



ANALYSIS ON THE ATTITUDE OF FARMERS TO RICE FARMING INSURANCE (RFI) PROGRAM IN TANAH DATAR DISTRICT

Siska Handayani^a, Rudi Febriamansyah^b, Mahdi^b

^aStudents of the Graduate Program, Universitas Andalas, Kampus UNAND Limau Manis Padang, West Sumatra 25163 Indonesia

^bFaculty of Agriculture, Universitas Andalas, Kampus UNAND Limau Manis Padang, West Sumatra 25163 Indonesia

ARTICLE INFORMATION

Article history:

Received 22 August 2019

Revised: 24 August 2019

Available online: Desember 2019

Keywords:

Farmer attitudes, Cognitive, Affective, Conative, Rice Farming Insurance (RFI) Program

Correspondence:

Phone: +6282169085469

E-mail: siska_handayani18@yahoo.com

A B S T R A C T

Rice Farming Insurance (RFI) Program in the district of Tanah Datar has been a significant decrease in the amount of land that follows, from 1,061 ha in 2016 to only about 150 ha in the year of 2017. Rice farming in Tanah Datar include enough vulnerable areas to disruptions resulting from floods, drought and plant pest organisms attack. This study have been conducted to find factors that lead to the decrease of farmer participation, particularly by studying how the socialization process of the program has been done by the government, and how are the actual farmer's attitude towards this RFI program?. By applying qualitative (key informant interviews) and quantitative approaches (using aquestionnaire survey to a numbers of farmers). The field extension officer has concentrated only in facilitating the program officers and other parties to be able to convey this RFI program to groups of farmers, not too deeply to individual farmers. The analysis of the farmers' attitude to this program shown that, in the cognitive aspects, the majority of farmers in all five categories are still do not fully understand and confidence to RFI program. Similar to the affective aspects, the majority of farmers in the five categories has not yet able to determine attitudes, whether they like or dislike the RFI program. Meanwhile, only in term of their conative aspects, mostly farmers of all categories are eager to learn more and become the participant of RFI program.

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INTRODUCTION

Technically, business activities in the agricultural sector will always be faced with a quite high risk of uncertainty. The risk of these uncertainties include the rate of crop failure due to natural disasters, such as floods, droughts and pests and diseases as the consequences of global

climate change, and the risks of the failure of market price as well (Pasaribu et al, 2014). This risk is likely to cause a decrease in production, damage and decrease in quality of products which in turn can cause a decrease in farm income of farmers, traders and other businesses.

In accordance with the mandate of Law Number 19/2013 on Protection and Empowerment of Farmers, Ministry of Agriculture has issued a policy in the form of *Permentan No.40/2015* on the Facilitation of Agricultural Insurance in order to help farmers cope with the possibility of future losses, in case of those risks. In that *Permentan No.40*, it is stated that agricultural insurance is a risk transfer scheme to provide compensation due to loss of farming so that the sustainability of farming can be assured. In case of rice, the ministry declared an insurance program called the Rice Farming Insurance (RFI) Program. RFI program provides a guarantee against damage to rice crops due to floods, droughts, and pest/diseases attacks.

In the province of West Sumatra, rice is an agricultural commodity that facing frequent events of production failures. Based on the 2016 data from the *Balai Perlindungan Tanaman Pangan, Hortikultura dan Perkebunan* (the Institute for Horticulture and Food Crop Protection) of West Sumatra province, the rice farm lands of West Sumatra province which was attacked by the pest such as mice, blast, brown planthopper, and other tungro reach 4,479 Ha. In addition to the 3,121 Ha of rice farming land were damaged by floods, 224 Ha of land to crop failure due to drought, as well as 5 Ha of land had landslides. If totaled in 2016 reached 8,283.24 Ha of land rice farming in West Sumatra that suffered losses due to pests, floods, droughts and landslides.

Therefore, in 2016, West Sumatra provincial government have targeted, covering an area of 36,000 Ha of land farmers to follow RFI program. Unfortunately, there are only about 78.6% or 28,394.86 Ha can be realized. Even in 2017 there was a decreased land area that follows the RFI program. There are only about 43.62% or 15,266.55 Ha are covered by this RFI program from the target area of 35,000 Ha.

