DETERMINANT OF FARMER PARTICIPATION IN THE RICE FARMING INSURANCE PROGRAM IN JENEPONTO REGENCY

Determinan Partisipasi Petani pada Program Asuransi Usahatani Padi di Kabupaten Jeneponto

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ABSTRACT

The purpose of this study is to analyze the factors that influence the participation of rice farmers in the rice insurance program in the Binamu district of Jeneponto Regency. The data sources for this study are primary data and secondary data. The sampling technique used in this research is the purposive sampling method, which is choosing a sample of farmers who actively participate in the rice farming insurance program. The number of farmers who are active in the program is 60 farmers and purposively all farmers are used as respondents. The data analysis method is multiple regression analysis. The results of this study show that the factors that significantly influence rice farmers' participation in the rice cultivation insurance program are land area, length of formal education, rice cultivation experience, and risk of losing rice cultivation. The wider the land ownership of rice, the higher the formal education level and the longer the rice cultivation experience, the less farmers will participate in the rice insurance program. The higher the risk of rice production, the higher the risk of rice cultivation. Farmers' participation in rice insurance programs has increased. Production risk is the most important factor that encourages farmers' high participation in the rice insurance system.

Keyword: farmers, participation, rice farming insurance
Penelitian ini bertujuan untuk menganalisis faktor-faktor yang berpengaruh terhadap partisipasi petani dalam program asuransi usahatani padi di Kecamatan Binamku Kabupaten Jeneponto. Sumber data dalam penelitian ini adalah data primer dan data sekunder. Teknik pengambilan sampel adalah metode purposive sampling, yakni memilih sampel secara sengaja terhadap petani yang berpartisipasi aktif dalam program asuransi usahatani padi. Jumlah petani yang aktif dalam program tersebut sebanyak 60 orang dan seluruhnya secara purposif dijadikan sebagai responden. Metode analisis data yang digunakan adalah analisis regresi berganda. Hasil penelitian ini menunjukkan bahwa faktor-faktor yang berpengaruh signifikan terhadap partisipasi petani padi dalam program asuransi usahatani padi adalah luas lahan, lama pendidikan formal, pengalaman usahatani padi, dan risiko produksi. Semakin luas lahan kepemilikan usahatani padi, dan semakin tinggi tingkat pendidikan formal, serta semakin lama berpengalaman dalam usahatani padi, maka tingkat partisipasi petani pada Program Asuransi Usahatani Padi justru semakin menurun. Semakin tinggi risiko produksi usahatani padi maka akan semakin meningkatkan partisipasi petani pada Program Asuransi Usahatani Padi. Faktor terpenting yang berpengaruh signifikan terhadap tingginya partisipasi petani pada Program Asuransi Usahatani Padi adalah risiko produksi.

Kata Kunci: petani, partisipasi, asuransi usahatani padi

INTRODUCTION

The government is determined to achieve the food self-sufficiency target, and as of 2015, the rice self-sufficiency rate that achieved the rice production target in 2020 has reached 85.8 million tons. Companies in the agricultural sector, especially rice farmers, face risks and uncertainties as they are affected by the negative effects of climate change. To overcome farmers' losses, the government supported the pursuit of agricultural protection in the form of agricultural insurance as set out in Law No. 19 of 2013 on the protection and empowerment of farmers, and subsequently supported agricultural insurance. 2015 Agriculture Minister No.40 Promotion Regulations (Kementerian Pertanian, 2021).

Extreme weather events continue to occur, increasing in frequency and intensity. Floods, droughts and crop damage attacks are the effects of extreme weather events that are part of the problems faced by farmers, especially rice farmers, during almost all growing seasons. Farmers have made some efforts to reduce climate risk, but this method is not sufficient. Formal protection assistance is needed to protect farmers from climate risks (Estiningtyas, 2015). The various risks faced by the agricultural sector can affect the stability of farmers' incomes. The biggest challenge for the agricultural sector is to increase the income of farmers with less than 0.5 hectares of land per capita. Land is expected to exist through the government to empower farmers who play a role...
in the development of the agricultural sector to achieve food sovereignty, food independence and food security in a sustainable manner. One form of protection of farmers' income or welfare is agricultural insurance (Djunedi, 2016).

