

STRATEGY TO DEVELOP RICE FARM BUSINESS INSURANCE IN PT ASURANSI JASA INDONESIA

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Abstract: Agricultural sector has very significant roles in Indonesian economy, some of which are as the contributor of the second highest PDB and the biggest labor absorber with the contribution of 13.6% and 32% respectively. Even though, it is the biggest labor absorber, agricultural business is not interesting to the community nowadays. This is because this business has a quite high risk to fail to harvest. This research aimed to analyze the external and internal factors affecting the development of Rice Farm Business Insurance (AUTP), to know the position of the company in carrying out the AUTP, and to formulate the strategy to develop AUTP in PT Asuransi Jasa Indonesia (Jasindo). This research used descriptive method through case study with the analysis equipment, like Five Forces Porter, IFE/EFE Matrix, IE Matrix, SWOT, and QSPM. The results showed that there were several strategic factors influencing the implementation of AUTP, i.e. a wide market opportunity. The position of the company in the implementation of AUTP was in the position of hold and maintain with the recommended strategy, of market penetration and product development. In this research, eight alternative strategies were obtained with the with the highest priority was to expand the distribution channel network.

Keywords: development stragety, rice farm business insurance, agricultural risk, Jasindo, QSPM

Abstrak: Sektor pertanian memiliki peran penting dalam perekonomian Indonesia diantaranya sebagai penyumbang PDB tertinggi kedua dan penyerap tenaga kerja terbesar dengan kontribusi masing-masing 13.6% dan 32%. Meskipun menjadi penyerap tenaga kerja terbesar, namun usaha tani saat ini kurang diminati oleh masyarakat pada umumnya. Hal ini dikarenakan pelaku usaha tani dihadapi oleh risiko kegagalan panen yang cukup tinggi. Penelitian ini bertujuan menganalisis faktor eksternal dan internal yang memengaruhi pengembangan Asuransi Usaha Tani Padi (AUTP), mengetahui posisi perusahaan dalam pelaksanaan AUTP, dan merumuskan strategi pengembangan AUTP di PT Asuransi Jasa Indonesia (Jasindo). Penelitian ini menggunakan metode deskriptif melalui studi kasus dengan alat analisis berupa Five Forces Porter, Matriks IFE/EFE, Matriks IE, SWOT, dan QSPM. Hasil dari penelitian ini menunjukkan beberapa faktor strategis yang paling berpengaruh pada pelaksanaan AUTP diantaranya adalah peluang pasar yang masih sangat luas. Posisi perusahaan dalam pelaksanaan AUTP ini adalah dalam posisi hold and maintain dengan strategi yang direkomendasi, yaitu strategi penetrasi pasar dan pengembangan produk. Pada penelitian diperoleh delapan alternatif strategi dengan prioritas berupa memperluas jaringan saluran distribusi.

Kata kunci: strategi pengembangan, asuransi usaha tani padi, risiko pertanian, Jasindo, QSPM

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INTRODUCTION

Agricultural sector is considered to play a significant role in the Indonesian economy. The contribution of agricultural sector towards national PDB reached 13.6%. This number is the second highest PDB contribution after a production industry. The crop sub-sector in the establishment of agricultural PDB gave a contribution of 32% (BPS, 2015). Moreover, the agricultural sector plays a role as the highest labor absorber. Around 35% of the total labors was in the agricultural sector although the business in agriculture is not very appealing to the society at the moment.

This is supported by the data of BPS (2015) which showed that the number of workers in agricultural sector in Indonesia had deteriorated since 2010–2014. This is presented in Figure 1. The labor force of rice crop sector also decreased (0.41%) in 2013. This decrease was influenced by some factors. First, agricultural sector faced the quite high uncertainty risk, and farmers had to bear its risk by themselves (Insyafiah dan Wardhani 2014). Next, agriculture is one of prone businesses towards the negative effects of uncertain climate change which caused the harvest fail. Therefore, this weakened the farmers' motivation to develop their farm business (PSEKP, 2009). Finally, the level of farmers' welfare has been under the poverty line.

Based on the data of BPS (2015), the width of rice farm with rice failure due to the attack of plant-disturbing organisms, flood, and drought went through fluctuation in 2010–2014. This caused the fluctuation of rice production in Indonesia in 2010–2014. This condition is in line with the statement of (2012) which stated that the level of crop failure was either the direct or indirect

effect of climate uncertainty, like flood, drought and OPT attack which affected the width of farm so that this caused crop failure. The data of rice production in Indonesia and the development of OPT attack, flood, and drought in 2010–2014 is presented in Figure 2.