The District of Tanah Datar is a center of rice production in West Sumatra province with a paddy-field area of 22,944 Ha or around 10% of the total area of paddy in West Sumatra Province (230,175.8 Ha). Nevertheless, the District of Tanah Datar includes a region prone to disruption of production, especially due to pests or drought and landslides (Hall Food Crop Protection Horticulture and Plantation Sumatra West. Annual Report 2016)

RFI program in the District of Tanah Datar has been performed since 2016 that covers the entire district by involving as many as 44 farmers' groups. As like the realization at the provincial level, the realization of RFI program in this districts was also only 46.1% from the target area. There are only 1,061.65 Ha paddy-field covered by this RFI program from the target area of 2,300 Ha. It has also declined in 2017 to be only around 6.53% of the target area covered by this RFI program. (Department of Horticulture and Food Crops Plantation West Sumatra Province. 2016.2017)

In general, the above circumstances, has shown a fact that a decrease in land area covered by RFI program may have relation with the attitude or action of farmers that has quit from the RFI program. Theoretically, the attitude or action of that farmers are representing the organization of their opinions, their beliefs, their feeling about the object or situation that often occurs, then provide them as the basis for them to make a response or behave/act in a way that particular choice (Walgito, 2003). Moreover, based on this conception, there are three components of attitudes; cognitive, affective, and conative that includes in the process of thinking before someone decide their choice. The level of those three components will then create the attitude of someone to make decision about the object or situation. Meanwhile, the attitude or action of a farmer will also be formed after the related parties attempt to provide information and socialization of the program. Socialization of the program RFI has been given to farmers to affect components of the knowledge/belief (cognitive), feeling (affective), and a tendency to act (conative) of farmers to accept the RFI program.

Therefore, based on the above background, this study was conducted to explore how the process of socialization has been done for the successful of RFI program in the District of Tanah Datar and analyze the level of farmers attitude in five categories of farmers, (1) the farmers who have claimed the insurance, (2) those who unfollow (quit) the RFI program, (3) farmers who keep up with the program RFI, (4) new farmers who join RFI, and (5) those who do not or have not yet participated the RFI program

METHOD

Research Methods

The research methodology used in this research is descriptive, qualitative and quantitative. To explore the process of socialization RFI program, data collection is done by the method of semi-structured interviews with key informants, while to analyze the attitude of farmers towards RFI program, data collection is done by structured interviews with respondents farmers, using a questionnaire (questionnaire).

Population and Sampling

The population in this study were rice farmers in Tanah Datar who are getting the information and know RFI program in Sungai Tarab Desert Nagari, Nagari Tabek District of Pariangan, and Nagari Padang Padang District Ganting Ganting totaling 502 people. Based on the formula slovin level 95% confidence, obtained the sample size for this study as many as 223 farmers. The next election based on the number of farmers samples taken five categories of farmers in proportion, with distribution as follows:

Table 1. Distribution of The Number of Samples Based on The Category of Peasant Farmers

Categories	Commentary	Number Of Samples
I	farmers who make an insurance claim damages	22
II	farmers quit the program RFI	83
III	farmers who continue to follow the program RFI	12
IV	new farmers who join the program RFI	103
V	farmers who do not / have not followed the program RFI	21

Variables and Data Collected

For the first objective is to describe socialization RFI program has done Tanah Datar District Government, the topic of data to be collected is socialization RFI program that has been done, including the socialization at the district level and implementation at the farm level. Meanwhile, for the second objective is to analyze the attitudes of farmers towards RFI program, the observed variables is the attitude components of cognitive,

affective and conative farmers to RFI program, against a five-object attitude; (1) the risk of paddy farming; (2) RFI program benefits; (3) the premiums paid by farmers in RFI program; (4) the mechanism of implementation of the program RFI and (5) service in RFI program. Measurement of each component of the attitude object is done using a Likert scale models with level 5 scale (1 s / d 5),

Method of Analysis

Methods of analysis of the attitudes of farmers towards RFI using the method of weighting and ranking the value score of all the answers to all components of the attitude object, as can be summarized in the following table:

Table 2. Assessment Weighting Based on The Number Revelation Attitude And a Score Of 5 Likert Scale.

attitude object	Kognitif (Weight =33.3%)			Afektif (Weight =33.3%)			Konatif (Weight =33.3%)		
	Q	Weight	Max	Q	Weight	Max	Q	Weight	Max
risk	5	6.67	0.3	0	0	0	0	0	0
benefit	3	6.67	0.2	3	8.33	1.0	0	1.2	0.12
Premium	3	6.67	0.2	3	8.33	1.0	3	8.33	0.12
Mechanism	5	6.67	0.3	5	8.33	1.6	4	8.33	0.16
Service	3	6.67	0.2	6	8.33	1.0	6	8.33	0.25
total	9	33.3	1.2	7	33.3	6.3	7	33.3	6.6

Note:

Q = number of statements on each object attitude rated

Weights are divided evenly on each component of the attitude and the attitude object.

Furthermore ranking to value the attitude spread in five levels: very low, low, neutral, high and very high, based on the Minimum and Maximum values for each component of attitude.

RESULTS AND DISCUSSION

Socialization Rice Farming Insurance Program (RFI) in Tanah Datar District

1. Implementation of socialization program

According to the Head of Breeding and Protection of Food Crops Department of Agriculture Tanah Datar, initial phase RFI before registration of participants is by doing socialization program by involving stakeholders in the program RFI namely PT Jasindo branch Bukit Tinggi as an insurance company, the supervisor extension districts, extension workers, farmers and farmer groups. RFI program information activities by the Department of Agriculture Tanah Datar has done in 2016 and 2017 to

be exact in May. In 2017, awareness has been done for one day ie on May 4, 2017. Dissemination RFI program conducted at the Department of Agriculture Hall of Tanah Datar.

Socialization program RFI in Tanah Datar submitted by the Department of Agriculture Tanah Datar and PT Jasindo Branch Bukit Tinggi. The material presented in this activity are as follows; (1) Losses due to pest and natural disasters that can be experienced by rice farmers; (2) Pest attacks that have occurred in West Sumatra;(3) The introduction of RFI program that can solve the problem.

RFI program information activities in Tanah Datar is done with a combination of several methods. The first method is to deliver the material in one direction by the speaker with the medium used is a laptop and a projector, so that participants can see the material socialization socialization. In addition, participants were also given printed materials socialization material. After the earlier method, the next method is with a question and answer discussion sessions. See the media and the methods used in the socialization program, show that socialization has sought to implement a number of methods and media are fit and appropriate so as to convey the intent of socialization program. Seen that socialization is carried out using two media outreach, namely direct and indirect illumination.

2. Socialization Implementation Level Farmers

After counseling and socialization at the district level, then the next village extension workers try to convey and disseminate information about the program RFI to farmers in farmer groups in each village extension work area. However, based on interviews with village extension workers, socialization by village extension is not in the form of formal activities and deliberately held a meeting to carry out socialization RFI, so there is no report of activities such as attendance to the material in the socialization at the level of village extension workers to farmers. Dissemination of information about the village extension program RFI done during regular meetingextension with the group at the time of planting season will start the disambil with other activities, that's when informed about the program RFI extension to farmers. These activities are usually housed in farmers' fields or homes farmer groups.

Farmer's attitude component analysis on each object attitude

1. Components of cognitive attitude of farmers

Components of cognitive attitude is one of three components forming attitudes and relatedknowledge, understanding and beliefs. Components of cognitive attitude of farmers towards RFI program:

Table 3. Components of cognitive attitude of farmers towards RFI program:

No	Categories	Cognitive's farmers of attitude object					Cognitive Total
		Risk farming paddy	Benefit program	The premiums paid by farmers	Mechanicall y RFI	Service of RFI	
1	Farmers who claim the damage (n=22)	neutral	neutral	high	high	low	neutral
2	Farmer that stop RFI program (n=83)	neutral	neutral	neutral	high	neutral	neutral
3	Farmer who continue to follow RFI program (n=12)	neutral	high	high	Very high	low	high
4	New farmers who join the program (n=103)	neutral	neutral	high	high	low	neutral
5	Farmers who do not follow the RFI program (n=21)	neutral	low	neutral	low	Very low	low

In general, the table shows that the cognitive attitude of farmers is still relatively neutral towards RFI program. High cognitive attitude only in 3 categories farmer who has decided to continue the program RFI for farming land. The high value of cognitive attitude 3 categories of farmers, especially because of the high valuation, very high on the object of his attitude toward mechanism RFI program followed by the positive response of the benefits and premiums to be paid.

