledge in that practices.
- There is a significant relationship between of knowledge about the practices of rationalizing the use of irrigation water and between the variables of age and number of years of education. It was also found that there was no significant relationship between the knowledge level of the farmers surveyed about the practices of rationalizing the use of irrigation water and the size of agricultural holdings.
- The most important problems facing the respondent farmers with regard to rationalizing the use of irrigation water were as follows: lack of irrigation water at a rate of (97%), pollution of irrigation water with agricultural and

household waste at a rate of (95%), while the most important proposals of the respondents were to overcome the problems. The challenges they face in rationalizing the use of irrigation water are as follows: regular irrigation shifts on time (92%), and state support to farmers financially and with equipment for irrigation network projects, whether by drip or sprinkler (89%).