A Sociological study of some determinants of the effectiveness of water users associations in villages in the Nubaria region, Egypt

Abstract

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Abstract. This research identifies the effectiveness of Water Users Associations (WUAs) in the Nubaria region of Egypt. The research was conducted in 2014 in Tiba, Alentlaq and Albostan counties in the Nubaria region of northern Egypt. A stratified sampling method was used to accurately represent the original population. Data from 61% of active WUAs were collected by questionnaires completed by WUA heads. Statistical methods used to analyze the data included tabular presentation and percentages and measurements of central tendency and measures of dispersion, as well as of the Non-parametric static methods to demonstrate the relationship between variables such as Chi-square. A Step-Wise regression analysis in SPSS determined the impact of the independent variables studied related to the level of effectiveness of WUAs. The study revealed a significant partial correlation between the effectiveness of WUAs and each of the following variables: social and economic status of the association President, organizational coordination, degree of innovation, irrigation knowledge, and the attitudes of the association President toward rationalizing the use of irrigation water. The results of Step-Wise regression show that the social and economic status of the association president ranks first in terms of the relative importance in influencing WUA effectiveness. The study concludes that providing technical support and training programs for association Presidents and members would increase the effectiveness of WUAs in this region. A second recommendation is to highlight the importance of rationalizing the use of water irrigation through a comprehensive national media campaign to raise awareness among farmers and water administrators.