2. Affective attitude of farmers

Affective attitude component is a component that is associated with pleasure or dislike show how the emotional feelings of farmers to RFI. Components of the affective attitude of farmers towards RFI program in Table 4:

In table 4 it can be seen that the farmers who make claims of damage, stop and do not follow the program has to be in the category of affective neutral / hesitated

which meant farmers could not determine how she felt about RFI program. Farmers still doubt whether liked or not. This condition is caused farmers only receive the programs, because they think it's all in the program has been arranged by the government, so that most of them were unable to determine the affective / her feelings about the program. Only in the category of farmers who continue RFI programs that have a high affection both to benefit programs and services in RFI program. This is also the reason farmers back following RFI program,

Table 4. Components affective attitude of farmers towards RFI program:

No	Categories	affective 's farmers of attitude object				affective Total
		Benefit program	The premiums paid by farmers	Mechanically RFI	Service of RFI	
1	Farmers who claim the damage (n=22)	neutral	neutral	neutral	neutral	neutral
2	Farmer that stop RFI program (n=83)	high	neutral	neutral	high	neutral
3	Farmer who continue to follow RFI program (n=12)	high	high	neutral	high	high
4	New farmers who join the program (n=103)	neutral	neutral	neutral	high	high
5	Farmers who do not follow the RFI program (n=21)	neutral	Very low	neutral	neutral	neutral

Categories farmers who quit are less like the mechanism RFI program that during one growing season. According to farmers the time span is very close, making it difficult for farmers to always sign RFI program. Farmers were advised to mechanisms of program 1 time a year so a longer time, and do not need repotrepot follow RFI program repeatedly. Furthermore, farmers who do not follow porgram have very low affection of the premium paid, which means that farmers do not like the amount of premium paid emotion in following RFI program, whether it is the number of initial and after subsidies. This low affection because farmers have not followed the program so do not know about the benefits of the program so hesitated to mmebayar a premium to follow a RFI program.

3. Conative attitude of farmers

The last component is a component forming attitudes conative attitude. Conative component is a component associated with the tendency to act farmers to RFI program. Components of conative attitude of farmers on the program RFI in Table 5.

In Table 5 as a whole can be seen that the farmer acted connative or high tendency towards RFI program. Farmers are willing bertidak of the program, where farmers want to search for information and matters relating to RFI from registration until the claims process. Only in the category of farmers who make claims that have a tendency to act classified as neutral. Farmers feel they hesitate to seek information related to RFI program, and also feel free to follow porgram RFI back. This is because of their disappointment in the process damage claims that are not in accordance with the schedule. In the category of farmers who continue to follow the program RFI have connative dikatagori overall were high. This may happen because farmers are already familiar with and are very familiar with RFI program so that farmers have a high action addressing RFI program. Recently in the category of farmers who do not follow the program also looks a high connative this means though not follow RFI program, farmers have a willingness to look for information, as well as the desire to follow RFI program. This can happen because the farmers who still need information and knowledge related to program RFI, so as to fulfill the act they have a high tendency. and wishes to follow RFI program. This can happen because the farmers who still need information and knowledge related to porgram RFI, so as to fulfill the act they have a high tendency. and wishes to follow RFI program. This can happen because the farmers who still need information and knowledge related to porgram RFI, so as to fulfill the act they have a high tendency.

Table 5. Components of conative attitude of farmers on RFI program.

