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Analysis of Rice-Business Insurance Program (Autp) In Ponorogo District (Case Study In Agriculture And Fisheries Department of Ponorogo District Work Program 2018-2019)

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ABSTRACT

This research aimed: (a) to analyze the implementation of rice farm business insurance (AUTP) in the Ponorogo District Work Area; (b) to find out the factors that influence the implementation of the AUTP program in Ponorogo district; (c) to prove that the agricultural sector in Ponorogo district is a base and superior sector. This research uses a qualitative approach, where the reality under study is understood by a holistic approach and does not take measurements on certain parts of the reality. This study uses Internal Factor Analysis, External Factor Analysis, Klassen Typology and LQ (Location Quetiont) Analysis. The results of the research show that: (a) Implementation of AUTP in Ponorogo district cannot be said be maximal. This is reinforced by the results of the typology Klassen analysis in Ponorogo district in the "Inactive" category; (b) Based on the results of the analysis of internal factors in this study, it was found that the implementation of the AUTP program in Ponorogo district found weaknesses and strengths that influenced the responses of farmers in Ponorogo Regency. The agricultural sector in Ponorogo Regency is a base and superior sector. (c) Based on the results of the study it was found that the LQ (Location Quantient) value from 2016 to 2018 obtained the value of LQ> 1, this indicates that the agricultural sector becomes the base and superior sector in Ponorogo district. With the knowledge of agriculture as a base sector, inputs can be produced so that the agricultural sector remains the Ponorogo base sector.

Keywords: *AUTP, IFE, EFE, Klassen, LQ*

1. INTRODUCTION

The rapid growth of development in all fields, especially industry and settlements, has a very negative influence on the development of the agricultural sector, it caused by the conversion of agricultural land to threaten national food security. Agricultural development must continue to be driven, especially in the context of pursuing increased production, added value and welfare of farmers. Along with agricultural development in general, handling land and water infrastructure plays an important role and is an integral part of supporting overall agricultural development.

Insurance applications in several countries include: Indemnity-based crop insurance, including: (a) Insurance with a risk named (named insurance company). This insurance covers one type of risk, for example hail insurance, fire, storm or ice melt. Where insurance money is calculated based on the value of agricultural inputs such as seeds and fertilizers, (b) crop insurance with several risks (multi peril crop insurance/MPCL). This insurance covers events / events caused by several reasons such as drought, floods, and some diseases. Index-based crop insurance,

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including: (a) Area-yield insurance. Insurance will pay the sum insured when the yield of an area is below the index. Other agricultural insurance. Some types of agricultural insurance applied in several countries include: (a) Livestock insurance (b) Fisheries insurance (aquaculture insurance) (c) Plantation insurance (forestry insurance) (d) Greenhouse insurance (Insyafiah, 2014).

The Indonesian Ministry of Agriculture efforts to succeed in achieving food self-sufficiency targets have become determined and must succeed. In this regard, starting in 2015, the government implemented a Special Effort for self-sufficiency in rice with a target of rice production in 2018 reaching 80.08 million tons. But business in the agricultural sector, especially rice farming were faced with the risk of uncertainty as a result of the negative impact of climate change that detrimented to farmers.

To overcome the losses of farmers, the government helped seek farming protection in the form of agricultural insurance, as stated in Law Number 19 of 2013 concerning Farmer Protection and Empowerment, which was followed up with the issuance Minister of Agriculture Regulation No. 40 of 2015 concerning Agricultural Insurance Facilitation (Ministry of Agriculture, 2017)

Agricultural insurance were very important for farmers to protect their farming. Agricultural insurance is a risk transfer that can provide compensation due to loss of farming so that the sustainability farming can be guaranteed. Through insurance, rice farming guarantees plant damage due to floods, droughts, and pest and plant disease attacks or plant pest organisms, so farmers would received compensation as working capital for the continuity of their farming.

Agricultural land, one of the most important factors of production, because land is a growing medium for plants(Hariyadi, Ali, & Nurlina, 2017). There are some agricultural lands that temporarily not cultivated, if handled, the said land can produce optimal production.