Considering the risk faced by farmers in implementing their farm business, the government issued the Consitution No. 19, 2013 about the protection and farmer empowerment. The government offered the program of agricultural insurance as one of the funding scemes which related to risk sharing in farming activities. Agricultural insurance is the association between farming financing with the third party (Institution/private company/government institution) with certain amount from premium financing (Pasaribu et al. 2010).

There are many countries implementing this insurance, like Europe, North America, Latin America, India, China, Japan, Thailand, and Australia in which they want to protect the farmers traditionally. Through this program – agricultural insurance, the government will allocate specific budget (ad hoc) for natural disaster in farming sector. Consequently, this can protect the budget/state budget revenues from the effect of natural disaster. This budget can be disbursed when there is a report of destruction in the farming area which causes the farming production decrease. Agricultural insurance aimed to protect famers from the loss which can make the yields drop and or field destruction which is caused by natural factors, pest and disease as well as drought. The distribution of agricultural insurance in some countries can be performed through insurance company, agricultural bank or the combination of both insurance company and agricultural bank.

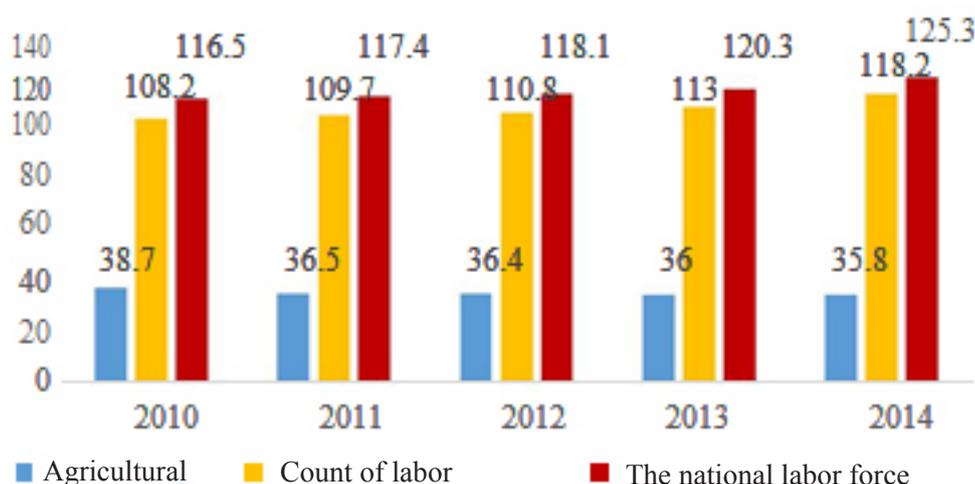


Figure 1. The development of labor force in the agricultural and non agricultural sector, Indonesia (BPS, 2015)

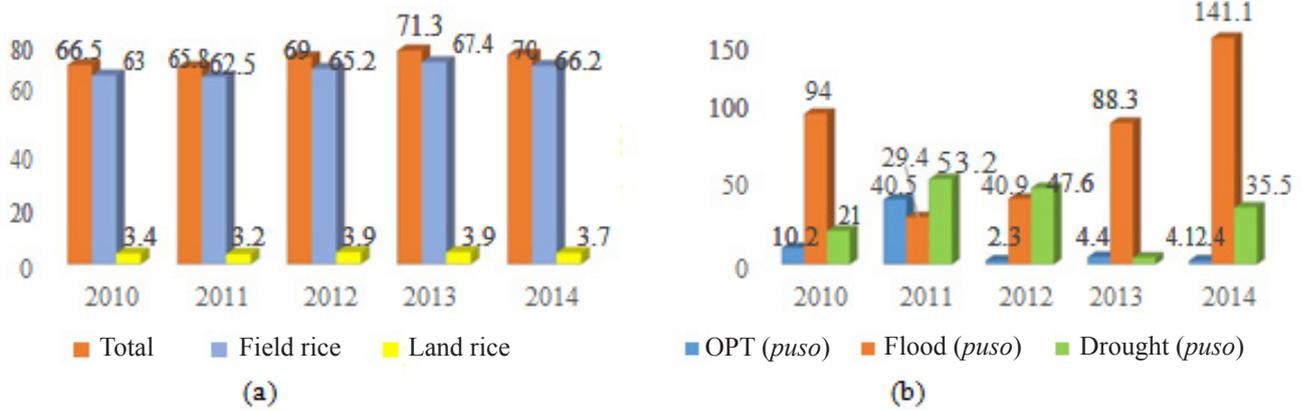


Figure 2. Rice production in Indonesia (a) and the development of OPT attack size, flood and drought in 2010-2014 (b) (BPS and Crop Plant Protection Directorate (2015))

