Comparing Parametric & Non-parametric Methods in Study of Factors Effective in Acceptance of Agricultural Crops Insurance

Case study: Application of Artificial Neural Network & Logit Model in Study of Acceptance of Wheat Insurance in Kerman

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Abstract

Agricultural activities in comparison with other economic activities are faced with some risk and absence of more certainty. To challenge the risks, insurance of agricultural crops, especially the strategic wheat production, has constantly been proposed by experts and researchers as a supportive policy. To this end, and in order to study factors effective on acceptance of wheat insurance by farmers in Kerman in the agricultural year 1385-86 (2006-2007), some 134 questionnaires were completed through random sampling and by using logistic and neural network models for the assessment. The results showed that economic factors such as farmers' income and areas under cultivation were positively effective in the acceptance of insurance. Meanwhile, other social factors, including work record and level of education of the farmers had positive effects, while the age of the farmer had negative impact on accepting insurance.

Keywords:

Agricultural Insurance, Artificial Neural Network, Logit Model, Wheat, City of Kerman.

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