Businesses in the agricultural sector, especially rice farming are faced with the risk of uncertainty as a result of the negative impact of climate change that is detrimental to farmers. To overcome the losses of farmers, the government helps strive for the protection of farming in the form of Rice Farming Insurance. Agricultural insurance is a risk transfer that can provide compensation due to loss of farming so that the sustainability of farming can be guaranteed, the risk of failure cannot be determined and is also expected to cause losses (Hardiana, 2018).

The agricultural sector has five sub-sectors, namely the food crops subsector, the plantation subsector, the livestock subsector, the fisheries subsector and the forestry subsector. The contribution and growth rate of the agricultural sub-sector in Ponorogo District is supported by agricultural commodity production from each agricultural sub-sector. Agricultural commodity production in Ponorogo Regency fluctuated from 2010 to 2015.

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One of the staple foods and strategic commodities for Indonesia is rice (Oryza sativa L). However, rice production has not been able to meet the needs of the population. For this reason, it is necessary to apply strategic policies such as the use of superior varieties, the construction of irrigation facilities, subsidies for seeds, fertilizers, and agricultural equipment with modern technology to increase rice productivity nationally.

Productivity of rice in East Java has increased. Based on data from the 2015 Central Bureau of Statistics (BPS), from 2009 to 2015 there has always been an increase, although in 2011 rice productivity declined from the previous year. However, the data from the Central Statistics Agency (BPS), most of the rice productivity has increased every year (2009-2015).

Demographically, the population of Ponorogo District which depends on the agricultural sector reaches 73.11% of the total population with the number of farmer households amounting to 178,958 of the total households in the Regency. Ponorogo has 244,790 households, with employment in the agricultural sector reaching 261,383 people. Ponorogo also has the potential of natural resources in the form of agricultural land covering an area of 63.49% of the total area of agricultural land with details. The area of rice fields reaches 34,638 ha and non-rice farmland area of 52,457 ha (Statistics of Ponorogo Regency 2017: BPS Kabupaten Ponorogo).

Ponorogo District is one of the food buffer areas in East Java. The area of rice fields in 2016 was still 34,801 hectares consisting of irrigated rice fields covering 32,775 hertares and non irrigated rice fields covering 2,026 hectares. The harvested area of rice in 2016 reached 79,000 hectares, an increase of 9.01 percent over the previous year.

The largest area of irrigated rice fields is in Sukorejo District with an area of 3,374 Ha (10.29 percent). While the most irrigated rice field area is found in Ngrayun Subdistrict covering an area of 771 Ha (38.06 percent). A longer rainy season compared to 2015 made the frequency of rice planting higher, so rice production also increased 3 percent compared to 2015. (Ponorogo District Statistics 2017: BPS Ponorogo District)

The increase in commodity in the agricultural sector is the most important thing in improving the economy of Ponorogo Regency. There are several things that underlie it, including the potential of large and diverse natural resources Administratively, the area of Ponorogo District is divided into 21 sub-districts which are further divided into 307 villages / villages, 1,002 neighborhoods / hamlets, 2,274 RWs and 6,869 RTs. Subdistricts with different geographical characteristics and conditions, thus enabling the diversity of commodities produced.

Mandate of Law Number 19 of 2013 concerning Farmer Protection and Empowerment, one of which states that farmers need to be protected from crop failure, the government issued an agricultural insurance program regulated in Minister of Agriculture Regulation Number 40 /

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Permentan / SR.230 / 7 / 2015. Then strengthened through Decree of the Minister of Agriculture No. 02 / Kpts / SR.220 / B / 01/2016 dated January 6, 2016 as a guideline for Rice Farm Business Insurance premiums (AUTP). AUTP's own background is to realize a special effort for rice self-sufficiency. With the cover of crop failures, farmers are expected to continue to implement agricultural productivity (Azriani, 2018).

This Rice Farm Business Insurance Research is to protect the loss of the economic value of rice farming due to crop failure, so that farmers have working capital for the next crop. Talking about insurance, we must be familiar. Moreover, insurance services in the household economic system, are usually needed in the face of financial risks that arise as a result of the risk of flooding, drought and the presence of pest attacks. While insurance services in the business world are needed in the face of various risks that can rationally disrupt the sustainability of the business activities of Rice Farmers in Ponorogo Regency.