The experiences of agricultural insurance scheme from some developed countries has been applied in Indonesia, one of which is Rice Farm Business Insurance (AUTP) made to decrease the risk of uncertainty faced by the farmers. However, the implementation of AUTP in Indonesia still needs improvement and adjustment with the system of agriculture in Indonesia. At this moment there is only 3.8% of rice field in Indonesia which is guaranteed by AUTP. This shows that the interest of farmers to assure their lands is still low. Lands which have not been guaranteed by the AUTP create their own chance to keep developing their AUTP's products. The right strategy to improve the users of AUTP must be done by Indonesian Government.

Such research had ever been performed by Adhitya (2016) when there was a pilot project of AUTP, and by Annisa et al. (2015) about the strategy to develop insurance of cattle. This research was aimed to analyze the strategy to develop AUTP by identifying the factors which could influence the success when the national scale expansion in Indonesia took place.

The aim of this research was to identify both internal and external factors affecting the development of AUTP in PT Asuransi Jasa Indonesia (Jasindo) and to analyze the attractiveness of the agricultural industry, to formulate the strategy to develop AUTP of Jasindo. This research is expected to give benefits, such as giving recommendation of a right strategy design in developing the AUTP for the internal side of Jasindo and becoming the referent for the government to make a policy in agricultural sector. This research was limited in the scope of a business unit of AUTP in which Jasindo was the implementer.

METHODS

This research was conducted with descriptive approach in the form of case study. The data used in this study are primary data (interview and questionnaire filled by head of Micro-Business Unit (UUPM) and head of UUPM division) and secondary data (relevant data, such as AUTP implementation report, journal, book, research of relevant past).

Selection of resource based on purposive sampling with the hope that the selected sample has knowledge, expertise, and competence in the field studied in the research. There were five persons of resource used in this study. Four persons were from internal Jasindo and one person was from an external company; that is, a senior researcher of an agricultural insurance from ICASEPS. The data obtained would be processed and analyzed descriptively-quantitatively to design the AUTP development strategy with the steps shown in Table 1.

The agricultural sector is one of the most vulnerable sectors to climate change impact risks, such as floods, droughts, and pest attacks. These risks have an impact on the worsening economic conditions of farmers because the farmers have difficulty in obtaining the capital to re-plant. Communities working in vulnerable sectors of climate change need a protection scheme that allows them to survive under uncertain climate change conditions (Dodon et al. 2013). Therefore, the government established an AUTP program that serves to minimize the risk of crop failure caused by drought, flood, and pest attack. However, the implementation of AUTP in Indonesia still needs improvement and adjustment to the agricultural system in Indonesia.

Table 1. Technique of data processing and analysis

Analysis performed	Tool of analysis	Output produced
Competitive Analysis Industry Power	Five Forces of Porter	Strategic factor, position and industry attractiveness of agricultural insurance
Analysis existing Strategy product of AOTP	EFE and IFE Matrix	Strategic issue information when carrying rice business insurance
The formulation of strategy alternative	SWOT and IE	Alternative strategy formulation
The determination of strategy priority	QSPM	Strategy prioritized to be applied in the development of AOTP
The plan of strategy implementation	The table of strategy implementation table	Policy, program, and strategy objects

The development of AOTP is influenced by several factors. First, rice farming is one of the most risky and uncertain business types (Sumaryanto and Nurmanaf, 2007). Second, the lack of conscious farmers on the importance of agricultural insurance (Siswadi and Syakir, 2016; Djunedi, 2016). Third, the uneven socialization of AOTP in Indonesia. These factors make AOTP a viable protection system to be developed (Figure 3).