Farmer insurance is very important for farmers to protect their crops. Crop insurance is a risk transfer that can cover agricultural losses to ensure agricultural sustainability. Farmer insurance is a form of risk management that involves raising large amounts of money through the involvement of large farmers to pay compensation to disaster-affected farmers. Crop insurance is very important for farmers to protect their crops. Crop insurance is a risk transfer that can cover agricultural losses to ensure farm sustainability. Crop insurance is a form of risk management, with large numbers of farmers participating to generate a large amount of compensation reserves for affected farmers (Kementerian Pertanian, 2021).

Rice is Indonesia's most strategically important food. In addition to being a source of basic food, rice commodities become a source of income from most of the population in rural areas. Thus, the management of rice farming risk is very important, because rice farming is very close to risk and uncertainty. Saragih et al (2018) the sources of risk are two factors, namely pest attacks and climate change. Pest infestation consists of rat pests, weed pests, and other pests, while the risks due to climate change are mostly caused by floods and droughts.

The implementation of agricultural insurance is certainly not separated from the role or participation of the agricultural community itself. Agricultural insurance programs aim to help farmers ensure the sustainability of farm management. The success of agricultural insurance programs, especially the Rice Farming Insurance program, will depend heavily on the participation of farmers in its implementation. The hope is that if farmers know and follow agricultural insurance, then their farming business will be guaranteed and the welfare of agricultural households will increase (Ardiana & Agusta, 2018).

Dhesrianti et al. (2019) It turns out that the implementation of the AUTP program at Wajo Regency was not smooth. The AUTP implementation mechanism is not fully implemented in accordance with the AUTP implementation guidelines set by the government. The farmers have responded positively to the AUTP program, as evidenced by the perceptions, attitudes and motives of the good categories of farmers, demonstrating that the AUTP program is popular with farmers in the region. Algazali et al (2019) argued that the agricultural insurance mechanism was well-developed in the Pin Run Regency, but the application process was very difficult and the payment of compensation was often delayed, so the program-based society. Socialization is not yet sufficient for all farmers and farmers.

Elhusna & Noer (2019), implementation of the AUTP program in Pariaman City is carried out according to implementation guidelines, but many farmers participating in this business insurance program do not understand the stage.
Farmers resist if they have to wait until the total damage to their land reaches 75 percent. Farmers say it makes no sense to pay premiums because they can’t apply for insurance claims subsidies from insurance companies if their land is damaged or if less than 75% of the pests occur thinking about. Farmers tend to be reluctant to use the AUTP scheme without a premium subsidy from the government.

Purniawati et al, (2020) states that the benefits farmers receive in implementing the AUTP program are positively correlated with their ability to pay premiums, farming experience, land ownership, number of dependents, and side jobs. I found. Problems associated with implementing the AUTP program are the lack of socialization of farmers and community group members, natural disasters (droughts and floods), the spread of rat pests, bug and tungro.

Jeneponto Regency is one of the regions of South Sulawesi that implemented travel insurance programs in 2018 and 2020. The Rice Insurance Program (AUTP) is run by the Jeneponto Regency Agricultural Bureau and PT. Jasindo. The Binamu district is one of the areas of Jeneponto Regency for the purpose of implementing a rice insurance program. The rice insurance system is mainly implemented during the first growing season, which overlaps with the rainy season. The purpose of this study is to analyze the factors that influence rice farmers' participation in rice insurance programs in the Binamu district of Jeneponto Regency.

RESEARCH METHOD

The basic method of this study is the descriptive method. The survey was conducted in the villages of North Empoang and Biringkassi in the Binamu District of Jeneponto Regency, South Sulawesi. The data sources for this study are primary and secondary data.

