

**Abstract:**

In this study, the optimum model for the purposes of scarce inputs management, environmental protection and sustainable production were developed. The study area, Orzooiyeh the city's major wheat-producing tissue is the center of Kerman province. To determine the optimum cropping pattern in terms of uncertainty in terms of gross agricultural activities, the available production inputs and the inputs needed to produce each unit of various products, using mathematical programming period respectively. In this study, a mathematical programming period to determine the optimum cropping pattern Orzooiyeh city with an emphasis on natural resources and environmental sustainability were used. Information required by this research through interviews and questionnaires, as well as agricultural Marnamhhay province were collected. Since the work of building the model for each farm units, time consuming, costly and almost unnecessary. The aim of this study randomly interviewing farmers and ranchers, as well as information on the acreage of the variance The questionnaires were cultivated, and finally to analyze the data from 2010 Excel and GAMS software was used. Farmers in the three groups on the basis of water resources using river water, and dry wells were classified work. In patients treated water from deep wells, the optimal cropping pattern, planting corn, alfalfa and cantaloupe is water. Optimal cropping pattern for rainfed cultivation of crops, peas, lentils and barley.

**Key words:** uncertainty, mathematical programming period, Kerman



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Determination of optimal cropping pattern  
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