

## **Abstract**

**Agriculture is a risky activity. In this field, all types of natural, economical and intentional risks work together to provide a fragile and susceptible situation for the producers. Supporting the producers in agriculture sector against revenue fluctuations plays an important role in increasing motivation and production. The government develops schemes and policies to support the producers in this section, and insurance is one of them. Agricultural crops' insurance supports the crops against the loss that has damaged the farmer and prevents the farmers' revenue fluctuations. In this study, it is tried to model the farmer, participation in Zabol County in crop insurance scheme. To do so, using Positive Mathematical Programming (PMP), the farmers' behavior to participate in wheat crop insurance and evaluating the consequence of this participation was studied. This was done through introducing the crop insurance scheme in development model for a group of farmers in Zabol County. The required data was collected from two sources. The data related to the farm was collected from the farmers of Shib Aab and Posht Aab in Zabol County. In addition, the historical data related to the years 1999 and 2008 for the yields and prices was also collected. Based on the results of this study, all of the representative farms in insurance scheme participated in introducing wheat crop insurance to the farmers. Increase in under-cultivation wheat farms and their gross margin, was the result of this participation. The results showed that some of the farmers' continue participating in the project until the government reduces its support from insurance to 50 percent. Increasing the insurance premium or decreasing the government's support from the insurance, had a significant negative effect on under-cultivation wheat farms and their gross margin. According to the results it was shown that, the farmers' participation is different depending on the size of their farms, if they are small medium or large, and the smaller the farms the more sensitive the government is in the farmers' support rate. Therefore, to insure the crop it is recommended that the farmers being divided into homogenous groups and the support rate being determined for each group.**

**Keywords: Insurance Scheme, Positive Mathematical Programming, Participation, Zabol**



University of Zabol  
Graduate school  
Faculty of Agriculture  
Department of Agricultural Economics

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**Supervisor:**

Dr. M. Sabuhi

**Advisers:**

Dr. H. Mohammadi

MS. A.R. Sargazi

**By:**

H.R. Paknezhad

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