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Dynamics of consumption inequality and evaluating the factors affecting it in the Iranian rural households

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Abstract

In arid and semi-arid countries, water is a valuable asset that human beings enjoy. Iran is also one of the arid countries that covers a large area of low water and desert areas. The successive droughts of the last few years and the arid and semi-arid climate of Iran have caused the water input to be considered as the most vital source and the plans that are considered for the sustainable development of the country. , Focus on the limitations of this resource. If we do not pay attention to all this, we will face increasing problems in the coming years. In this regard, a study was conducted and the Cobb Douglas production function method was used to estimate the economic value of water in the Sistan region. The results of this study showed that the price paid for water consumption is much lower than the final production value of the three products. This case does not save water consumption and farmers are looking for optimization methods. Do not use water and modern irrigation methods. On the other hand, according to the calculated elasticity for water consumption, which shows that if water consumption increases by an average of one percent, the production of each of the studied products will also increase. Given the average water consumption per hectare and the yield given for each crop, the calculated high yield means that for every percentage increase in water to produce triple crops, the yield of each crop will increase. In addition to the type of product, water consumption also depends on climatic conditions, type of plant and irrigation method.

Key words: Economic valuation, Economic value of water, Integer Linear Programing, Sistan Region.