

Investigation Factors Affecting the Satisfaction of Cold Water Fish Farms Policyholders from Agricultural Insurance in Mazandaran Province

Ghodratollah Nouri¹, Reza Khoshsima¹, Hassan Salehi²

¹. Department of Management, Buin Zahra Branch, Islamic Azad University, Buin Zahra, Iran

². Research Institute of Fishery Science, the Department of Economic and Social Studies, Tehran, Iran

reza.khoshsima@gmail.com

Abstract: The present study aimed to investigate the factors the satisfaction of cold water fish farms policyholders from agricultural insurance in Mazandaran province to provide appropriate solutions for provider organizations, policy makers and institutions. The population of the study is 63 cold water fish breeders of Mazandaran province that during the years 2009 to 2013 had insured their farms by agricultural insurance. A questionnaire was used to collect field data, and its validity evaluated by a panel of experts and its reliability confirmed using Cronbach's alpha coefficient which was 0.88. According to the results, it seems that variable "agricultural insurance fund has addressed our complaints on time" had a greater impact on satisfaction at level of 30%; and then the variable "we're satisfied compensation of how to identify and assess agricultural insurance fund" at level of 28%; then the variable "distance between compensation for damages by the time specified by the appropriate insurance fund" at 23% level and finally variable "clash of the managers and employees of agricultural insurance fund is appropriate" at level of 20% are effective in satisfaction, respectively. In addition, "agricultural insurance fund has addressed our complaints on time" was able to explain the satisfaction policyholders from insurance. Values (Beta=0.30, p=0.004) show that with one unit increase in the variable "timely handling of complaints", 1.4% increase in the variable "satisfaction from agricultural insurance" has been obtained. The results indicate that the major aquaculture dissatisfaction was about the "lengthy interval between loss and compensation, lack of adequate process of detection and estimation of compensation, how to deal with the complaints and demands of aquaculture and how to treat agricultural insurance fund managers and staff".

[Ghodratollah Nouri, Reza Khoshsima, Hassan Salehi. **Investigation Factors Affecting the Satisfaction of Cold Water Fish Farms Policyholders from Agricultural Insurance in Mazandaran Province.** *Researcher* 2016;8(2):41-46]. ISSN 1553-9865 (print); ISSN 2163-8950 (online). <http://www.sciencepub.net/researcher>. 7. doi:[10.7537/marsrsj08021607](https://doi.org/10.7537/marsrsj08021607).

Keywords: Agriculture Insurance Fund, Aquaculture, Cold Water Fish, Satisfaction, Dissatisfaction, Fishery

1. Introduction

The agricultural sector has great importance in the global economy and the country's economy and has an important role in providing food security (Zamani, 2001; Mohammadi, Daniyani and Fooladi, 2001; and Jafarzadeh, 1999), the high rate of job creation (Consulting Engineers, 2001; Karimi, 1994), the high percentage of potential foreign exchange (Mohammadi, Daniyani and Fooladi, 2001), and GDP (Consulting Engineers, 2001).

On the other hand, among the different economic sectors, agriculture due to the special conditions governing it, including activities mainly venture (risk), and decisions and activities of agricultural producers are affected by this phenomenon. Risks that threaten agricultural products are: Fire, lightning, hail, ice, snow, storm, wind and rain, the effects of weather, tornado, damage to animals and birds, hostilities, earthquakes, landslides, volcanic eruptions, vermin and pest drought risk. Thus, planners usually plan for agricultural units in the face of uncertainty conditions (Consulting Engineers, 2001).

Experts agree that in theory agricultural insurance fund is a mechanism involved in risk taking, but in practice, a costly tool to transfer the risk of Farmers and producers of public and private insurers (Consulting Engineers, 2001).

One of the ways that encourage rural and agricultural insurance products is important, would be satisfaction of present policyholders from insurance (Fakoor, 2000), because these people are very important factors in encouraging other farmers to buy insurance (Sajjadi, 1999).

In this regard, an important principle of marketing, the cost of adding a new client satisfies a current customer is five times (Warnock, 1992). The most important factor to attract aquaculture to the proper functioning of agricultural insurance and agricultural insurance fund is satisfactory.

