Barriers of Pastures Insurance Development from Experts' Perspective

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According to statistics released by agricultural insurance fund (AIF) less than 4 million acres out of 90 million acres has been covered by Pastures Insurance. This observation along with several facts motivated authors to study possible barriers which Pastures Insurance has been encountered in practice. The research population included all the experts in agricultural insurance fund. Small population caused a census study. The initial and follow-up mailing generated 100 useable responses from experts resulting in a response rate of 100%. This research applied SPSS Software to analyze the data. Data was analyzed using the factor analysis. KMO index along with the Bartlett test verify appropriateness of the collected data for explanatory factor analysis. Based upon the findings, the barriers have been classified into five factors named communication barrier, Extension barrier, Rangers' barrier, Organizational barrier and Experts' barrier. Among these factors, communication barrier plays the most important role. It is composed of lack of awareness of ranchers about legal affairs of pasture insurance; inappropriate behavior of insurance experts and extension agents, problems regarding with illiterate and old stakeholders, limited media for pasture insurance development. [Najafabadi **and** Rami. **Barriers of Pastures Insurance Development from Experts' Perspective. International Journal of Agricultural Science, Research and Technology, 2012; 2(1):43-46].**
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Abstract

1. Introduction

With the establishment of the Agricultural Products Insurance Fund in 1984, the Government actualized one of its most successful and progressive projects in the agricultural sector through the introduction of crop and livestock insurance system. Skilled planning and considerable efforts have resulted in the overall adoption of the insurance scheme in the rural areas of Iran. The Fund is rapidly expanding its activities in all strategic fields. It has extended the active areas of insurance from 2 provinces to all 29 provinces of the country thus increasing the areas insured from 90,000 hectares in 1984 to nearly 6 million hectares at present. The range of products, both agricultural and horticultural has increased from cotton and sugar beet to 25 main products in addition to livestock, forestry and pastures.

In an effort to preserve the natural resources of the country, the agricultural insurance Fund (AIF) launched its insurance program in 1997 in favor of the nation's forestry, pastures, and watershed management. Regarding their importance in the agricultural sector, the insurance scheme provides protective measures in order to safeguard the country's vast forestry, sizeable pastures, and watersheds against losses inflicted upon by nature, a major cause of which is drought. Pastures with the backing of approved executed projects, and forestry (one to five years old) located in the northern part of the country as well as the public investments in the biological section of watersheds are now all benefiting from insurance coverage (AIF website, 2011).

Unfortunately, Pastures Insurance does not receive enough attention from rangers. According to statistics released by AIF (2009) less than 4 million acres out of 90 million acres has been covered by Pastures Insurance.

This observation along with several facts motivated authors to study possible barriers and challenges which Pastures Insurance has been encountered in practice. Based upon the findings, the barriers have been classified into five factors named communication barrier, Extension barrier, Rangers' barrier, Organizational barrier and Experts' barrier. Among these factors, communication barrier plays the most important role. It is composed of lack of awareness of ranchers about legal affairs of pasture insurance; inappropriate behavior of insurance experts and extension agents, problems regarding

with illiterate and old stakeholders, limited media for pasture insurance development.

Efficient factors on demand for crop insurance in Fars province, showed that land ownership, wheat production of previous years, age, level of education, farmer's capital, risk taking, previous record for facing risk, have positive correlation with adoption of wheat insurance. (Torkamani, 2002).

Ghorbani and Darvish (2001), in their study about factor effecting adoption of agricultural products' insurance found that, increase in insurance level and investigation of factors effecting adoption of insurance is important issue for policy makers in order to be able to recognize the strength and weaknesses of adoption process of insurance.

Bouquet and Smith, (1996) pointed out that: previous recording facing risk, amount of debt to credit institutions and banks, variations of product quantity, literacy of farmers, are effective variables of adoption of insurance of wheat farmers in U.S.A.

Baker (1990) in his study has examined demand for rainfall insurance in half dry areas. The results showed that knowledge of farmers related to advantages and significance of rainfall insurance, have positive impact on their propensity for acceptance insurance.

Several problems inhibit the development of crop insurance, moral hazard (Goodwin and Smith, 1998), adverse selection (Goodwin, 1994 and Quiggin et al., 1994), systemic risk (Miranda and Glauber, 1997) and the absence of long-term data on agricultural yield and actuarial methods to accurately calculate the fair premium rate.

2. Methods and Materials

The methodology used in this study involved a combination of descriptive and quantitative research. Questionnaire items were developed based on the previous literature and objectives. The questionnaire was revised with the help of experts with significant experience to examine the validity of the research model. A 5–point likert scale ranging from 1 as strongly disagrees to 5 as strongly agree was used for the measurement. A pretest for the reliability of the instrument was conducted with 20 experts in AIF. It summarized barriers into one single variable, B. The computed Cronbach's alpha for R. is 93%, which indicated the high reliability of the questionnaire.

The research population included all the experts (N=100) in agricultural insurance fund (AIF). Small population caused a census study. The initial and follow-up mailing generated 100 useable responses from experts resulting in a response rate of 100%.