Primary data is data obtained directly from farmers participating in the rice insurance program using a question list (questionnaire) during the survey process. Secondary data is data available to institutions provided in this study by the Central Bureau of Statistics, the Ministry of Agriculture, Department of Agriculture, and other related agencies. The sampling technique used in this research is the purposive sampling method, which is choosing a sample of farmers who actively participate in the rice farming insurance program. The number of farmers who are active in the program is 60 farmers and purposively all farmers are used as respondents. The data analysis technique used to analyze the determinants of farmer participation in the rice farming insurance program is multiple linear regression. The multiple linear regression equation model can be written as:

$$Y = a + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + e$$

400 | Fatmawaty, Sri Mardiyati, Syafiuuddin, Mohammad Natsir; Determinant...
RESULT AND DISCUSSION

The Agricultural Insurance Program requires rice farmers to be involved in its implementation. Farm-level agricultural insurance programs cannot be implemented without the participation of rice farmers. Factors suspected of affecting farmers' participation in the rice insurance program are land area, length of formal education, rice cultivation experience, risk of losing rice cultivation, and the strength of expansion.

The area of land referred to in this study is the area of land owned by farmers, while the experience of rice farming is the length of experience farmers have in managing rice farming. Rice production loss risk is the percentage of rice farming production losses experienced by rice farmers. The intensity of extension is the frequency with which rice farmers participate in counseling on agricultural insurance. To analyze the effect of these variables, it can be seen further in Table 1.

| Table 1. Factors Affecting Farmers' Participation in the Regency Jeneponto's Binamu District Rice Insurance Program |
|----------------------------------|----------------------------------|----------------|-------------|
| Independent Variables           | Coefficient                     | Std. Error     | t-statistics|
| Land Area (X1)                  | -3.057779***                    | 0.986798       | -3.098687   |
| Formal Education (X2)           | -0.456131**                     | 0.184977       | -2.465882   |
| Rice Farming Experience (X3)    | -0.153271***                    | 0.055922       | -2.740818   |
| Production Risks (X4)           | 0.232396***                     | 0.031160       | 7.458155    |
| Intensity of Extension (X5)     | -0.225072                       | 1.160242       | -0.193987   |
| Constant                        | 78.40985**                      |                |             |
| R-squared                       | 0.622747                        |                |             |
| F-statistic                     | 17.82797**                      |                |             |
| Prob(F-statistic)               | 0.000000                        |                |             |
| Source: Primary Data Analysis, 2021. |

Y = 78.409 - 3.058*X1 - 0.456*X2 - 0.153*X3 + 0.232*X4 - 0.225*X5
The factors of land area, length of formal education, experience of rice farming, risk of loss of rice production, and intensity of counseling together (simultaneously) have a significant effect on participation in the AUTP Program. The value of the coefficient of determination (R²) of 0.622747 indicates that simultaneously these independent variables have an effect of 62.28 percent on the level of participation of rice farmers in the AUTP Program in Binamu District, Jeneponto Regency, while the remaining 37.72 percent is influenced by factors others not investigated in this study. See Table 1 to understand the factors that influence farmers' participation in the rice insurance program.

The results of the partial test analysis of the multiple linear regression analysis reveal the factors that have a significant impact on farmers' participation in the rice insurance program, land area, formal education period, the rice cultivation experience, and the risk of loss of rice production (Table 1). Marphy & Priminingtyas (2019) showed that variables related to age, education and business experience have a positive and significant impact on farmers' participation in the Malang Regency's AUTP program.

Hikmawati et al (2021) states that the factors that influence decision-making when using rice insurance are education, business experience, risk tolerance, and consulting activities. The results of Sutiknjo & Swastika (2017) show that socio-economic factors that have a significant impact on farmers' perceptions, attitudes and participation in the AUTP program are education, income and land area. Prasetyo & Fariyaanti (2019) conclude that the variables that actually influence a farmer's decision to follow the AUTP program are the farmer's age, land area, education level, rice cultivation experience, land tenure, and the farmer's knowledge of AUTP. rice field. The amount of insurance premiums paid.

