Comparison of Personal, Social, Communicational and Extensional-Technical Characteristics of Ranchers in Ilam City In Related to Agricultural Products Insurance

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ABSTRACT

The purpose of this study was to compare personal, social, communicational and extensional-technical characteristics of ranchers in related to the insurance of agricultural products. The methodological approach of this study was causal- comparative. Ilam's ranchers were chosen as participants (N=5704). And 359 of them were selected by simple random sampling method. The validity of the research instrument was obtained by a panel of experts consisting of senior faculty members, insurance fund experts, and some experts of agriculture jahad organization of Ilam province. A pilot wok was conducted and the reliability of the questionnaire, involving 30 questions, was done by the ranchers outside the selected participants. Cronbach alph confidence coefficient was 0.79. Results showed that there is a significant difference at 0.05 levels among the averages ranchers' knowledge about insurance, consent from Insurance and technical extensional situation when two rancher groups were compared.

Key words: Insurance, Rancher, Ilam City
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INTRODUCTION

Agriculture sector in Iran, due to structural characteristics and a significant role which plays in the development of country, is of great importance. This sector is the most fundamental basis of the country development, the most important source of national wealth and also the provider of people's food needs and raw materials of country industries [5]. This sector is the most important and economical part and the programs pivot of economical-social development of the country because it nearly provides 1.4 national gross production, 1.3 work force employment, more than 4.5% food needs, 1.2% non-oil experts and about 10.9% industries' need to agricultural products [14]. Among the activities of this part, the production and the rearing of ranch is of special importance so it provides the society's protein needs.

At the present time, more than 85% employees of agriculture field work in cattle industry separately or in addition to garden and a rebel activities. Undoubtedly, one of the important in inhibitor factors of attracting personal investment in agriculture and cattle industry is natural and cattle production seriously. So much natural risks of country make farmers and ranchers face with a lot of problems. This causes their discouragement not to invest next years. Decrease in investment also causes decrease in production, so the food security of society is at risk [10]. The most obvious aspect of rural life is insecurity. Farmer doesn't have security, because, income hand, natural disasters often threat him to the decline in products and in other hand, he faces with vacillation of costs marker [2]. A main point is that agriculture insurance doesn't directly increase the ranchers' and farmers' income; but, by management risk in the riskiest part, it indirectly increase income source [13]. Studies show that the production in agriculture faces with random and unpredictable events resulted in weather conditions, pests and herbaceous and cattle diseases, and other natural disasters. These factors cause significant vacillations in cattle and agricultural products. But because our

4126

country has very variant climatic conditions, the range of necessary risks of agricultural activity is very different and it asks the more complex service to face risks [4].

Literature Review

Insurance of agricultural products is among the useful programs of management-risk which, by increasing the degree of risking farmers and ranchers, cause them to invest in new technology and, to increase efficiency in using resources, and also to provide security in producing agricultural and cattle products [15]. Also, In the united Nations second conference in Paris titled "on Investigation of agricultural development of less-developed countries", insurance has been confirmed as a part of a comprehensive program of supporting service and nowadays, instance is one of the main issues of economical- social development programs of countries; because the insurance development has a direct relationship with the economical-social development and results in an improvement of people's income condition and income analysis [4]. Based on Bahrami and kalantari's researches [2]. The agricultural insurance has been attracted as one of the efficient and effective method which can decrease the risk coefficient of cattle and agricultural activities and increase investment security in this part.

Wang [16] has investigated the farmer's behavior in the insurance of agricultural products. Results showed that in the voluntary insurance, due to the lack of nation helps, most of the farmers may not tend to insure their products and request for agricultural insurance decrease; so it is necessary to make sure farmers from the results and productivity to increase their inclination in insuring their products. In 2010, Feng and Zhang [6], in their research, identified four main problems in the development of agricultural insurance in china consisting of: 1. not to be proportionate the level of agricultural insurance development and the basic situation of agriculture in the national economics, 2. imbalanced between the level of agricultural insurance development and agricultural wastes. 3. To be low the commitments level of agricultural insurance and 4. Not to be equal the agricultural insurance development in different areas of china.

In a research in 2006, Muze and vevere[11] examined the consent of 1650 insured subjects and concluded that the effective factors on the consent of the insured, in order of importance, are confidence to the quality of received services, understanding and obviousness of provided information enough attention to the needs of insured subjects, difficulties in the customers' service units, confidence to the protection of personal information, individual approach, enough confidence to the insurance company, the necessary time to solve problem, the quality and usefulness of problem.

