



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

**The Thesis Submitted for the Degree of M.Sc
In the field of Agricultural Economics**

Title:

**Application of Ricardian Method in Investigating the Economic
Impact of Climate Change on Agricultural Land Rents**

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Abstract

The aim of this study was to investigate the effect of climate change on two crops in agricultural sector and climate change factors on the rent of selected crops (wheat and corn) in panel data . static tests were conducted for panel data . the final goal in this section is to investigate the model for rent of wheat and corn . finally , the results of climate scenarios in the future are discussed and the results of future climatic scenarios are discussed .17 the results showed that most of the estimated coefficients such as chi - square and non - linear were significant . the results of model estimation for wheat crop show that by increasing the temperature , the net income will decrease by increasing the temperature , but in relation to harvest season , rent will decrease at first and then the rent of land will be increased . according to the results of this study , it can be concluded that there is a significant difference between the two groups ($p < 0.05$) . the interaction between temperature and precipitation has a negative and meaningful effect on the rent of the land . the results of three scenarios were identified . in scenario a and b , the rent of land increases and in the c scenario , climate change will reduce the amount of rent in the field .

the results show that the net income of the farm will increase . 17/5 the results of this model show that the net income of maize will increase . 22/5the results of this model show that the increase in rainfall will increase net income of maize . the results of the effect of temperature and average precipitation on the ground rent of maize crop show that an increase in the average temperature of more than 200 , 200 and 200 mm will increase the net income of maize field . the results of the effect of temperature and average precipitation on the rent of the maize crop show that an increase in the average temperature of more than 200 m / h leads to an increase in the rent and the increase in the precipitation .

key words : climate change , panel data , rent of agricultural land , stochastic method .