No	Categories	conative's farmers of attitude object				Conative Total
		Benefit program	The premiums paid by farmers	Mechanically RFI	Service of RFI	
1	Farmers who claim the damage (n=22)	high	neutral	neutral	high	neutral
2	Farmer that stop RFI program (n=83)	high	high	high	high	high
3	Farmer who continue to follow RFI program (n=12)	high	Very high	neutral	high	high
4	New farmers who join the program (n=103)	high	high	high	high	high
5	Farmers who do not follow the RFI program (n=21)	high	high	high	high	high

Farmers Attitudes towards RFI Program

Having previously discussed each of the components of attitude from the cognitive, affective and conative then further discussed the total attitude of farmers to RFI program, as follows:

Table 6. Attitude of Farmers towards RFI Program

No	Categories	Attitude		
		Cognitive	Affective	Conatif
1	Farmers who claim the damage (n=22)	1. neutral	neutral	neutral
2	Farmer that stop RFI program (n=83)	neutral	neutral	high
3	Farmer who continue to follow RFI program (n=12)	high	high	high
4	New farmers who join the program (n=103)	neutral	high	high
5	Farmers who do not follow the RFI program (n=21)	low	neutral	high

1. Farmers who claim the damage

Of the overall category, the farmers who make claims have a level attitude of the lowest category. Farmers who do have a damage claim of cognitive, affective and conative who will be in the neutral category. It had happened because, based on interviews with the group leader KWT simple, Bonau Rice, Rice Kobang and Tengah Sawah Padang about the claims process is known that the process of a damage claim to payment of damages does not comply with the schedule specified in the General Guidelines RFI program.

The realization of the process of filing a claim that has been implemented by 4 farmers groups in Nagari Padang Ganting (KWT simple, Rice Bonau, Rice Kobang and Rice Tengah Padang) revealed that starting from the reporting, verification of damage, up to the disbursement of compensation passed by the 1-month waiting period on each stage, even before the compensation money has been handed over symbolically still not entered into an account group after five months, from February until June report oenelitian when this is done. This situation makes farmers reluctant to take care and follow this RFI again. Plus the duration of the PT Jasindo comes to verification of damage since reporting damage to make farmers bored waiting, because wetland they should not be disturbed and eliminate evidence of damage.

Based on the above, it is to make farmers who claim to act and be willing to follow the program RFI back, it needs to be repaired how knowledge and feelings toward RFI program. In the cognitive farmers need to gain more information and knowledge about the benefits RFI

program that can provide compensation for farmers if farmers experiencing crop failure event as well as the services and programs RFI. Additionally affective farmers as a whole are in the neutral category. Farmers dislike most visible in the services RFI program, farmers are not satisfied with the process damage claims to the payment of compensation. The benefits program is not too felt by farmers, because the process kalim and old payment as described earlier. Therefore to make the farmers do have a damage claim to follow the course of action RFI back, needed improvements in the provision of information about benefit programs and services RFI program. An increase in services is also necessary to make farmers like RFI program.

2. Farmer that stop RFI program

As shown in Table 6. The visible Farmers who unfollowed RFI program has a level of cognitive and affective neutral, while connative who are at high category. The point here is that farmers do not really understand, know and love RFI program, thus making farmers stop following RFI program. They know the benefits of the program, premiums paid to the service program, but such knowledge is incomplete.

Although farmers have stopped following RFI program, farmers are still high connative it is necessary socialization and counseling form the cognitive and affective neutral farmers so that farmers would know the benefits of the program and always remember to follow the program and will enroll RFIRFI program in each cropping season.

3. Farmer who continue to follow RFI Program

Farmers who continue to follow the program RFI have high levels of cognitive, affective and conative high. This is the highest level of the whole category. This situation shows that farmers have high knowledge, like the program and want / wish to join the program. Farmers receive RFI program and feel able to cope with the risk of crop failure they face. Farmers follow RFI program in 2017 because already there are signs of an attack against rice farming. Some of the farmers' land adjacent to land already started group planthopper pests. That is why farmers sign up RFI program, to overcome if to attack their dilahan. So to make the farmers follow

RFI program steadily, farmers must have the cognitive, affective and conative high.

