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To cite this article: A Amiruddin *et al* 2021 *IOP Conf. Ser.: Earth Environ. Sci.* **807** 032088

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Rice farmers response to the agricultural insurance program in Matakali District, Polewali Mandar Regency

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Abstract. Agricultural insurance is an agreement between the farmer and the insurance company to bind himself in the coverage of farm business risks. Agricultural insurance is an alternative to minimize risks that deserve to be considered, especially to overcome losses due to climate change. Agricultural insurance deals with farm financing with third parties (private institutions / companies / government agencies) with a certain amount of premium financing. This study aims to determine the response of farmers to agricultural insurance in Matakali District, Polewali Mandar Regency, West Sulawesi Province. This study uses a weighted average calculation with the Guttman Scale. The results of the study concluded that the cognitive response of farmers was in the category of agreeing with the tendency of farmers to understand agricultural insurance, the affective response of farmers was in the category of agreeing with the agricultural insurance program and was welcomed by farmers, and the conative response of farmers was in the category of disagreeing with most farmers not actively involved in the agricultural insurance program.

1. Introduction

Agriculture is a fundamental sector in economic development. In Indonesia, the agricultural sector is included in the three leading sectors contributing to Gross Domestic Product (GDP). Many sectors depend on the agricultural sector as a provider of production inputs [1]. The large number of people who depend on agriculture and are supported by a large and diverse wealth of natural resources is the capital that makes this country an advantage to be able to develop its agricultural sector. However, this great potential has not been able to make farmers improve their welfare, in fact most of them are



included in the poor category. Many factors cause the above, one of which is crop failure caused by uncertain climate change [2].

Fundamental problems that can pose a threat to the agricultural sector include increasing population, increasing environmental damage and global climate change, availability of land and water infrastructure, narrow land ownership status, weak capacity of national hatcheries and nurseries, limited access of farmers to capital, still high farm interest rates, weak institutional capacities of farmers and extension workers, low exchange rates of farmers, insecurity of food and energy security, food diversification has not been well implemented, inadequate inter-sectoral agricultural development and less optimal performance and service of the agricultural bureaucracy [3].

Therefore, there needs to be a special and widespread effort to minimize the risk of loss due to threats that occur in the agricultural sector. Agricultural insurance is an alternative to minimize risks that deserve to be considered, especially to overcome losses due to climate change. Agricultural insurance deals with farm financing with third parties (private institutions / companies / government agencies) with a certain amount of premium financing [2]. Insurance for farming can be a solution to tackling climate change that is difficult to predict. Agricultural insurance is actually not a new thing in the agricultural sector, several countries in India and Iran have implemented this program to protect farmers [4].

Agricultural insurance has been implemented in Indonesia since 2012 and is a solution to tackling climate change that is difficult to predict. Agricultural insurance is actually not a new thing in the agricultural sector, several countries in India and Iran have implemented this program to protect farmers. In Indonesia, farm insurance is better known as agricultural insurance which is regulated in Law Number 19 of 2013 concerning Protection and Empowerment of Farmers. This is solely for increasing productivity as the key to increasing farmer income, therefore rebuilding research and a guarantee system for additional farmers is crucial [5].

Agricultural insurance can be an attractive program in relation to global climate change. Insurance also not only covers protection against price fluctuations, but specifically includes risk sharing due to drought, floods and attacks by plant pests and other external factors, such as landslides, earthquakes, political problems and others. The existence of agricultural insurance for agriculture in Indonesia will certainly help farmers to reduce the risks experienced by farmers. Although the implementation will not be easy, it is not impossible if it is applied in Indonesia [6].

Polewali Mandar Regency, West Sulawesi Province is one of the regions that has implemented an agricultural insurance program since 2016. There are 10 farmer groups in Polewali Mandar Regency applying agricultural insurance and have received assistance due to crop failure. The intended crop failure was caused by floods, drought and attacks by pests. And crop failures that often occur in this district are due to pests and drought.

One of the farmer groups that applies agricultural insurance is located in Matakali District and is one of the districts that has great agricultural potential in Polewali Mandar Regency. However, in Matakali District there are several obstacles faced by farmers, namely the frequent occurrence of crop failures, one of which is caused by pest attacks. As an effort to protect farmers from the risk of uncertainty, agricultural insurance is expected to have a positive impact on the lives of farmers because the benefits obtained can protect agricultural businesses. Considering that the agricultural insurance program is a new program, it is necessary to conduct an in-depth study of the implementation of this program. Based on this, this study aims to determine the rice farmers response

to the agricultural insurance program in Matakali District, Polewali Mandar Regency, West Sulawesi Province.

2. Research methods

This research was conducted in Matakali District, Polewali Mandar Regency, West Sulawesi Province from August to September 2018. The data collection technique was done by interviewing and using a research instrument in the form of a questionnaire given to the research sample. The sample was determined using a saturated sampling technique, because the population in this study amounted to 35 people, so the entire population will be sampled as members of the P3A Lajampi farmer group in Makkombong Village.

