The Compilation of Agricultural Drought Insurance Plan by Using of Rainfall Index: The Case Study of Rain fed Wheat

Abstract

Iran is being located in the arid zone of the world and is exposed to numerous droughts. The average of rainfall in Iran is bout 1/3 out of the average rainfall in the world, and it is about 250 mm a year. Drought has profound impacts on agricultural production and profitability. There are many strategies to manage this risk. Crop insurance program is a vital mechanism in protecting farmers from such natural disasters. In this way weather index insurance by using weather index such as cumulative rainfall, can be valuable tools to reduce the risk associate with drought. This study evaluated the role and status of a drought insurance program based on cumulative rainfall index. It is also estimated important options at the insurance contract include maximum gain, premium rate and indemnity. To do so rain fed wheat is selected in three cities of Mashhad, Bojnord and Birjand. In addition this present pattern for insuring drought is compared with the method that is used by agricultural insurance fund. Results indicate that estimated maximum gain is seriously decreased and it is due to reducing moral hazard. At last it is suggested to facilitate the offer of drought insurance based on rainfall; policy makers must establish an appropriate legal and regulatory framework. Also for drought insurance to be successful data collection process should be trusted organize.

Key words: drought, cumulative rainfall, weather index insurance, maximum gain, premium rate, indemnity.

Graduate School
Faculty of Agriculture
Dissertation for M.Sc Degree in Agricultural Economic

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Spring 2009