Rice farming is faced with the risk of uncertainty as a result of the negative impact of climate change that is detrimental to farmers. Therefore, the government helped seek farming protection in the form of agricultural insurance to overcome farmers' losses. Agricultural insurance protects farming because it is a risk transfer that can provide compensation due to loss of farming so that the sustainability of farming can be guaranteed. Rice farming insurance (AUTP) can provide guarantees for plant damage due to floods, droughts, and pest and plant disease attacks or plant pest organisms (OPT), so that farmers can obtain compensation as working capital for the sustainability of their farming.

This research aims: (a) to analyze the implementation of rice farm business insurance (AUTP) in the Ponorogo District Work Area; (b) to find out the factors that influence the implementation of the AUTP program in Ponorogo District; (c) to prove that the agricultural sector in Ponorogo District is a base and superior sector.

2. METHODOLOGY

This research used a qualitative approach, where the reality under study is understood by a holistic approach and does not take measurements on certain parts of the reality. The research conclusions are made not based on quantitative calculations, but are based on careful descriptions of reality (Emzir, 2012).

A qualitative approach is an approach that seeks to capture aspects of the social world that are difficult to measure with numbers. A qualitative approach also allows writers to gain access to people's motives, meanings, actions, and reactions in the context of their daily lives (Putra, 2013).

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The workings in qualitative research are more flowing, processing, adjusting to the situation and conditions of the field (natural / naturalistic context), and are specific (typical). Qualitative research does not test theories or hypotheses, but observes, understands, and interprets reality well, meticulously, comprehensively, and in detail to obtain a good, systematic understanding or interpretation of the reality under study. Therefore qualitative research is also known as a subjective and naturalistic approach (Ibrahim, 2015).

In qualitative research, research is considered to end (finish) if the issues that are the focus of research can be explained systematically and comprehensively, in detail, and in depth. In other words, narrative and descriptive explanations that are detailed, detailed, systematic, argumentative, clear, and easily understood become the strength of the results of qualitative research (Ibrahim, 2015).

The basic method used in this research is descriptive method, producing data in the form of words or images, so as not to emphasize numbers. So the results of this study are in the form of a description of the phenomenon and findings in the field related to the formulation of the problem. Through descriptive research, it will be described about Rice Farm Business Insurance covering the implementation, guidance model, collaboration of implementing actors, farmer participation and welfare of farmers in Ponorogo Regency.

This research was conducted in Ponorogo Regency considering the contribution of the agricultural sector to the economic sector's GRDP has the greatest value and the Ponorogo Regency is feasible to carry out the cultivation process (cultivation of agricultural commodities from the food subsector and horticulture, plantations, fisheries, plantations and forestry). Explaining the problems that have been set, several methods of data analysis are used:

1. IFE Matrix Analysis

   IFE were extraction stage in carrying out the strategic management audit. This strategy formulation tool summarized and evaluated key strengths and weaknesses in the functional area, and also provided a basis for identifying and evaluating the relationships between these areas. Intuitive assessments were needed to develop the IFE Matrix, so the emergence of a scientific approach should not be interpreted to mean that very extraordinary technique. A good understanding of the factors included werw more important than the actual numbers. Similar to EFE Matrix and Competitive Profile Matrix.

2. EFE Matrix Analysis

   External Factor Analysis enabled strategy makers to summarize and evaluate economic, social, cultural, demographic, environmental, political, government, legal, technological and competitive information.

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3. Klassen Typology Analysis

Klassen Typology Analysis used to answer first question of research. The Klassen typology is one of the regional economic analysis tools that can be used to find out the description of the status of rice farming insurance in relation to Rice Farming Insurance/ Rice Production Income (Farmers). Culture of rice farming insurance, Knowledge of farming insurance in the Ponorogo Regency Work Area. Klassen Typology Analysis is used with the aim of Analyzing the relationship of Rice Farming Insurance, / Rice production income (Farmers)., Analyzing the relationship of insurance culture Rice farming Analyzing the relationship of insurance knowledge with Farmers in the Ponorogo Regency Work Area by taking into account the increase in area covered by business insurance farm in East Java Province as a reference area (Sjafrizal, 2008).