Some researches have been conducted to improve and enhance investment in the production related to the agricultural insurance in china. It was suggested that first, the national subsidies of agricultural insurance should be gradually done in some provinces experimentally and their evolution and complexity are improved, then they will act effectively. Second, government should carefully consider insurance companies and be aware of their different insurances and products. Finally, primary subsidies and different agricultural insurances can be provided based on the insurance products which are done in different places [18].

In their study, Williams et al [17] identified that, by changing the amount of insurance premium, they can get shareholders with different risk degree accept the agricultural products insurance. Rastgoo and Rezvanfar [12] examined effective factors on the development of agricultural products insurance in khodabande city. In this study, the low consent of farmers from insurance plan was related to the less speed of paying indemnity and the indemnity amount to them. There fore, these should be paid carefully and fast to increase the farmers' motivation.

In Ghochan, a study titled "Investigation of farmers' attitude to grape insurance" was done to recognize effective economical-social factors on the process of insurance acceptance. In this study, variables examined are as follows education, income level, enough technical- knowledge to harvest, using of extension services and the age of shareholders which all of them have a positive impact on the acceptance of products insurance on behalf of farmers [9].

Kohansal and Rahnama [8] investigated effective factors on the request to insure almond in Taft city, Yazd province. Results showed that variables such as agriculture history, relationship with extension workers, previous year's climatic conditions and the received indemnity amount against injuries, had positive and significant impacts on the request for insuring almond product.

Based on Abdollahi and Eslamlueean's studies [1], factors such as responder's education, pistachio age, farmers' liability amount, pistachio product Function, high risking and risk aversion of gardeners, having knowledge about experimental insurance plan of pistachio and having a job out of farm have a negative impact on the inclination to

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farmers' cooperation in the fair insurance plan of pistachio product. Instead, such factors as gardener's age and low risk aversion have a positive impact on the acceptance of insurance plan.

Zamani et al [19] studied the acceptance of agricultural products insurance and its determinant agents, and they applied spreading theories, farm structure and multidimensional to determine effective agents on the acceptance behavior of agricultural products insurance. Based on the findings of this study, the main effective agents on the acceptance are: farmers' knowledge about insurance, loan receipt, risking, and distance to administrator, subject's commitment to agriculture bank and the size of producing unit.

Hosseini and Hassanabadi Zadeh [7] indicated that there was relationship between the educational factors and the role of insurance in reducing risk by livestock managers. Also Successful adoption of livestock insurance will also depend on participation of stakeholders in process of formulating and developing policies which enhance the empowerment of livestock owners

Davodi and Maghsoudi [3] showed development of the agriculture products insurance was a strategy for agriculture services development in iran, also

MATERIALS AND METHODS

This study is applied, and it has used from comparative-causal research method because it compares characteristics of ranchers who have accepted insurance with those of ranchers not accepting insurance. Participants of this study were Ilam ranchers (N=5704). The study used from simple random sampling, and its statistical universe was Ilam villages where they were sampled by using of Cochran formula (n=359). From this sample, 130 respondents had insured their cattle and 229 of them hadn't insured their cattle. The main aim of this study was to compare, social, communicational and extensional characteristics of Ilam ranchers in terms of agricultural products insurance. Its special aims are as follows=1. To determine the ranchers' personal, social, communicational and technical-extensional characteristics.

2. To determine barriers of cattle insurance
3. To compare personal, social, communicational and extensional characteristics of two groups of ranchers.

To determine the validity of a questionnaire, it was given to senior faculty members, insurance fund experts and some experts from agricultural jahad organization of Ilam province. And a pilot work was done to determine the reliability of the instruments and to gain variance for sampling.

The questionnaire was given to 30 ranchers in Eyvan city where they were similar to the statistical universe in terms of social, cultural, economical and climatic conditions. After getting data, Alpha Cronbach alph confidence coefficient was .79 for all variables with rank scale.