Studies of Goodwin (1993); Chizari and Ghalavand (2003), Smith and Bakouee (1996), Jamshidi (2000), Mobasheri (2000) and Qaed Amini (1998) confirmed the effect of this variable. Serra et al. (2003) suggest an increase in premiums reduced farmers' willingness to participate in the insurance

program. Material factors in the insurance program is not limited only to premiums, but the amount of compensation received by farmers after the damage and grant programs and help governments and organizations are also located in this area. A study was conducted on Kansas wheat farmers became clear, the farmers who saw their sponsored grant programs were less likely to participate in insurance programs (Goodwin & Smith, 1995).

In a study by Tirae and Yari (2002), entitled "The modernization of personality factors affecting the adoption of agricultural insurance" in Khuzestan province, between age, education and number of household members, the adoption of agricultural insurance fund and there was a significant positive relationship. In a study by Seddiqhi (2003) on 2000 rice cultivator in northern Iran about their satisfaction in creating production cooperatives, the farmers' age was negatively correlated with satisfaction.

On the other hand an important factor in satisfaction of the farmer's risk insurance fund agriculture. In other words, farmers in a position to pay farmers higher risks, have desire and satisfaction from insurance. Chizari and Ghalavand quoting Ehsani et al. that factor influencing the adoption of agricultural insurance fund exposure with risk.

Johnson et al. study (2001), and Nogin and Liblans (2001), have confirmed this issue. In other words, the customer point of view to the successful operation of the external image of the organization in the past called on to customers.

The aim of this study was to investigate the influence of variables "when referring to insurance experts in the fields", "the gap between the time the determination of compensation for damages", "time to pay compensation", "The premium rates (tariffs)", "the amount of compensation", "how to identify and assess compensation by insurance", "procedure to pay compensation", "complaints and handling insurance agents", "the way managers and employees of insurance", and ads influence insurance "variable" satisfaction of insurance "as a dependent variable.

Materials and methods

The population of the study is 63 cold water fish breeders of Mazandaran provinces that during the years 2009 to 2013 had insured their farms by agricultural insurance and randomly were investigated. In order to understand the factors influencing satisfaction questionnaire design through interviews with aquaculture and the survey was completed and design assessment tools, was trying to assess the scale of satisfaction and factors affecting it are investigated and provide other local data resulting from questions included in the questionnaire was also designed. For the validity of experts and Cronbach's

alpha was used for reliability. The dependent variable of the study, "satisfaction of agricultural insurance" and Independent variables include: "The gap between claims and determining compensation", "how to determine damages from the insurance fund agricultural experts", "how to handle aquaculture complaints", and "attitude of managers and employees of agricultural insurance fund" and various measures to assess the variables that were scored with the Likert scale was used and the variables of a 5-point scale of "strongly agree", "agree", "somewhat agree", "disagree", "strongly disagree" was used. As well as to review and assess "the satisfaction of agricultural insurance fund" as a dependent variable of aquaculture were asked to answer the questions carefully the range includes 20 episodes graded from 1 to 20 and equivalent to the lowest to the highest score or completely dissatisfied to completely satisfied with it.

Statistical method

In order to measure the satisfaction of Aquaculture of agricultural insurance fund between the dependent variable (satisfaction) and independent variables, linear regression test and Pearson's correlation coefficient was used step by step and in this way to increase or strengthen the variables involved and effective satisfaction. In the residual model and other variables that affect the increase in the variance of the dependent variable of the model have been removed. Linear regression (multiple) regression analysis is a method of prediction equation satisfaction of the following.

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4$$

Y = estimated value (dependent variable)

a = constant value

x₁ = first independent variable

x₂ = second independent variable

x₃ = third independent variable

x₄ = fourth independent variable

Results

For reliability, Cronbach's alpha is used which was 0.88, and then set variables, coefficients corresponding to each of the variables and constants are as shown in Table 1.