4. Analisis *Location Quotient* (LQ)

Models that are often used to analyze activities in an area include the Location Quotient (LQ) analysis model. This technique is a way of beginning to determine the ability of an area in a particular activity sector. The final results of this technique are still temporary conclusions that still need to be reviewed through other analytical techniques so that they can answer whether the conclusions are proven or not. However, in the initial stage it was enough to provide an overview of the capabilities of the regions concerned in the sector observed.

Basically this technique presents a relative comparison between the capabilities of a sector in the area investigated with the capabilities of the same sector in the wider area. The variables used as a measure to produce coefficients can use units of labor in the sector, production or other units that can be used as criteria. Relative comparison of Location Quotient (LQ) Model can be expressed through the following mathematical:

$$LQ_i = \frac{S_i / N_i}{S / N} = \frac{S_i / S}{N_i / N}$$

The LQ formulation structure provides several values as follows:

LQ> 1 : the observed sub-region has a potential surplus

LQ <1 : sub-regions tend to import from other regions

LQ = 1 : the sub-region is sufficient in certain activities

LQ analysis can be done as a first step to obtain information on a sector as a base or non-base sector.

$$LQ = \frac{S_i / S}{N_i / N}$$ at $$LQ \quad \frac{S_i / N_i}{S / N}$$

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Data based on the information above, entered into the formula, will be obtained as follows:

a. If LQ> 1, it states sub-regions that have the potential to export certain commodities or are a base sector.
b. If LQ = 1, states that the area in question has sufficient needs in certain activities.
c. If LQ <1, it states that the sub-region in question has a tendency to import from other sub-regions or is a non-base sector.

3. RESULTS AND DISCUSSES

East Java Province has implemented the AUTP program. The number of AUTP participants in East Java Province reached 15,838 farmer groups. With the number of affected land amounting to 144,568.14 Ha. Whereas in Ponorogo regency the number of farmer groups participating in the AUTP program is only 3 farmer groups with an affected land area of 22.14 hectares. If you see the number of farmer groups in Ponorogo regency as many as 882 active farmer groups, only 0.34% of farmer groups participating in the AUTP program with an affected land area of 22.14 hectares or about 0.076% of the total agricultural land in Ponorogo Regency. The small number of AUTP participants in Ponorogo district was caused by farmers arguing that the AUTP program did not benefit the farmers because the affected conditions had to reach 75%, even though the average land area affected rarely reached 75% of damage. Besides that, based on data from interviews with informants, it was stated that many farmers did not understand the direction and target of the AUTP program. The lack of government outreach to the AUTP program has caused farmers to be unsure about the objectives of the program.

Regarding the number of farmer group in Ponorogo regency, which is participating in the AUTP program, compared to other districts, it tends to be far less. This proves that the AUTP program has not been well absorbed by the groups in the Ponorogo district.

Faktor Internal Factor Analysis

Internal Factor Analysis Relating to Implementation of AUTP in Ponorogo Regency can be explained as follows:

Weakness

- Lack of understanding of farmers about AUTP
- Assessment of farmers that AUTP is not profitable
- The small size of agricultural land that fails to harvest
- High requirements for crop failure to reach 75%
- The small participation of POKTAN to follow AUTP
- Lack of socialization from the government

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Strengths

- Provided a guarantee of protection to obtain farming capital
- Low self-help premiums that must be paid by farmers
- Provided continuous guidance from the government
- Insurance premiums guaranteed are not only from natural disaster factors
- Large number of farmer groups
- Amount of extensive agricultural land