Table1: Frequency Distribution of Ranchers' personal characteristics

Age (year)	Frequency	Percentage	Average	Standard Deviation
18-35	39	11.4		
36-45	82	24.0		
46-55	106	31.1	49.7	1.27
56-65	85	24.9		
66-80	29	8.5		
Education (year)	**Frequency**	**Percentage**	**Average**	**Standard Deviation**
Illiterate	26	7.8		
Elementary school (1-5)	141	42.6		
Guidance school (6-8)	78	23.6	6.55	3.68
High school(9-12)	84	25.4		
Pre-university (12-14)	2	0.6		
Stock Rising History (year)	**Frequency**	**Percentage**	**Average**	**Standard Deviation**
1-5	31	9.7		
6-10	68	27.2		
11-20	136	42.5	20.04	1.4
21-30	46	14.4		
31-40	39	12.2		

4128

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RESULTS

Personal characteristics of respondents:
The obtained data showed that the average age of respondents was 49.7 the average of their education level was 6.55, and the average of stock rising was 20.04. Thus, it can be concluded that most of the ranchers are middle-aged and their education is at an elementary.. Also, most of them have worked in stock raising field about 10-20 years.

Respondents'' social characteristics:
An amount of ranchers' attitude about cattle insurance was 7 questions, that of their consent from insurance was 8 questions and the amount of their social permeability was 7 questions which all of them have Likert 6- options spectrum. Giving score to the above mentioned spectrum is as follows: 0=none, 1= very low, 2= low, 3= mean, 4= high, 5= very high. So, the maximum scores for attitude, consent and permeability are 35, 30, and 35, respectively and the minimum score will be zero.

According to the results, the social permeability of 19.2% of respond ants was very low and low, that of 51.1% and 30.8% of them were moderate and high, respectively. Like wise, 40.8% of ranchers had a very low consent from rural cattle insurance, 42.8% and 6.4% of them had moderate and high and very high consent, respectively. According to the table, 14.2%, 68.3%, and 17.5% of ranchers respectively had weak, mean and very good attitudes to insurance.

Table2: Frequency Distribution of Ranchers' social characteristics

Social permeability	Frequency	percentage	Average	Standard Deviation
Very low (0-3)	1	0.3		
Low (8-14)	64	17.8		
Mean (15-21)	184	51.1	24.60	4.05
High (22-28)	111	30.8		
Very high (29-35)	0	0		
Consent to Insurance	**Frequency**	**percentage**	**Average**	**Standard Deviation**
Very low (0-8)	41	11.4		
Low (9-16)	142	39.4		
Mean (17-24)	154	42.8	22.97	7.10
High (25-32)	17	4.7		
Very high (32-40)	6	1.7		
Attitude to Insurance	**Frequency**	**percentage**	**Average**	**Standard Deviation**
Very low (0-7)	0	0		
Low (8-14)	51	14.2		
Mean (15-21)	246	68.3	24.58	3.71
High (22-28)	59	16.4		
Very high (29-35)	4	1.1		

Table 3: Frequency Distribution of Ranchers' communicational, Technical Extensional characteristics

Information sources	Frequency	percentage	Average	Standard Deviation
Very low (0-8)	11	3.1		
Low (9-16)	53	14.7		
Mean (17-24)	140	38.9	30.7	7.14
High (25-32)	119	33.1		
Very high (33-40)	37	10.3		
Technical-Extensional situation	**Frequency**	**percentage**	**Average**	**Standard Deviation**
Very low (0-3)	44	12.6		
Low (4-6)	111	31.6		
Mean (7-9)	137	39	8.68	2.94
High (10-12)	52	14.8		
Very high (13-15)	7	2		
Knowledge about Insurance	**Frequency**	**percentage**	**Average**	**Standard Deviation**
Very low (0-5)	3	0.8		
Low (6-10)	23	6.4		
Mean (11-15)	83	23.1	17.23	3.94
High (16-20)	238	66.1		
Very high (21-25)	13	3.6		

Communicational, technical and extensional characteristics:
The amount of ranchers' knowledge about cattle insurance, the amount of resonances' use of information resources and the technical-extensional situation were measured by 5, 8, and 3 questions, respectively. All of these questions have likert 6-0 options spectrum. Giving score to the mentioned spectrum is as follows=0=none,1=very low 2= low,

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3= mean, 4= high and 5= very high. Therefore, the maximum scores for knowledge, information resources and technical-extensional situation were 25, 40, and 15, respectively and the minimum score will be zero.

According to the table, 301% of respondents used from information resources very low, and 14.7%, 38.9%, and 43.4% of them used it low, mean and high and very high, respectively. Also, 44.2% of respondents stated the technical extensional situation very weak and weak, 39% and 16.8% of them stated it mean and good and very good, respectively. Likewise, based on the results, the knowledge of 7.2% of ranchers about insurance was very low and low, 23.1% of them were mean and 69.7% of them were high and very high.