4. New farmers who join the program

Farmers who just followed the program RFI in 2017 have cognitive neutral, as well as affective and conative high, meaning that farmers are not so aware of and understand the program RFI, but farmers liked the way services are delivered in the program RFI, where farmers do not need to get involved directly, simply by caretaker farmers. High conative formed from the high desire and willingness of farmers to seek information even have to do it. So farmers have also high desires to follow RFI program. New farmers who join the program, has a high affective and conative, only on cognitive still neutral. Thus the need to provide information in the form of socialization and counseling to new farmers who follow program that they have pengetahuan / high cognitive.

5. Farmers who do not follow the RFI program

Categories of farmers who do not follow the program RFI have low cognitive, affective and conative high neutral. Although knowledge is still low and farmers perasasan yet to be decided but the high conative meaning that although today do not follow RFI program, but farmers have the desire to follow RFI program. Farmers who do not follow the program had low cognitive, for it needs to be given information and the introduction of a better form of socialization and good counseling on the program and the risks of farming RFI mungkin occur in rice farming.

Relationship Socialization and Attitudes Toward Farmers RFI Program

The preceding discussion shows that awareness has been done at the district level with a formal and structured, while the farmer more to socialization and familiarization with menyambil or in conjunction with regular meetings of the group without any special occasion. Socialization has been done should affect all three components of a good attitude components of the knowledge / belief (cognitive), feeling (affective) and the tendency to act (conative) farmers to RFI program. But it can be seen that the farmer's attitude components (Table 5) whether cognitive, affective and conative have a varying degree.

In general, based on the five categories of farmers, the majority of farmers are in the category of cognitive neutral. This shows that socialization has been done has not change the knowledge and confidence to farmers against RFI program. Farmers just know, without having the complete information and knowledge. For example, on the part of the premium paid, farmers know that they need to pay a premium, but they do not know their premium subsidies and independence. Affective farmers majority are at neutral category (Table 5). Socialization is done does not have enough farmers memilikikognitif against RFI program, so this also makes them can not also specify feelings towards RFI program. Whether they like or do not like the program, because their knowledge is not yet complete.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Research has been carried out with the title Analysis of Attitudes Toward Farmers Rice Insurance Program (RFI) In Tanah Datar, get a conclusion as follows:

1. Socialization program in Tanah Datar RFI performed involving all parties involved in the program RFI ranging from Agriculture Office, PT Jasindo, extension workers, farmers and farmer groups. District level Socialization is done once a year, in addition to the extension of each village to continue dissemination to farmers and farmer groups.
2. Components of cognitive attitude of farmers majority are at neutral category. that is to say here are farmers still do not have a complete knowledge and confidence to RFI program. Further components of the affective attitude of farmers majority are at neutral category, which means farmers can not determine its attitude toward RFI program, whether they like or dislike a RFI program to overcome the risks of farming that may occur in farming. Last component conative attitude majority are at a high category, where the high farmer wishes to seek information and follow RFI program.
3. Socialization that has been done yet to make

farmers have knowledge / cognitive sufficient, as well as making farmers like the program. But socialization is able to make the farmers have a desire to know, seek information and follow RFI program.

Recommendations:

1. Socialization has been done yet to make farmers have cognitive and affective high on the program, then it is necessary socialization and counseling programs RFI to farmers in full, sustained by a higher frequency than has been done.
2. The need for improvement of the relevant parties to improve services and regulations clearer and simpler program. Service improvement is also necessary because it will be the basis for farmers to re-join the program in the next planting season RFI where farmers will have knowledge / cognitive and feelings / affect high.

REFERENCES

- Pasaribu, et al. (2014). Risks of Food: Challenges and Opportunities. Research and Development Agriculture. Ministry of Agriculture
- Ministry of Agriculture. (2017). Guidelines for Rice Farming Insurance Premium Assistance RFI 2017
- Department of Horticulture and Food Crops Plantation West Sumatra Province. 2016.2017
- Hall Food Crop Protection Horticulture and Plantation Sumatra West. Annual Report 2016.
- Walgito. Ben .(2003). Introduction to General Psychology. Yogyakarta: Andi Offset.



Available online at <http://ijasc.pasca.unand.ac.id>

International Journal of Agricultural Sciences

ISSN: 2598 – 1145 (online)