RESULTS

AOTP Implementation Scheme

The implementation of AOTP involves many stakeholders in which the farmers are the center of this business paying only a self-supporting premium of 20% (Rp36,000) of the total premium value (Rp180,000). The registration of farmers is done by several stages as shown in Figure 4. The sum insured given to farmers in case of crop failure caused by flood, drought and pest is 6 million rupiah per Ha/MT.

Industrial Enticement

Agricultural insurance products are a new Class of Business in Indonesia. So far, general insurance companies have been less interested in developing the business because the risk will be very large. But today, many general insurance companies are entering the agricultural insurance industry. This is because the risk of crop failure can be minimized with the assistance for farmers, so the risk borne by the company is also lower. Currently, there are several general insurance companies, such as Jasindo, ACA Limited Company, and Tania Insurance Limited Company. The agricultural insurance industry will begin to develop if one of

the general insurance companies is able to generate large profits. Generally, general insurance companies wait more for results than research for new products. The premium generated in the agricultural insurance industry is currently dominated by AOTP products owned by Jasindo as shown in Figure 5. The amount of the premium is due to the fulfillment of the law of the big numbers principle.

If the agricultural insurance industry can grow, it will have a positive impact on economic growth. The relationship of insurance to economic growth can be a causal relationship, meaning that economic growth supports insurance growth or insurance growth can support economic growth (Rahim, 2013). Insurance can provide financial security for the economic impact of extreme climatic events and for some other climate changes at a more cost-effective than certain preventive measures (Nnadi et al. 2013).

The Five Forces of Porter model is one of the tools to analyze the competitive strategy undertaken by the company (Riky and Mustamu, 2014). Assessment and analysis of five forces porters of Jasindo can be seen through five main elements, namely:

1. Newcomer threats

The threat of prospective newcomers is basically "average" with an average score of 64%. The value is obtained through analysis of farmers of AOTP participants who are still less loyal so it can open opportunities for other insurance companies to seize the market share owned by Jasindo. For competing insurance companies entering the agricultural insurance industry at least a needed considerable amount of capital, sufficient mastery of agricultural knowledge requires a product differentiation to attract farmers, and

the difficulty of getting distribution channels because of the range of farmers who are generally located in rural areas . These conditions create barrier to entry for other insurance companies.

2. Competition of Similar Companies

Competition among such companies in agricultural insurance industry can be said “moderate” with the average calculation of 44%. The competition analysis of such companies is that there is no competitor for Jasindo concerning the rice commodity insurance, the growth of agricultural insurance industry which is slow, high cost to do the business, and obstacles of high resignation.

3. Bargaining Power of Suppliers

Jasindo involves extension agents as suppliers or as channels in the bargaining power of suppliers is said to be "high" with an average calculation of 83.3%. The high bargaining power of suppliers is due to the company's dependence by extension agents who can carry out advanced integration to conduct AOTP marketing. The industry is not an important customer for extension agents, and it will require high costs if the company will move to other distribution channels.

4. Bargaining Power of Consumers

The bargaining power of farmers is "moderate" with an average calculation of 55%. The bargaining power of farmers is said to be moderate because farmers can not control the value of premium offered, the location of the group of farmers spread so that the service provided by Jasindo which is objective. Farmers have no other choices rather than they have to change products other than AOTP because Jasindo is a major player on rice commodity insurance. However, farmers can still exercise control over services through the provision of advice to local extension agents, offices, and offices of Jasindo.

5. Substitution Product Threat

The threat of the product is "low" with an average value of 33.31%. AOTP substitution product can be in the form of credit which has function in giving farmer capital for the cultivation process. Other substitution products include parametric-based agricultural insurance (index), i.e. insurance associated with scientific indexes, such as rainfall, temperature, humidity (Estiningtyas et al. 2011). The concept of climate index insurance has been developed and implemented in several countries, such as Mexico, Ukraine, Malawi, Ethiopia, China, Mongolia, Nigeria, Australia, Canada, India, Serbia (Barnett and Mahul, 2007; Pocuca et al. 2013; Thomas and Leichenko, 2011) .