According to Table 1, it is observed that the variable "Agricultural Insurance Fund due to complaints we handle the" at level of 30% has greater impact on satisfaction, and then the variable "compensation of how to identify and estimate the Agricultural Insurance Fund, I'm satisfied" at the level of 28%, variable "distance between the damages with the time set by the insurance compensation is satisfied" at the level of 23%, and finally, the variable "Clash of managers and employees is agricultural insurance fund" have been effective in 20%

satisfaction rate and other variables in the model have not been satisfied because of the increased variance.

Table 1: stepwise regression of individual variables influencing satisfaction

Model/variables	Non-standard coefficients		Standard coefficients	t	Sig
	B	S.D.	Beta		
Constant coefficient	25.9	1.95		13.66	0.000
handle complaints and requests	1.4	0.476	0.301	2.96	0.004
How to estimate loss from the insurance fund	1.27	0.521	0.281	2.45	0.017
distance between the loss and determine compensation	1.11	0.530	0.232	2.09	0.004
attitude of managers and employees	1.07	0.499	0.204	2.14	0.036

$$Y = 26 + 1.27(x_1) + 1.4(x_2) + 1.07(x_3) + 1.11(x_4)$$

In other words, changing "agricultural insurance fund is timely to consider my complaint" has been unable to explain the satisfaction of policyholders of agricultural insurance, and the values of $p = 0.004$, and $Beta = 0.30$ has shown that variable in increments of one standard deviation in dealing with complaints in a timely manner aquaculture, a 1.4% increase in the standard deviation, the variable satisfaction has caused agricultural insurance and so on "how to recognize and estimated variable compensation insurance fund agriculture, I'm satisfied," explained 28% of variation in satisfaction. And the values of $p = 0.017$, and $Beta = 0.28$ has shown that the variables in increments of one standard deviation increase in the standard deviation between 1.27% satisfaction is associated with Farmers Insurance.

The variable "compensation determined by the distance between the damages with the insurance fund" explains 23% of variation in satisfaction and values of $p = 0.004$, and $Beta = 0.28$ has shown that in increments of one standard deviation. The variable "compensation determined by the distance between the damages with the insurance fund" increased 1.11% standard deviation in the variable satisfaction agriculture insurance. Finally, handling and insurance fund managers and staff satisfaction explained 20% of variance and the values of $p = 0.036$, and $Beta = 0.204$ has shown that in increments of one standard deviation in the variable complaints from insurance increased 1.071% increase in the standard deviation satisfaction agricultural insurance is variable.

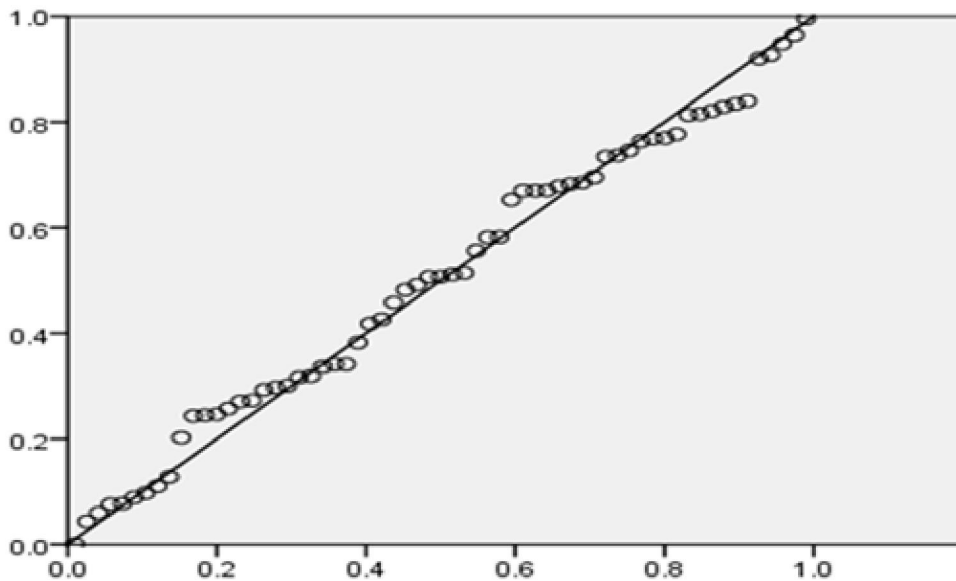


Figure 1: regression of research variables

Figure 1 shows the correlation coefficient test and the independent variables and the dependent variable (satisfaction) is correlated and predictable.