Rice farmers response to agricultural insurance was analyzed using a weighted average calculation using the Guttman Scale. Positive answer ratings are given a score of 1 and negative answers are given a score of 0. To facilitate an operational assessment, a percentage scale range is used between 0% - 50% (in the disagree category) and 51% - 100% (in the agree category). The calculation of the average "yes" answer uses the following formula:

$$\text{Average Yes Answer} = \frac{\sum \text{average Yes answer}}{\sum \text{respondents}} \times 100\%$$

3. Results and discussion

The response is the response given by farmers related to agricultural insurance where each farmer has a different response. Farmer's responses to agricultural insurance were assessed based on cognitive responses, affective responses and conative responses.

4. Cognitive response

Farmer's cognitive response is the level of understanding of farmers towards the agricultural insurance program. The cognitive response of farmers to agricultural insurance consists of 5 indicators, namely farmers knowing the purpose of agricultural insurance, understanding the requirements that must be met to participate in agricultural insurance, knowing the amount of premium paid, knowing the large amount of compensation in case of crop failure and knowing the claim settlement procedure.

The cognitive response of farmers regarding the objectives of agricultural insurance in Matakali District, amounted to 88,6% or as many as 31 farmers chose to agree to know the purpose of agricultural insurance. The purpose of agricultural insurance is to provide protection to farmers in the event of crop failure as a result of the risk of flooding, drought and pest attacks, as well as diverting the risk of flooding, drought and pest attacks to other parties through insurance coverage. Meanwhile, 4 other farmers chose disagreed to know the purpose of agricultural insurance because they only participated in agricultural insurance based on a recommendation from the head of the farmer group without knowing the purpose of agricultural insurance.

The cognitive response of farmers regarding the requirements that must be met to participate in agricultural insurance in Matakali District, as many as 29 farmers (82,9%) chose to agree to know the requirements to participate in agricultural insurance. The conditions that must be met are being registered as a member of a farmer group and having a maximum land area of 2 hectares. Meanwhile, 6 other farmers (17,1%) chose disagree to know these requirements because of the lack of socialization to farmers.

The cognitive response of farmers regarding the amount of premium paid in Matakali District, as many as 26 farmers (74,3%) responded agreeing to know the amount of premium to be paid in

agricultural insurance. The total premium charged to the insurance recipient is Rp 180.000 and is borne by the government as much as Rp 144.000 or 80% of the total premium, so farmers only need to pay a premium of Rp 36.000 / ha. Meanwhile, there were 9 farmers (25.7%) who gave a disagreement response to knowing the amount of premium paid in agricultural insurance. This happened because the Department of Agriculture only involved the head of farmer groups in the socialization of agricultural insurance, which resulted in farmers who did not know the details of the program.

The cognitive response of farmers regarding the large amount of compensation provided by agricultural insurance in the event of crop failure in Matakali District, as many as 21 farmers (60%) responded agreeing to know the amount of compensation in the event of crop failure. Agricultural insurance will provide compensation to farmers in the event of crop failure of Rp 6.000.000 / Ha. Meanwhile, 14 farmers (40%) don't know the amount of compensation provided by agricultural insurance in the event of a crop failure due to farmers.

The cognitive response of farmers regarding the procedure for settling agricultural insurance claims in Matakali District, only 1 farmer (2,9%) responded that they agreed to know the claim settlement procedure and 34 farmers (97,1%) responded that they disagreed to know the claim settlement procedure. Farmers do not know the claim settlement procedure because farmers only know that they are registered as participants in agricultural insurance but do not know all the processes from registration to claim settlement, because everything from registration to claim settlement is carried out by the head of the farmer group. As for the claim settlement procedure, the farmer submits a written notification in the event of damage, by attaching a photo of the land including an indication of the damage occurring no later than 7 calendar days after the damage is detected, first the pest observers and agricultural extension agents directly examine the farmer's land.

The average score of the cognitive response indicator was 61,7%. The average value of this score is in the 51% –100% scale range, so it can be concluded that the overall cognitive response of farmers to agricultural insurance in Matakali District, Polewali Mandar Regency is in the agreed category. This indicates that most farmers know the purpose of agricultural insurance, the conditions that must be met to participate in agricultural insurance, the amount of premium to be paid, the large amount of compensation and know and know the claim settlement procedure.

5. Affective response

The affective response of farmers is the attitude of the respondent farmers towards the agricultural insurance program. Farmer's affective response to agricultural insurance consists of 5 indicators, namely the socialization of agricultural insurance programs, program administration requirements, program implementation, program benefits and premiums paid.

The affective response of farmers regarding the socialization of agricultural insurance programs in Matakali District, there is only 1 farmer (2,9%) agree that the implementation of agricultural insurance has been going well. The farmer who agrees is the head of the farmer group who has participated in the socialization held by the Department of Agriculture. Socialization of the agricultural insurance program was only conducted once in Polewali Mandar Regency and was only represented by each head of farmer groups. Meanwhile 34 farmers (97,1%) chose to give a disagreement response and were of the opinion that the socialization of the agricultural insurance program had not gone well. This happens because in the socialization organized by the Department of Agriculture only the head of the farmer group is included and the farmers know about the existence of agricultural insurance only from the head of the farmer group or from other farmers.