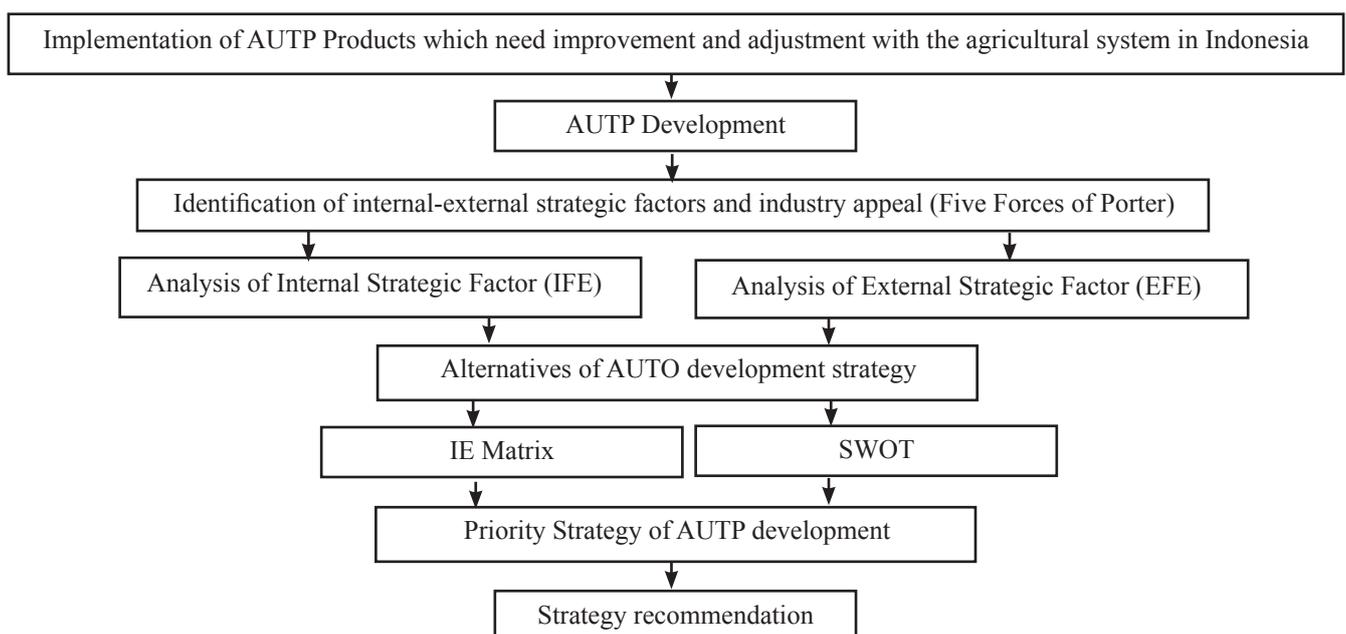


Figure 1. Research framework

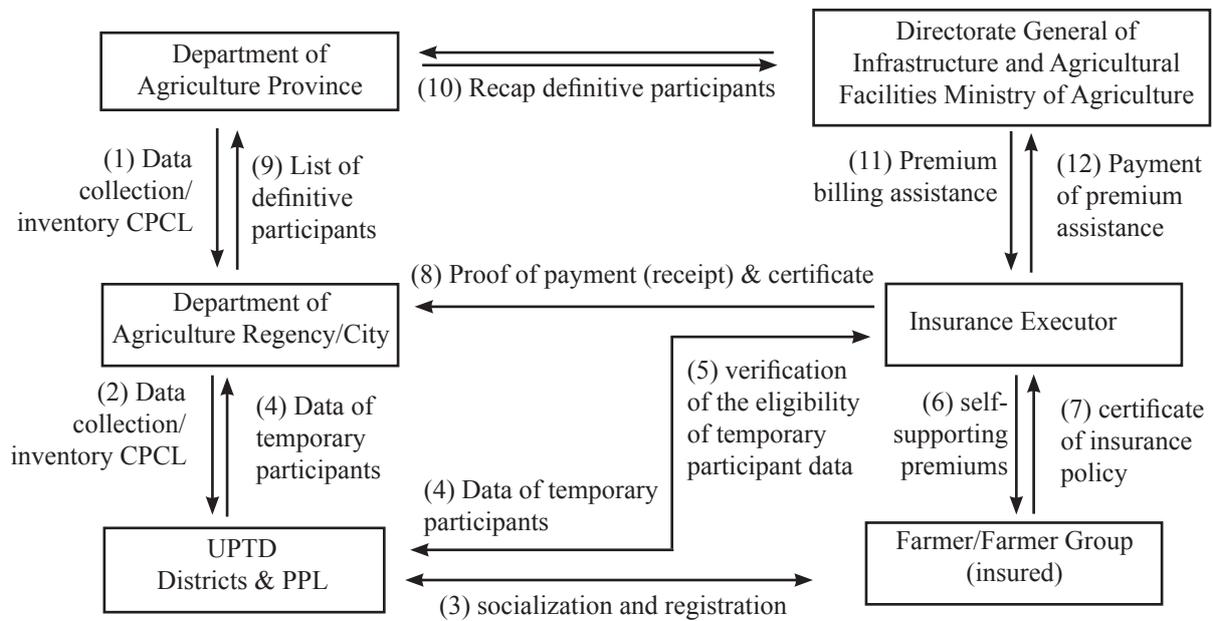


Figure 4. Scheme of AOTP implementation

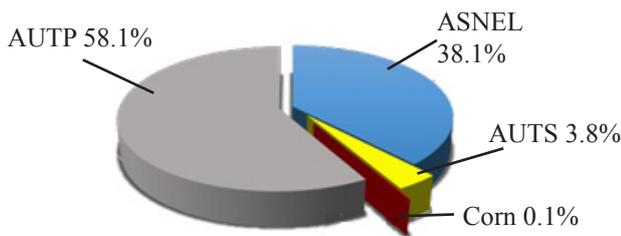


Figure 5. Distribution of agricultural insurance premiums per product type in 2016 (PT Asuransi Jasindo and PT ACA, 2016)

In Indonesia, climate index insurance has started to be developed by PT Sampo Insurance in cooperation with PT ACA for maize insurance products. Substitution product threats can be said to be low because substitution products have a higher price. Farmers, when borrowing credits at formal institutions bear considerable interest. Supariatna's research (2008) states that interest rates stipulated by commercial bank financing services (BRI unit of village and BPR) and pawnshops are 24%, 36%, and 30–42% per annum respectively. In the informal credit agency interest rates to be paid by farmers are higher, with an interest rate of 60% per annum. While the climate insurance premium index also has a more expensive price when compared to AOTP, which is Rp100,000/MT. In addition, the many formal lending institutions that require collateral make it difficult for the farmers to obtain the substitution product.

Identification of Internal-External Strategic Factors

1. Internal Environment Analysis

Internal environmental analysis is the process of identifying the strength and weakness factors of Jasindo in running the AOTP. The internal strategic factors of Jasindo are identified and analyzed using Internal Factor Evaluation (IFE) analysis tool. The final result of this evaluation is obtained and weighted in score of each strategic factor. Internal strategic factors owned by Jasindo in the development of AOTP can be seen in Table 2.

2. External Environment Analysis

The analysis of the external environment is a process of identifying the opportunity and threat factors of Jasindo in running the AOTP. The external strategic factors of Jasindo are identified and analyzed using an External Factor Evaluation (EFE) analysis tool. The final result of this evaluation obtained and weighted in score of each strategic factor. The external strategic factors faced by Jasindo in the development of AOTP can be seen in Table 3.