Tabel 1. Internal Factor Analysis

No	Descriptions	Amount	Rating	Weigh t	Score
	Weakness (Internal)				
1	Lack of understanding of farmers about AUTP	24	3,43	0,13	0,44
2	Assessment of farmers that AUTP is not profitable	15	2,50	0,08	0,20
3	The small size of agricultural land that fails to harvest	17	2,83	0,09	0,25
4	High requirements for crop failure up to reach 75%	18	3,00	0,10	0,29
5	The small participation of farmer group join to AUTP member	18	3,00	0,10	0,29
	Total	92			1,46
	Strength (Internal)				
1	Provided a guarantee of protection to obtain farming capital	21	2,50	0,08	0,21
2	Low self-help premiums that must be paid by farmers	21	3,00	0,08	0,25
3	Provided continuous guidance from the government	18	2,71	0,11	0,29
4	Insurance premiums guaranteed are not only from natural disaster factors	19	3,00	0,10	0,31
5	Large number of farmer groups	18	3,00	0,10	0,31
	Total	97			1,37

Sources: Primary Data managed, 2019

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The results based internal factors in table 1 above, it was found that the implementation of the AUTP program in Ponorogo district found weaknesses and strengths that affected the responses of farmers in Ponorogo Regency. Some of the weaknesses that affect farmers' participation in the AUTP program are the lack of understanding of the farmers about AUTP, the high requirements for crop failure up to 75% and the small participation of POKTAN to follow AUTP. Besides that, another weakness is caused by the small area of agricultural land that fails to harvest and the assessment of farmers that AUTP is not profitable.

Viewed from the side of the opportunity, the value is smaller than the weakness. Based on the assessment of the respondents, the value of opportunity weight is 1.37. While the value of weakness weight is 1.46. This means that the implementation of the AUTP Program has not been so received among farmers in Ponorogo district for several reasons the above weaknesses.

External Factor Analysis

External Factor Analysis relating to the Implementation of AUTP in Ponorogo Regency can be explained as follows:

Opportunity:

- The welfare of farmers is increasing
- Provided alternative to open a post-harvest business
- Fostering the government becomes an additional new innovation for farmers
- Increase farmer's accessibility to financing sources
- AUTP is a solution for farmers to survive crop failure

Threat

- Jasindo Incorp. were less committed to insurance payments
- Many farmers change professions to onpther fields
- Many farmers sell unproductive agricultural land
- Many farmers switch to commodities other than rice
- The small number of farmers participating in the AUTP

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Table 2. External Factor Analysis

No	Descriptions	Amount	Rating	Weight	Score
	Opportunities (External)				
1	The welfare of farmers is increasing	19	3,17	0,10	0,32
2	Provided alternative to open a post-harvest business	16	2,67	0,08	0,23
3	Fostering the government becomes an additional new innovation for farmers	18	3,00	0,10	0,29
4	Increase farmer's accessibility to financing sources	17	2,83	0,09	0,25
5	AUTP is a solution for farmers to survive from crop failure	17	2,83	0,09	0,25
	Total	87			1,34
	Threat (External)				
1	Jasindo Incorp. were less committed to insurance payments	21	3,50	0,11	0,39
2	Many farmers change professions to onpther fields	21	3,33	0,11	0,35
3	Many farmers sell unproductive agricultural land	18	3,00	0,10	0,29
4	Many farmers switch to commodities other than rice	19	3,17	0,10	0,32
5	The small number of farmers participating in the AUTP	18	2,67	0,08	0,23
	Total	97			1,57

Sources: Primary Data managed, 2019

Based on external factor analysis data in table 2, it is found that the magnitude of the opportunity to participate in the AUTP program is much smaller than the threat that appears. Some concerns with the existence of the AUTP program felt by farmers include the emergence of concerns that PT. Jasindo as a provider of insurance funds is less committed to insurance payments. Many farmers will take their fortune to transfer professions to fields other than agriculture. With frequent crop failures there is a tendency for farmers to sell unproductive agricultural land. Then the increasing number of pest and disease attacks many farmers who switch to planting crops other than rice that are more resistant to pests and diseases.

3.1. Klassen Typology Analysis

The highest number of farmer groups participating in the AUTP program in East Java is Bojonegoro district (11,435) and Lamongan district (1,048). Then followed by Trenggalek district (885), Jember (471) and Tuban (459). While the lowest number of farmer groups participating in the AUTP program is Magetan Regency (2) and Ponorogo Regency (3). Besides that, there are also

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9 districts which do not take part in the AUTP program, including; Bondowoso, Malang, Mojokerto, Probolinggo, Pasuruan, Kediri, Pamekasan, Bangkalan and Situbondo.