Sayugyaningsih et al (2020) influences farmers' participation in the AUTP program, age, number of families, business experience, crop failure experience, AUTP information, and farmers' presence in AUTP socialization, both internally and externally. I discovered that there was a factor. Factors that actually influence Pringsewu's participation in the AUTP program include the complexity of the AUTP program, the impact of the farmers' social environment, and the role of counseling as a facilitator. The barriers farmers face in participating in the AUTP program are when registering and submitting claims (Ayu et al, 2021).

Rice insurance performance is judged by the farmer's knowledge of rice insurance and the premium payments are good, but improvements are needed to make complex claims to the farmer. Factors that influence a farmer's access to rice insurance include age factors, member ratings from the farmer's group manager, implementation mechanisms, and qualification beliefs (Hamidah & Sutrisno, 2021).
Land area has a significant negative impact on the participation rate of rice farmers in the rice insurance program, with a regression coefficient value of 3.057779. This shows that an increase in the area of rice land by 1 hectare reduces the participation rate of rice farmers in the rice insurance program by 3.057779 percent. Conversely, a 1 hectare reduction in rice acreage will increase rice farmers’ participation in insurance program by 3.057779 percent. The more land a rice farmer owns, the lower the rate of participation in the rice insurance program. This is thought to be because the larger the rice field, the higher the insurance premium. On the other hand, insurance compliance requirements are becoming more stringent as all rice farming operations must be in line with government advice from agricultural land expansion. The results of Wahyuningsih & Hasan (2019) show that farmers’ participation in rice insurance is influenced by other farmers’ perceptions, land area, agricultural business experience, and the vibrancy of agricultural groups.

Long-time period formal education has a full-size terrible effect at the participation fee of rice farmers withinside the rice coverage application, with a coefficient price of 0.456131. This manner that if the formal education duration for rice farmers is prolonged through one year, the participation fee of rice farmers withinside the rice cultivation coverage application will lower through 0.456131%. Conversely, if the formal education duration for rice farmers is shortened through one year, rice farmers’ participation in coverage application will growth through 0.456131 percent. Thus, it may be interpreted that the better the extent of formal training of rice farmers, the decrease the participation fee of rice farmers withinside the Rice Farm Insurance Program. This suggests that the better the training of rice farmers, the extra inclined to undergo the danger of loss, so coverage has a tendency to be ignored. Farmers who have a tendency to be riskaverse or do now no longer like danger will switch the danger of loss to the coverage.

The experience of trying rice cultivation has a coefficient value of 0.153271, which has a significant adverse effect on the participation rate of rice farmers in the rice cultivation insurance system. This means that a year's increase in rice cultivation experience will reduce rice farmers' participation in the rice insurance program by 0.153271 percent. Conversely, if the rice cultivation experience decreases by one year, the participation rate of rice farmers in the rice cultivation insurance system will increase by 0.153271%.

This situation shows that the longer the rice cultivation experience, the lower the participation rate of rice farmers in the rice cultivation insurance program. This suggests that the longer the rice farming experience, the more courageous the rice farmer is at risk of loss, so insurance tends to be ignored. Fauzi et al (2021) argued that the main assessment of rejecting or responding negatively to the AUTP Program is the requirements of the insurance program
that are considered complicated, the claims are difficult, and farmers do not understand the agricultural insurance program.

The main factors that affect the participation of farmers in the AUTP Program are the length of farmer education, activeness in the farmer group, the area of land cultivated, and the risk of possible crop failure. The risk of rice farming production significantly positively affects the participation rate of rice farmers in the Rice Farm Insurance Program with a coefficient value of 0.232396. This means that if the risk of rice farming production increases by one percent, the participation rate of rice farmers in the Rice Farm Insurance Program will increase by 0.232396 percent. And if the risk of rice farming production decreases by one percent, the participation rate of rice farmers in the Rice Farm Insurance Program will decrease by 0.232396 percent. Thus, it can be interpreted that the higher the risk of rice farming production, the more it will increase the participation rate of rice farmers in the Rice Farming Insurance Program. This indicates that the higher the risk of rice farming production, the more reluctant or afraid to wingung risk of loss, so farmers will choose insurance as a risk transfer. In general, farmers who tend to be riskaverse or do not like risk will transfer the risk of loss to the insurance.