Table 2. Internal factor evaluation

Internal Strategy Factor	Weight	Rating	Score
Strength			
Extensive company operational area	0.08	4	0.32
The involvement of the government to carry out AUTP	0.06	4	0.24
Good finance performance supports company to develop business	0.10	4	0.40
A good company reputation	0.12	4	0.48
Integrated information system	0.12	3	0.36
Weakness			
The weakness of SDM UUPM handling AUTP	0.13	2	0.26
Lack of distribution channel	0.07	1	0.07
Marketing which has not reached the whole areas of Indonesian	0.10	2	0.20
Experience and product knowledge about AUTP which is still low	0.10	2	0.20
Process of claim implementation which takes long compared to that of weather index	0.12	2	0.24
Total IFE			2.77

Table 3. External factor evaluation

External Strategy Factor	Weight	Rating	Score
Opportunities			
The market share is still very wide	0.13	4	0.52
Development of agricultural insurance on other commodities	0.12	4	0.48
PT Asuransi Jasindo can sustainably run the AUTP program	0.08	4	0.32
Application of information technology in AUTP	0.23	2	0.46
Integrated information System	0.12	3	0.36
Threat			
AUTP High risk in the implementation of AUTP	0.07	2	0.14
Limited data and information	0.07	3	0.21
Threats of newcomers	0.20	2	0.40
Lack of awareness of farmers on the importance of insurance	0.10	3	0.30
Process of claim implementation which takes long compared to that of weather index	0.12	2	0.24
Total EFE			2.83

AUTP Company Position and Development

The position of Jasindo the development of AUTP can be known by using Internal External (IE) matrix. This External Internal Matrix describes internal strategic factors and external strategic factors that influence the development of AUTP at Jasindo. Internal strategic factors and influencing external factors have been quantitatively analyzed by weighting and rating. The calculation will result in a weighted score of each of the internal strategic factors and external factors. There are 10 internal strategic factors (strengths and weaknesses) and 8 external strategic factors (opportunities and threats) that affect the company in AUTP development. The weighted score of each strategic factor can be seen in the IFE matrix Table 2 and EFE matrix in Table 3.