Table 3. District-AUTP Participation Classification of Klassen Typology

Average area of failure crop	Average Participaton AUTP	
	yi,1 > yi,2	**yi,1 < yi,2**
	Very Active	**Active**
ri,1 > ri,2	Bojonegoro	Pacitan
	Gresik	
	Jombang	
	Lamongan	
	Lumajang	
	Madiun	
	Ngawi	
	Tuban	
	Jember	
	Nganjuk	
	Trenggalek	
	Enough Active	**Less Active**
ri,1< ri,2	Banyuwangi	Blitar
	Kediri	Bondowoso
	Kota Probolinggo	Magetan
	Kota Madiun	Malang
		Mojokerto
		Ponorogo
		Probolinggo
		Sampang
		Sidoarjo
		Sumenep
		Tulungagung
		Kota Kediri
		Pamekasan
		Kota Malang
		Bangkalan
		Situbondo

Sources: Primary Data managed, 2019

Cluster typology analysis data obtained data that Ponorogo Regency tends to be less active in participating in the AUTP program, this is evidenced by the number of participants participating in the program no more than 3 farmer groups only from 882 active farmer groups. Based on data

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from respondents that this is because in the Ponorogo regency the level of crop failure is still at a reasonable level, even some of the damaged agricultural land has not been categorized as heavy meaning reaching more than equal to 75% damage.

3.2. Location Quantient (LQ) Analysis

Tabel 4. Location Quantient (LQ) Agriculture of Ponorogo 2016-2018

No	Sector	2016 (%)	2017 (%)	2018 (%)
1	Agriculture	28,77	28,71	28,59
2	Mining	2,78	2,76	2,64
3	Industry	9,42	9,67	9,74
4	Electrical, PDAM	1,57	1,64	1,52
5	Construction	9,05	9,25	9,14
6	Trade	24,81	24,62	24,38
7	Communication	5,74	5,67	5,79
8	Rental, company services	5,21	5,17	5,23
9	Services	12,56	12,51	12,97

Sources: Primary Data managed, 2019

Based on table 4, it can be calculated the LQ of Ponorogo regency based on agricultural LQ data in East Java Province as follows:

With the agricultural sector GRDP in East Java Province in 2018 reaching 16.56%, 2017 reached 16.45% while in 2016 it reached 16.25%. From these data, LQ (Location Quantient) can be calculated in the agricultural sector as follows:

LQ *(Location Quantient)* year 2016 :

LQ = 28,77 / 16,25 = 1,77

LQ *(Location Quantient)* Year 2017 :

LQ = 28,71 / 16,45 = 1,74

LQ *(Location Quantient)* Year 2018 :

LQ = 28,59 / 16,56 = 1,72

From the calculation of LQ (Location Quantient) from 2016 to 2018 the LQ value> 1 is obtained, this indicates that the agricultural sector becomes the base and superior sector in Ponorogo district. The results of this calculation are included in the first classification, namely LQ> 1. This means that the agricultural sector in Ponorogo Regency can be the agricultural sector base for the East Java region and export to other regions that lack production in the agricultural sector. This LQ =

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1.72 result also means that the proportion of creating added value in the agricultural sector in Ponorogo Regency is 1.72 times greater than the proportion of creating value added in the agricultural sector in East Java Province. With the knowledge of agriculture as a base sector, inputs can be produced so that the agricultural sector remains the Ponorogo base sector.

4.CONCLUSIONS

Based on the results of research and discussion conclusions can be drawn as follows:

a. Implementation of the implementation of paddy farm business insurance (AUTP) in Ponorogo Regency.