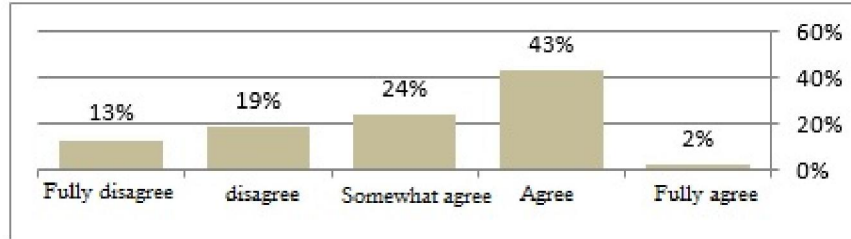


Figure 2: Average satisfaction with how to handle complaints

Figure 2 shows that the majority of aquaculture of how to handle complaints and desires of Agricultural Insurance Fund has been satisfied,

therefore, should seek to strengthen the insurance fund to absorb more of the variable to be created.

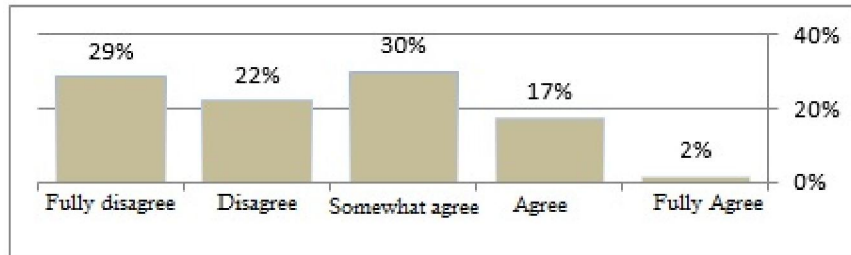


Figure 3: Average satisfaction with the damage estimate

Figure 3 shows that most aquaculture of how to estimate the damage is not satisfied by the Agricultural Insurance Fund, so the process variable

insurance fund should be revised to more satisfaction with the performance of the aquaculture agricultural insurance fund to be created.

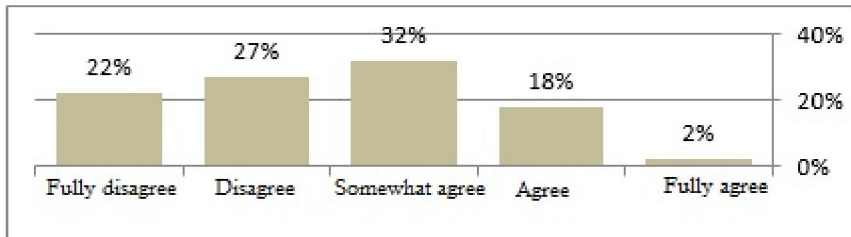


Figure 4: Average satisfaction of the distance between the damage and determine compensation

Figure 4 shows that the distance between the dominant aquaculture damages to farm fields are not satisfied with the determination of compensation from the insurance fund, the insurance must be in the

process of reengineering this variable so that aquaculture satisfaction over the performance of the agricultural insurance fund.

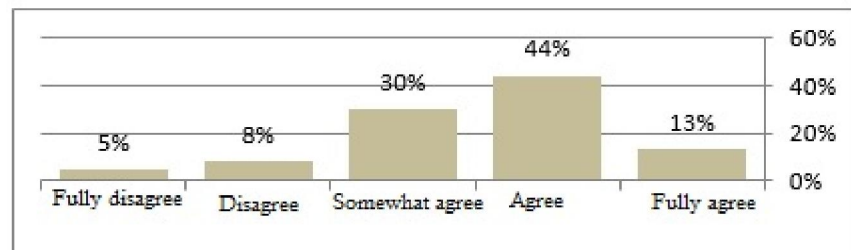


Figure 5: Average satisfaction with the behavior of managers and employees

Figure 5 shows that the vast majority of aquaculture handling agricultural insurance fund administrators and staff satisfaction is high, so farmers have to maintain the status quo Insurance Fund seeks to reinforce the variable to be created to absorb more aquaculture.