Saragih et al. (2018) The coverage set by the AUTP program states that it cannot cover the total cost of the farmers. This is the reason for the lack of participation of rice farmers in the AUTP program. Lybawsetal. (2020) We found a significant link between farmers' participation in the AUTP program and the risk appetite for rice cultivation in the Regency Tanjun Jabun Timur (Putri et al., 2020). It is the level of knowledge and mentoring strength of AUTP information that influences the AUTP program. The knowledge level variable in AUTP information indirectly influences the participation of farmers through the level of motivation of farmers according to the AUTP program. The obstacles faced by AUTP participants include the length of the payment process and the payment of payment funds (coverage).

Dewi & Suamba (2020) The benefits of AUTP in overcoming the risks of Tabanan Regency's Kramasback agriculture from OPT attacks and drought damage can be seen in comparison to the AUTP Damage Fund with production costs of 124.18% or more than 100%. I can do it. Seen, there is a budget surplus of IDR 177,246.00. The surplus funds can be used as capital to purchase production equipment during the next growth period. Farmers generally agree to the AUTP program. This program is screened based on profits, needs, registrations, premiums and qualifications. This indicates that the farmers' response to AUTP is good and that atp is considered to be in line with the farmers' wishes.

Hakim et al. (2021) showed that the average farmer's willingness to pay rise insurance coverage was IDR 33,140.00 per hectare per hectare during the growing season. The most important factor affecting a farmer's solvency is the
fluctuations in the number of dependents and income. Agricultural experience, land area, and soil conditions do not significantly affect farmers' willingness to pay AUTP premiums. Surning et al., (2018) stated that the amount of AUTP premium dues set through the farmer's Willingness to Pay approach is Rp 30,853.00 per hectare per growing season, while the current AUTP premium contribution is Rp 36,000.00 per hectare per growing season, so farmers want AUTP premium dues lowered. Obstacles when implementing the AUTP program in Subak Cepik, Tabanan Regency are in the AUTP socialization process because farmers lack socialization.

Mustika et al. (2019) The most important attributes by interest-based farmers were found to be field farming expansion, number of claims, direct socialization, farmers group chairs, and ease of information gathering. Farmers with a positive attitude and satisfaction tend to follow the program continuously and recommend it to other farmers. Ali et al. (2019) Although the implementation of the AUTP program is proceeding smoothly, it claims that socialization is still inadequate and that the solution is still difficult for farmers. There is a relationship between age and cognitive response, age with emotional response, and education with emotional response.

Putri et al (2019) mentioned that farmer perception of agricultural insurance in general is very good. Indicators that still need improvement are the socialization of agricultural insurance, the improvement in the number of claims paid, and the duration of claims payments. At the forefront of further development of sustainable agricultural insurance programs are regular socialization activities of agricultural insurance companies, classification of premium rates and claims according to regional type, and direct review by the insurance when there are claims submitted by farmers so that they are more objective.

**CONCLUSION AND SUGGESTION**

**Conclusion**

Factors that have a significant impact on farmers' participation in the rice-growing insurance program in the Binamu District of Jeneponto Regency are land area, long-term formal education, rice-growing experience, and the risk of rice-growing loss. The wider the land ownership of the rice company and the higher the level of formal education and experience in the rice business, the less farmers will participate in the rice insurance program. The higher the risk of rice production, the more farmers will participate in the rice insurance program. Production risk is a major factor driving farmers' high participation in rice insurance programs.
Suggestion

The government needs to expand and resume policies on the Rice Farming Insurance Program and develop agricultural insurance programs for commodities other than rice crops. The government needs to prioritize the implementation of the Rice Farm Insurance Program in high-risk areas in agriculture.

REFERENCES