The implementation of AUTP in Ponorogo district cannot be said to be maximal because the number of farmer groups participating in the AUTP program is only 3 farmer groups with an area of affected land as much as 22.14 hectares. If you see the number of farmer groups in Ponorogo regency as many as 882 active farmer groups, only 0.34% of farmer groups participating in the AUTP program with an affected land area of 22.14 hectares or around 0.076% of the total agricultural land in Ponorogo Regency. The small number of AUTP participants in Ponorogo district was caused by farmers arguing that the AUTP program did not benefit the farmers because the affected conditions had to reach 75%, even though the average land area affected rarely reached 75% of damage. Besides that, based on data from interviews with informants, it was stated that many farmers did not understand the direction and target of the AUTP program. The lack of government outreach to the AUTP program has caused farmers to be unsure about the objectives of the program.

While based on using the Klassen typology analysis related to the implementation of AUTP in Ponorogo district, showed that Ponorogo district is in the "Inactive" category. Based on data from respondents that this is because in the Ponorogo regency the level of crop failure is still at a reasonable level, even some of the damaged agricultural land has not been categorized as heavy meaning reaching more than equal to 75% damage.

b. Related to the factors that influence the implementation of the AUTP program in Ponorogo Regency.

Based on the results of the analysis of internal factors in this study, it was found that the implementation of the AUTP program in Kabupaten Ponorogo found weaknesses and strengths that influenced the responses of farmers in Ponorogo Regency. The biggest weaknesses affecting farmers' participation in the AUTP program are the lack of

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understanding of farmers about AUTP, the high requirements for crop failure to reach 75% and the small participation of POKTAN to follow AUTP. The weakness is caused by the small area of agricultural land that fails to harvest and the assessment of farmers that AUTP is not profitable. Viewed from the side of the opportunity, the value is smaller than the weakness. Based on the assessment of the respondents, the value of opportunity weight is 1.37. While the value of weakness weight is 1.46. This means that the implementation of the AUTP Program has not yet been received among farmers in Ponorogo district.

c. The agricultural sector in Ponorogo Regency is a base and superior sector.

Based on the results of the study, it was found that the LQ (Location Quantient) value from 2016 to 2018 obtained LQ> 1, this indicates that the agricultural sector becomes the base and superior sector in Ponorogo district. The results of this calculation are included in the first classification, namely LQ> 1. This means that the agricultural sector in Ponorogo Regency can be the agricultural sector base for the East Java region and export to other regions that lack production in the agricultural sector. This LQ = 1.72 result also means that the proportion of creating added value in the agricultural sector in Ponorogo Regency is 1.72 times greater than the proportion of creating value added in the agricultural sector in East Java Province. With the knowledge of agriculture as a base sector, inputs can be produced so that the agricultural sector remains the Ponorogo base sector.

REFFERENCES

Arikunto, Suharsimi. 2013. Manajemen Penelitian. Rineka Cipta. Jakarta. ISBN: 978-979-518-153-8

Azriani, Zednita., et al. 2018. Pelaksanaan Asuransi Usaha Tani Padi dalam Meningkatkan Ketahan Pangan di Kota Padang. Semnas UNS Dies Natalis Ke-42. Vol 2, No. 1 (2018). E-ISSN: 2615-7721, P-ISSN: 2620-8512

Daniar, Gilang Ardila.2018. Implementasi Asuransi Usaha Tani Padi Se-Eks Karesidenan Pati dalam Mengatasi Gagal Panen.

Daymond, Christine & Holloway, Immy. 2008. Riset Kualitatif dalam Public Relations & Marketing Communications. Yogyakarta : IKAPI

Djunedi, Praptono. 2016. Analisis Asuransi Pertanian di Indonesia: Konsep, Tantangan dan Prospek. Jurnal Borneo Administrator. Vol 12 No. 1. 2016.

Emzir. 2012. Analisis Data Metodologi Penelitian Kualitatif. Jakarta : Rajawali pers

Rahman, Fadlur. 2017. Asuransi Usaha Tani Padi (AUTP) Dalam Peraturan Menteri Pertanian No 40 Tahun 2015 Menurut Petani Berkala Kecil di Kelompok Tani Sidomakmur IV Desa Sidodadi, Paiton, Kabupaten Probolinggo dan Tinjauan Maslahah Mursalah. Malik Maulana Malik Ibrahim.