Weighted scores of each strategic factor are summed to obtain internal strategic factor of 2.77 and for external strategic factors obtained value 2.83. The weighted score is incorporated into the IE matrix and obtained the firm position located on the quadrant V as shown in Figure 6, which is to hold and maintain (hold and maintain).

Development Strategy of AUTP of Jasindo

SWOT analysis in this research is used to develop alternative strategies by combining opportunities and threats faced by companies and internal strengths and weaknesses owned by the company. Alternative strategies obtained adapted to the company's position in implementing AUTP, namely the market penetration

strategy and product development. SWOT matrix analysis results obtained 8 alternative strategies as shown in Figure 7.

Strategy Prioritization

Strategy prioritization is one of the most important things in formulating a strategy. This is done considering the overall strategy can not be implemented by the company. HR, financial ability, and time are aspects that become the main focus in the implementation of a strategy. QSPM is an enabling tool in developing strategies to evaluate alternative strategies that have been objectively formulated based on previously identified internal and external factors. The result of strategy priority analysis through QSPM is known to extend/increase the distribution of channel network (Table 4).

Managerial Implications

The result of strategy draft analysis that describes the strategic factors in the form of opportunities, threats, weaknesses, and strengths as well as the analysis of alternative strategies is the information that can be used as the basis for making strategic recommendations for the company in the development of AOTP. Implications that can be applied by the management of Jasindo is as follows expand the distribution channels by

involving financial institutions, such as banks, retail, agents, or credit institutions in the field of agriculture. The Company conducts training for all employees who handle AOTP either located at the head office or the branch office to improve the quality of human resources of UUPM. Jasindo needs to look back at the customer segment which enables the creation of a new customer segment. The company needs to expand the area of AOTP socialization to rice production centers and areas that have not been guaranteed by AOTP. In addition, companies need to enhance integration among stakeholders involved in the AOTP.

CONCLUSIONS AND RECOMMENDATION

Conclusions

The attractiveness of the agricultural insurance industry is still relatively low, as evidenced by the small number of general insurance companies entering the agricultural insurance industry. The condition is caused by several factors. First, agricultural insurance is a new business in Indonesia. Second, agricultural insurance is a high-risk business (Jin et al. 2016). Third, many general insurance companies are just waiting for the results of the old players in the industry and do not do research and development due to the high cost that will be incurred to perform these activities.