This research applied SPSS Software to analyze the data. All the variables in this study are correlated. On the other word there is not any dependent variable among the variables. For this reason, one has to employ explanatory factor analysis to classify variables into some factors. So there is not any Hypothesis in this research.

This research aims to reduce dimension of variables collected in this study. No theoretical framework is available for such reduction. Therefore, one has to employ explanatory factor analysis (say EFA). EFA can be employed for a collection of data which the KMO index exceed 0.7. In the EFA number of factors estimated based upon the scree plot and variable assigned by absolute value of factor loadings (before or after rotation). Moreover, factors rank based upon their eigen value or their contribution in total variance.

3. Results and discussion

Table 1 summarizes the demographic profile and descriptive statistics of experts. Age of the experts varies from 23 to 57 years old. Moreover, the majority of them are male and average of their work experience is 14 years old.

Table 1. Demographic Profile and Descriptive Statistics of experts

Work experience	Mean= 13.7	S.D=9.5	Min=1 and Max=30
Gender	Female (29%)	Male (71%)	Mode: Male
Age/year	Mean= 39.3	S.D=9.4	Min=23 and Max=57

Figure 1 illustrated information about reasons of purchasing pasture insurance. This information indicated that drought is the most important reason for pasture insurance from experts' perception (65 percent).
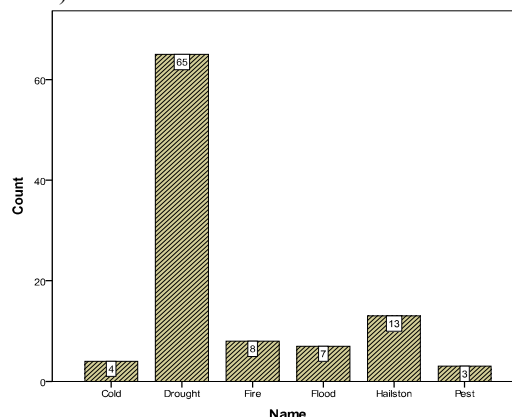

Figure 1. reasons of purchasing pasture insurance from experts' perception

Implementation of factor analysis summarizes all barriers into 5 factors given by Table 2.

Factor one is composed of the following barriers. Lack of awareness of ranchers about legal affairs of pasture insurance; inappropriate behavior of insurance experts and extension agents, problems regarding with illiterate and old stakeholders, limited media for pasture insurance development. These barriers are clearly related to communication factor. So it was named communication barrier. The Eigen value of this factor (2.705) indicates that the factor explained about 12% total of variance.

Factor two is composed of the following barriers. Negative attitude toward insurance, low ratio of rangers to extension agents, lack of research in natural resources extension, lack of linkage between extension and research, lack of presence of rangers in participatory projects. These five barriers are related to the extension aspect. So it was named extension barrier. The Eigen value of this factor (2.524) indicates that the factor explained about 11.4% total of variance.

Factor three is measured by the following barriers. Low indemnities to rangers, inequality of socio-economic in rangers' society, not refer of rangers to insurance fund on time, high cost of insurance tariff. The third factor was named rangers' barriers. The Eigen value of this factor (2.317) indicates that the factor explained about 10.5% total of variance.

Factor four is composed of the following barriers. Problems in compensating to rangers who receive damage, lack of planning, organization and monitoring, diversification of private and public goals. Factor four was labeled as organizational barriers. The Eigen value of this factor (1.666) indicates that the factor explained about 7.5% total of variance.

Factor five is composed of the following barriers. Negative attitude of experts to themselves, lack of informed experts in pasture insurance. So it was named as experts' barrier. The Eigen value of this factor (1.648) indicates that the factor explained about 7.4% total of variance.

Table 2 represents portion of each factor from the total common variance. As one may observe that about 49.36% percent of total common variance explained by these 5 factors, which the majority of it has been explained by the communication barrier.

Table 2. Factor Analysis of pasture insurance barriers

Factor name	Explained common variance by factor
communication barrier	12.2
Extension barrier	11.4
Rangers' barrier	10.5
Organizational barrier	7.5
Experts' barrier	7.4
Total	49.36

4. Conclusion and Recommendation

Unawareness of ranchers about legal affairs of pasture insurance pointed out as the most important factor in this research. This observation confirm by Salari (2009), Mark et al (2000).To enforcement this aspect in the target population, the governor should establish some communication group to exchange information and idea among the rangers. Moreover, mass media are used by the consumer industry to inform people about their products and services through advertising. Without advertising, the public will not know about various products and services insurance which are available in the market as well as their prices. Thus mass media help the insurance organizations to promote pasture insurance.

Ordering of extensional barrier show that unconfident and negative attitude toward insurance and policyholder is the most important variable. Therefore, one may suggest the Iranian government should cover some portion of pasture premium. On the other hand, considerable amount of compensation for pasture insurance is the most important challenge to extent such insurance in Iran. One may suggest that the insurance industrial organization revise compensation rules to make them more effective.

Government incentives through price support, increasing of agricultural products and effective use of applied methods can encourage ranchers to adopt pasture insurance.

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