Fauzy, Nurul Fathiyah. 2018. Sosialisasi Dan Pendataan Peserta Program Asuransi Usahatani Padi (AUTP). Jurnal Pengabdian Masyarakat Ipteks. *Vol. 4 No.1 Juni 2018. e-ISSN:2528-116X p-ISSN:2527-5216*

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Hardiana, Juli. 2018. Faktor-Faktor yang Mempengaruhi Keputusan Petani Dalam Mengikuti Program Asuransi Usahatani Padi (AUTP) Di Kabupaten Tanjung Jabung Timur. Universitas Jambi.

Hariyadi, B. W., Ali, M., & Nurlina, N. (2017). Damage Status Assessment Of Agricultural Land As A Result Of Biomass Production In Probolinggo Regency East Java. *ADRI International Journal Of Agriculture*, *1*(1).

Ibrahim, Dr. 2015. Metodologi Penelitian Kualitatif. Bandung : Alfabeta

Insyafiah., Wardhani, Indria. 2014. Kajian Persiapan Implementasi Asuransi Pertanian Secara Nasional. Kementerian Keuangan-Badan Kebijakan Fiskal-Pusat Pengelolaan Risiko Fiskal.

Kementan. 2018. PEDOMAN BANTUAN PREMI ASURANSI USAHA TANI PADI (AUTP) DIREKTORAT PEMBIAYAAN PERTANIAN.

Mutaqin, Aceng Komarudin., et al. Metode Parametrik untuk Menghitung Premi Program Asuransi Usaha Tani Padi di Indonesia. Jurnal Etos. Vol 4, No.2, Juli 2016, ISSN 1693-699X | EISSN 2502-065X

Mappiare, Andi. 2009. Dasar-dasar Metodologi Riset Kualitatif. Malang : Jenggala Pustaka Utama

Nurfianingsih. 2017. PENERAPAN ASURANSI USAHA TANI PADI (AUTP) SEBAGAI UPAYA MENINGKATKAN KESEJAHTERAAN PETANI (Studi Pada Dinas Pertanian, Tanaman Pangan dan Holtikultura Kabupaten Tulungagung). Universitas Muhammadiyah Malang

Putra, Nusa. 2014. Metode Penelitian Kualitatif Manajemen. Jakarta : Rajagrafindo

Priyono. 2016. Metode Penelitian Kuantitatif. Zifatama Publishing. Sidoarjo. ISBN: 978-602-6930-31-6.

Rahmat. 2013. Statistika Penelitian. Pustaka Setia. Bandung. ISBN: 978-979-076-337-1

Saragih, Ika Rosalia, et al. 2018 . ANALISIS RISIKO PRODUKSI PADI DALAM PENGEMBANGAN ASURANSI USAHATANI PADI (AUTP) DI DESA PANCA ARGA, KECAMATAN RAWANG PANCA ARGA, KABUPATEN ASAHAN. Jurnal Agrisep Vol. 17 No. 2 September 2018. ISSN: 1412-8837, e-ISSN : 2579-9959

Septian, Dandi., et al. PERLINDUNGAN PETANI MELALUI KONSEP ASURANSI PERTANIAN PADA GABUNGAN KELOMPOK TANI DESA ARGOREJO, KABUPATEN BANTUL. JURNAL PENELITIAN HUKUM Volume 1, Nomor 2, Juli 2014, Halaman 92-108

Sugiyono. 2014. Statistika Untuk Penelitian. Alfabeta. Bandung. ISBN: 978-979-8433-10-8

Sukarsono, A. (2017). Pengaruh Jiwa Wirausaha, Motivasi dan Manajemen Agribisnis Terhadap Keberhasilan Usaha Tani Gapoktan LM3 POMOSDA Kabupaten Nganjuk. Jurnal Ilmiah *Vidia Vol 25 No*.1

Wahyuningtyas, Rosita. et al. 2013. ANALISIS SEKTOR UNGGULAN MENGGUNAKAN DATA PDRB (Studi Kasus BPS Kabupaten Kendal Tahun 2006-2010). JURNAL GAUSSIAN, Volume 2, Nomor 3, Tahun 2013. UNDIP