The affective response of farmers regarding the administrative requirements of the insurance program in Matakali District, there were 21 farmers (60%) who agreed that the administrative requirements of the agricultural insurance program were not difficult for farmers and 14 farmers (40%) considered that administrative requirements were difficult for farmers to fulfill. Where in the agricultural insurance registration process, farmers only need to register and pay a premium to the head of the farmer group.

The affective response of farmers regarding the implementation of the agricultural insurance program in Matakali District, there were 26 farmers (74,3%) who agreed that the implementation of the agricultural insurance program was going well and 9 farmers (25,7%) gave a response disagreed if the insurance program had been implemented goes well. This is because farmers think that there are still a number of things that need to be addressed from the program, one of which is that the socialization must involve the farmers.

The affective response of farmers regarding the benefits of agricultural insurance in Matakali District, there were 22 farmers (62,9%) who agreed that there were benefits from agricultural insurance. The existence of agricultural insurance can help farmers in case of crop failure so that farmers do not feel a loss. In addition, there were 13 farmers (37,1%) who gave a disagreed response because the farmers had not benefited from the agricultural insurance program. These farmers are farmers who have never received assistance from agricultural insurance, because they have never experienced a crop failure.

The affective response of farmers regarding the premiums paid in the agricultural insurance program in Matakali District, there were 26 farmers (74,3%) who agreed that the premiums to be paid were not too large and 9 farmers (25,7%) considered that the amount of premiums paid was not too large. must be paid is still too big. The premium that must be paid by farmers is Rp 36,000.

The average score of the affective response indicator was 54,8%. The average value of this score is in the scale range 51% - 100% so it can be concluded that the overall affective response of farmers to agricultural insurance in Matakali District, Polewali Mandar Regency is in the agreed category. This indicates that most farmers have a feeling that the agricultural insurance program is a program that can protect farmers from the risk of crop failure.

6. Conative responses

The farmer's conative response is the farmer respondent's action against the agricultural insurance program. Farmers' conative response to agricultural insurance consists of 5 indicators, namely participation in the socialization of agricultural insurance programs, self-registration as a participant, farmer participation in the registration process, farmer participation in the claim settlement process and farmer participation due to the claim period.

The farmers' conative response regarding their participation in the socialization of the agricultural insurance program in Matakali District, only 1 farmer (2,9%) gave an agree response and had participated in the program socialization and as many as 34 farmers (97,1%) gave a disagreed response in participating in the socialization program. This is because the agricultural insurance program socialization is only attended by the head of farmer groups.

The farmers' conative response regarding self-registration as a participant in agricultural insurance in Matakali District, all farmers responded agreeing that they had registered themselves as participants in agricultural insurance because farmers believed this program was able to protect farmers from the

risk of crop failure. Farmers follow agricultural insurance through directions or explanations from the head of the farmer group that agricultural insurance can help farmers in case of crop failure.

The farmer's conative response regarding participation in the agricultural insurance registration process in Matakali District, there were 18 farmers (51,4%) who responded agreed that farmers followed the registration process and 17 farmers (48,6%) responded disagreed that farmers did not follow the registration process agricultural insurance. This is because in the process of registering as a participant in agricultural insurance it is only carried out by farmer groups and a few farmers.

The farmer's conative response regarding participation in the process of settling agricultural insurance claims in Matakali District, only 1 farmer (2,9%) gave an agree response, namely only the head of the farmer group and 34 farmers (97,1%) gave a disagree response. This is because in the process of settling agricultural insurance claims it is only done by the head of the farmer group.

The farmers' conative response regarding participation because of the period of agricultural insurance claims in Matakali District, there were 26 farmers (74,3%) who responded agree that the claim period was in accordance with the rules, namely 14 days after the claim. Meanwhile, there were 9 farmers (25,7%) who responded disagree, farmers did not know how long the claim period was because they never experienced harvest failure and received assistance.

The average score of the conative response indicator was 46,2%. The average value of this score is in the scale range of 1% - 50%, so it can be concluded that the affective response of farmers to agricultural insurance in Matakali District, Polewali Mandar Regency is in the disagree category. This indicates that farmers do not participate in all program activities from socialization, registration to claim settlement.

7. Conclusion

Rice farmer responses to the agricultural insurance program in Matakali District, Polewali Mandar Regency was assessed based on cognitive responses, affective responses and conative responses. The cognitive responses of farmers are in the category of agree with the tendency of farmers to understand agricultural insurance, the affective responses of farmers are in the category of agree with the agricultural insurance program and are welcomed by farmers, and the conative responses of farmers are in the category of disagree with most farmers not actively involved in the program agricultural insurance.

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