Barriers in getting insurance:
Ranchers face with some barriers in accepting and using the rural cattle insurance. Here, it has been stated 20 barriers in likert 6-options spectrum. Respondents state them from none to very high based on their prevention. Table 4 shows the average and the rank of barriers or problems from ranchers' points of view.

According to the table, the following problems are among the most important ones in getting the rural cattle insurance: not covering all the risks by insurances, having official problems of contract with insurance and the inefficiency of paying indemnity in compared to injury.

Table4. Ranking Items Related to the Barriers in Getting Insurance

Items	Average	Changes coefficient	Standard Deviation	Rank
Not covering all the risks by insurance	5.19	0.93	17.93	1
Having the official problems of contract with insurance	4.82	098	20.25	2
Inefficiency of payment indemnity in compared to injury	4.72	1.08	22.79	3
Not being knowledgeable of ranchers about the benefits and results of cattle insurance	4.80	1.14	23.74	4
Not cooperating other related organizations and parts	4.62	1.11	24.14	5
Having problems in paying insurance premium 4.67 for rural ranchers.	4.67	1.14	24.41	6
Being low the paying indemnity by insurance 4.92	4.92	1.21	24.64	7
Being low the income level of rural ranchers	4.69	1.15	24.64	8
Being high the insurance premium	5.05	1.25	24.81	9
Not cooperating the insurance underwriters and agriculture bank	4.53	1.15	25.38	10
A lack of financial facilities of insurance fund to execute cattle insurance in wide range	4.34	1.11	25.57	11
Not paying the indemnity in time to the injured ranchers	4.64	1.24	26.67	12
Being difficult to execute rural cattle insurance for custodians	4.30	1.18	27.35	13
Resistance of the peasants against the change and acceptance of new ideas	4.31	1.22	28.26	14
Weak propagandas of insurance fund and agriculture bank	4.29	1.22	28.31	15
Not paying attention to the educational programs to increase ranchers' knowledge about insurance	4.36	1.28	29.43	16
Not having encouraging programs and policies for the insured subjects	4.40	1.33	30.10	17
Not being available insurance centers and agriculture bank	4.20	1.30	31.02	18
A lack of personnel's facilities of agriculture bank branches in cities	4.09	1.28	31.26	19
Peasants' belief to God's destiny	4.18	1.42	33.94	20

None=0, very low=1, low=2, moderate=3, High=4, very high=5

Comparisons of personal, social, communicational and technical –extensional characteristics in two groups of ranchers:
Results in table 5 show that there is a significant difference at 0.05 level among the averages of stock raising history, social influence, attitude to the insurance, ranchers' knowledge about the insurance, consent from insurance and the technical- extensional situation in both rancher groups. So, the ranchers who have insured their cattle have high averages of the above mentioned variables.

Table 5: comparison of personal, social, Economical and Extensional characteristics of both Rancher Groups

Independent variable Dependant variables	Ranchers who have insured their cattle (N=130)		Ranchers who haven't insured their cattle (N=229)		t	Significant
	M	SD	M	SD		
Age	50.94	16.85	49.16	9.43	1.07	0.28
Education level	6.47	4.06	6.57	3.45	-0.25	0.8
Stock Raising History	25.69	17.23	17.14	11.06	5.6	0.000
Social influence	25.89	3.70	24.56	3.70	-3.02	0.003
Attitude to Insurance	25.87	4.12	24.52	2.93	3.16	0.002
Consent from Insurance	24.34	5.84	22.86	7.06	0.02	0.04
Information sources	30.86	7.63	31.71	5.86	-1.03	0.3
Technical-Extensional situation	9.35	2.75	8.73	2.79	1.93	0.05
Insurance knowledge	20.89	3.79	19.76	4.06	-2.54	0.01

Suggestions:
Based on the analyses, it can be concluded that the cattle insurance is a wide process in Ilam, It should cover all the ranchers and this aim should be obtained in a short time. It is suggested that we should start from ranchers having a high social influence and high knowledge about insurance and then go to the ranchers having a better attitude about insurance and a high stock raising history. In order to, accept more and more insurance. Also, it is suggested that we increase the insurance coverage based on the ranchers' wishes, enhance their knowledge about the benefits and results of the insurance, and use the related organizations in giving information and insurance.

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