Abstract:

In about 4 to 5 years ago, with the advent and extension of an unstudied and nonlocalized new technology for digging deep wells, and also due to the appearance of many other problems related to modernizing the society and establishing inappropriate institutions and wrong management approaches, irreparable damages were imposed to the valuable heritage of ground-water resources in the country. Shortage of Water in Iran can be considered as one of the main constraining factors limiting the development process over coming decades. Hence, it is necessary to develop plans and layouts appropriate for using water in an optimal way and maintaining its position as one of the axis of expansion. The base of this study is to represent a planning schema for managing the amount of existing water for agriculture purposes in such a way that the manager should in addition to economic aspirations, considers the environmental goals too. Hence in this study, an idealistic fuzzy goal programming is introduced. In this way, the issue of allocating water among basic products in orzooieh city placed in Kerman province is discussed. By the mean of 355 questionnaires and face-to-face interviewing with crop farmers and by the use of random sampling approach in crop year 1393-1394, the required information for this study was obtained. In this study, in order to present a managerial strategy dealing with the shortage of underground water in an economic and environmental manner, we are planning to reach three ideal goals namely maximizing profit, minimizing fertilizer and pesticide consumption in situations where systematic restrictions such as water, capital, work force and farm exists. In this regard, 5 different weighted scenarios and a water-instead-of-land decision variable to is employed in order to assign the existing water to garden and agricultural in which, such products can import crop products to the proposed model. products such as corn, water melon, citrus, pistachio and nakheel in the first weighted scenario, products such as Corn, watermelon and pistachios in the second weighted scenario, products such as Corn, tomatoes, pistachios and walnuts in the third weighted scenario and the products such as Corn, watermelon, citrus, pistachio and Nakheel in the fourth and fifth weighted scenario was chosen among the products such as Wheat, corn, watermelon, potato, rapeseed, citrus, pistachio, walnut and Nakheel in which all the assigned waters in accordance to the high efficiency of water in line with desired goals in being consumed by them. In this study, it is proposed to agricultural experts Encourage and promotes farmers increasing product farming in a drop irrigation manner and also the products should be priced in accordance to the consumed water and government supporting Modern methods of irrigation and water transfer and the Drought-resistant seeds being used.

Keywords: managerial strategy, products in drop, fuzzy goal programming, Kerman



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Representation management strategy for dealing with the groundwater reservoirs deficit in Orzoyah City

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