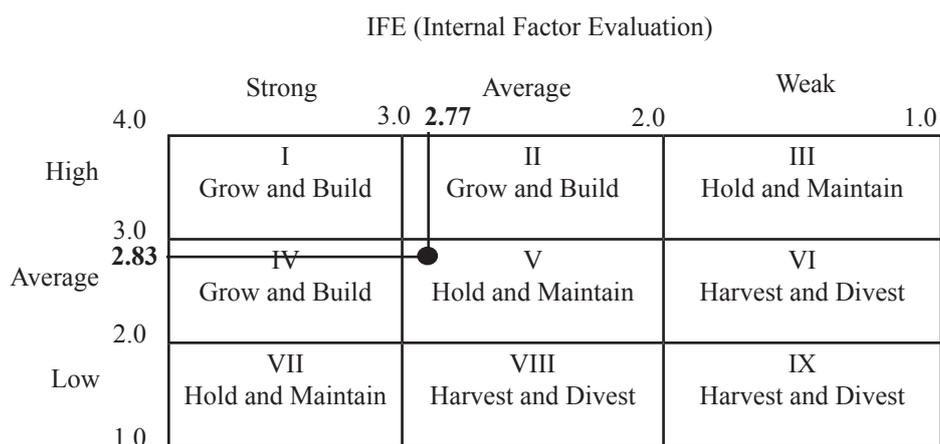


Figure 6. Jasindo IE Matrix in developing the AOTP

	<p>Strengths (S)</p> <ol style="list-style-type: none"> 1. The large operational area of the company 2. The support from the government 3. Good financial performance in supporting the running business 4. Reputation of the company 5. Integrated information system 	<p>Weakness (W)</p> <ol style="list-style-type: none"> 1. Lack of human resources in Handling the AOTP 2. Lack of distribution channel 3. Pemasaran yang Marketing which has not reached the whole areas of Indonesia 4. Minimum experience and product knowledge of the employees on AOTP 5. Long process of the claim
<p>Opportunities (O)</p> <ol style="list-style-type: none"> 1. Highly wide market share 2. Highly wide customer segment 3. Sustainable System 4. Information technology application on AOTP 	<p>Strategy-SO</p> <ol style="list-style-type: none"> 1. Increased socialization to the regions especially the rice production center and regions that have not been guaranteed by AOTP (S1,S2, S3, S4, S5, O1, O2, O3) 2. Changes of insurance types into parametric insurance (S1, S3, S4, O1, O2, O3) 	<p>Strategi-WO</p> <ol style="list-style-type: none"> 1. Improving the quantity and quality of the human resources of UUPM by recruitment and training (W1, W4, W5, O1,O2, O3) 2. Expansion/addition of network of distribution channel (W1,W2, W3, O1, O2, O3) 3. Creation of application system of online and Real time which integrates the related stakeholders to increase coordination (W5,O4)
<p>Threats (T)</p> <ol style="list-style-type: none"> 1. High risks in the implementation of AOTP 2. Limited data and information 3. Threats of new comers 4. Lack of awareness on the importance of insurance 	<p>Strategy-ST</p> <ol style="list-style-type: none"> 1. Increase of assistance for the whole farmer participants AOTP (S1, S2, S3, T1, T2, T3, T4) 2. Evaluation and risk analysis for the whole regions in Indonesia AOTP (S1, S2, T2, T4) 	<p>Strategy-WT</p> <ol style="list-style-type: none"> 1. More intensive marketing through the printed and electronic media (W1, W2, W3, T3, T4)

Figure 7. SWOT Matrix of AOTP development strategy scheme of Jasindo

Table 4. QSPM determination of AOTP priority strategy result

Strategy	TAS Total	Average	Priority
Expand/add the net of distribution channel	26.56	6.64	1
Increase the socialization especially the central area	25.74	6.435	2
Rice production and areas that have not been guaranteed by AOTP			
Increase the quantity and quality of Human Resources by doing recruitment and training	24.98	6.245	3
The change of insurance type into parametric insurance	23.49	5.873	4
Evaluation and analysis of AOTP risks in every area of Indonesia	23.23	5.807	5
Make the application system online and realtime integrating the whole stakeholders related to improve coordination	23.18	5.795	6
Increase the companioship at the whole farmer of AOTP participants	23.00	5.750	7
More intensive marketing through printed and electronic medium	20.44	5.110	8

The results of this study can be concluded that there are internal and external strategic factors that affect the development of AOTP Jasindo. The most influential internal strategic factors are good corporate reputation as one of the largest and most trusted SOEs in the insurance sector and the lack of UUPM human resources that handle AOTP. While the most influential external strategic factors are the market share is still very wide and the threat of newcomers. The position

of Jasindo in developing AOTP is in a state of preserving and maintaining (hold and maintain) with recommended strategy which is market penetration strategy and product development strategy. The result of strategy analysis using SWOT analysis is obtained by suitable alternative strategy in AOTP development. There are eight alternative strategies with five strategies is a market penetration strategy and the other three strategies are product development strategies. Priority

of strategy obtained by using QSPM analysis tool in the form of strategy to add/expand distribution channel network.

There is a similarity of research result with previous research conducted by Annisa et al. (2015), which is on company reputation being the internal factor that is the most influence to AUTP development and company position in running AUTP in a condition of holding and maintaining (hold and maintain).

Recommendations

It is suggested that further researchers carry out FGDs with each level of stakeholders involved in the implementation of the AUTP. Furthermore, to improve the services of the company in which there are several suggestions as follows: the company should increase the socialization and marketing of AUTP products to all parts of Indonesia. In addition, the company should add AUTP distribution channels. Companies should have completed and detailed databases to facilitate AUTP operations.

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