Discussion:

Aquaculture much risk is an important factor in satisfaction of agricultural insurance fund. In other words, aquatic conceive in a position to produce their risks higher desire and satisfaction than to have insurance, Chizari and Ghalavand quoting Ehsan et al., factors affecting the adoption of agricultural insurance fund exposure is safe. There are also material factors to satisfaction of policyholders and insurance agents can place, receive compensation after the damage is or support programs such as grants. It can be safely said physical variables; the effect of policyholders' satisfaction is the key. The Voluntary Fund for Agricultural insurance may be more to attract those beneficiaries that the actions are at greater risk (Chizari and Ghalavand, 2003). Studies of Smith & Bakouee (1996), Yaqubi Frani (2000) and Nikouei and Turkmani (1999) of these variables can ignore the farmers' participation in insurance plans. The effect of service performance and satisfaction by insurance policyholders of agricultural insurance in most cases correspond.

Rastgoo and Rzvanfar (2007) Factors affecting the development of strategic agricultural insurance products in the city have examined in Khodabande city. Due to factors such as speed and low satisfaction farmers compensation and the compensation is proposed that the adoption of measures by the Agricultural Insurance Fund, pay compensation to the affected farmers will proceed with speed and accuracy to enhance the motivation of farmers. According to their results, the results of this study also showed that by increasing the provision of quality services such as: Timely presence of experts in the fields of insurance and the estimated damage to determine the compensation, how to detect and determine the amount of damages, insurance managers and employees more attention to the demands, needs and complaints aquaculture and timely handling customer complaints and strengthen their Fund managers and employees on how to deal with the promotion of agricultural insurance, satisfaction aquaculture in others.

Reza Shahnoushi in a study on satisfaction about Khorasan Razavi wheat growers of agricultural insurance concluded that the services provided by the Agricultural Insurance Fund as well as the amount or extent of land peasants, and irrigated farms and

farmers studied had an effect on the level of their satisfaction with insurance.

The study by Liu Young in 2008, as the cause of the success of agricultural insurance in China, Japan and several countries using the data done Come to the conclusion that satisfaction with the performance of agricultural insurance in order to compensate policyholders in time and tariffs to a variety of insurance tariffs and direct and indirect government support (production subsidies and payments) is connected.

The results suggest that attention to aquaculture as a principal component of the Agricultural Insurance Fund in satisfaction is crucial. For this reason and based on the results of satisfaction aquaculture agricultural insurance fund during the years studied was less than 50% indicated their satisfaction at moderate to low level of agricultural insurance fund.

It looks for changes in any of the variables "prompt handling of complaints by the Agricultural Insurance Fund aquaculture", "How appropriate compensation estimate", "suitability gap between compensation for damages at the time set by the Agricultural Insurance Fund "and" a good deal of Agricultural Insurance Fund managers and employees" increased by 1.4, 1.27, 1.11 and 1.07 percent in satisfaction of the Agricultural Insurance Fund and the same amount of satisfaction has affected aquaculture insurance.

The results of this research can be concluded that the role of providing quality service in a timely manner to deal with complaints and demands, including aquaculture, review and reform process on how to estimate and determine the damage, shorten the distance between a set time damage as well as damage to farms with more attention on how to deal properly with aquaculture managers and employees of agricultural insurance fund satisfaction of agricultural insurance as an important factor affecting aquaculture, respectively. So it seems that the most important and effective should be placed on the agenda of decision-makers in the field of agricultural insurance fund so that increase satisfaction, insurance tends to promote aquaculture and eventually lead to inclusive and sustainable development, which consequently fidelity insurance (insurance renewal) aquaculture.

Acknowledgements:

I do appreciate Fellow Iranian Fisheries, Fisheries Science Research Institute and the Agricultural Insurance Fund due to the selfless cooperation in this study.

References:

1. Nouri, Gh. (2014). Fish-growing fields of agriculture insurance policyholders causes of

- dissatisfaction (Northern provinces), Master's thesis, Qazvin, Buin Zahra, management group.
2. Tiraye, Y. (2001). Study of personality factors in allowing the modernization of agricultural insurance fund by farmers in Khuzestan province, M. Sc., Tehran, Tarbiat Modarres University, Department of Agricultural Extension and Education.
 3. Jafarzadeh, A. (1999). The importance of agricultural insurance fund in the normal compensation, the insurance industry Journal, Issue 55.
 4. Jamshidi, M. (2000). Understanding the factors affecting the development of rural livestock insurance in East Azerbaijan province. MA thesis Rural Development, Faculty of Agriculture, University of Technology.
 5. Chizari, F. and Ghalavand, K. (2003). Factors Affecting the Adoption of funds between farmers in the provinces of Tehran and Mazandaran agricultural insurance, agricultural insurance fund research assistant.
 6. Zamani, Gh. (2001). The estimated manpower and employment pathology graduates of the agricultural sector of the country, Tehran Institute of Research and Planning in Higher Education.
 7. Sajjadi, A. (1999). Stresses customer satisfaction in business, management, Issue 22.
 8. Sarmad, Zh., Bazargan, A. and Hejazi, A. (2000). Research Methods in Behavioural Sciences (third edition), Tehran, Agah.
 9. Fakour, M. (2000). Impact of service quality on customer satisfaction fire insurance, insurance industry quarterly, year, Issue 60, pp 63-74.
 10. Ghaed Amini, H. (1998). Factors influencing policyholder satisfaction and increased sales of insurance companies, the insurance industry quarterly, year Issue 50, pp 15-31.
 11. Krimi, A. (1994). Insurance fund agriculture in developing countries, Journal of the insurance industry, the ninth year, No. 36, pp, 31-53.
 12. Mobasheri, J. (2000). The level of satisfaction of policyholders injured in auto insurance, Insurance Industry Quarterly, Year Issue 58, pp. 65-81.
 13. Mohammadi Donyani, M. and Fooladi, M. (2001). The employment status of graduates in Agriculture Productivity, Journal of Agricultural Economics and Development, pp 327-342.
 14. Consulting Engineers (2001). Proceedings of meetings of the three conferences of agricultural insurance, development and investment security, agricultural insurance fund.
 15. Nikouei, A. and Torkamani, J. (2001). Agricultural policy with a view on Farmers' Willingness to take risks and use of inputs, Journal of Agricultural Knowledge, Volume 11, Number 1.
 16. Nikouei, A. and Torkamani, J. (1999). Factors affecting demand for agricultural insurance: A Case Study of Farmers city of Sari, Iran Journal of Agricultural Science, Volume 30, Number 2.
 17. Goodwin, B. (1993). An empirical analysis of the demand for multiple peril crop insurance. American Journal Agricultural Economics, (75):425-434.
 18. Goodwin, B & Smith, V.(1995). The economics of crop insurance and disaster. The AEL press publisher for the. Americanenterprice institute. Washington, DC.
 19. Gustafson, C.(1997). Serving the Continuing Education Needs of Crop Insurance Agents. Journal of Extension. Volume. 35. No. 2.
 20. Johnson, M. Gustafson, A. Andreassen, T. Lervik, L & Cha, J.(2001). The evolution and future of national customer satisfaction index models. Journal of Economics psychology, 22(2): 217- 245.
 21. Nguyen, N & Leblance, G.(2001). Corporate image and Corporate reputation in customers retention decisions in services. Journal of Retailing and Consumer Services, 8(4): 227-236.
 22. Sadighi, H. (2003). Rural production Cooperative Approach and Farmers professional Satisfaction. Proceedings of the 19 Annual Conference. Raleigh, North Carolina, USA.
 23. Serra, T. Goodwin, B & Featherston, A.(2003). Modeling Changes in the U.S0 Demand for crop Insurance During the 1990s. American Agricultural Economics Association
 24. Warnock, p.(1992). "Surveying clint satisfaction". Journal of extension. 30 (1).