

# Build an Agricultural Business Ecosystem For Agricultural Insurance

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#### **ABSTRACT**

Agriculture is the main source of income for rural communities in many developing countries such as Indonesia. Agriculture represents 15% of the Gross Domestic Product and employs nearly 38 million workers, most of whom are small farmers. Thus, improving the condition of farmers will reduce the level of poverty. Rice Crop Insurance is one of the Government's programs to support farmers, farmers can still immediately replant their land from the payment of benefits paid by the Insurer and do not experience financial shocks due to by unwanted events. The current pattern of agriculture in Indonesia are traditional pattern so that natural factors are very influential, agricultural machinery and capital financial is limited. The location of the research was carried out at the Asuransi Jasindo Purwokerto Branch Office. This research is an exploratory descriptive research because this research aims to explore various problems or questions that become the focus of a research activity. This research involves Asuransi Jasindo, farmers group, Unit Pelaksana Jasa Alsintan and Bank BNI as a financial institution. Learning from the experiences of other developing countries, the success of most insurance projects lies in the combination of insurance with other services, such as loans, in-kind seed payments, and government programs that improve soil conditions and infrastructure. So that the existence of agricultural insurance can change the behavior of farmers by reducing uncertainty, allowing farmers to get profitable crops and then becoming a catalyst, because lenders are more likely to provide credit to farmers who are protected by insurance.

**Keywords:** Agricultural insurance; agricultural ecosystem; insurance marketing; insurance marketing strategy

#### 1. Introduction

The agricultural sector is one sector that has an important role in the national economy, especially in realizing food security National Food Security Requires Independence Fulfilling food needs originating from domestic production (food self-sufficiency). The farmers protection is the nation's mandate as outlined in the Undang-undang Republik Indonesia Nomor 19 tahun 2013 concerning the Protection and Empowerment of Farmers, especially the implementation of the farmer protection strategy through Agricultural Insurance as the seventh strategy.

In more detail, the agricultural insurance program is regulated through the Peraturan Menteri



Pertanian Nomor 40/Permentan/SR.230/7/2015 concerning Agricultural Insurance Facilities where the regulation discusses the technical matters of the program. The purpose of the Agricultural Insurance is to provide protection to farmers in the event of crop failure as a result of the risk of flooding, drought, and attacks by plant-disturbing organisms. Diverting losses due to the risk of flooding, drought and pest attacks through other parties, namely insurance coverage. The risks guaranteed in agricultural insurance include floods, droughts, pest attacks and pests. Pests on rice plants include brown planthoppers, stem borers, walang sangit, golden snails, rats and armyworms. While the diseases in rice plants, among others, tungro, blast disease, stem rot, grass stunt, and empty dwarf.

#### 1.1 Agricultural Insurance

With insurance protection, farmers and breeders will get comfort and security in running their farms so that farmers and ranchers can focus on better, safer and more profitable farming management.

# 1.2 The Role of Agricultural Insurance

Agricultural insurance has the potential to address some of the constraints by:

- Changing behaviour by reducing uncertainty.
- Enabling farmers to invest in riskier but potentially more lucrative farm activities.
- Helping smallholders smooth consumption and prevent the sale of assets by timely insurance pay-outs after crop losses.
- Becoming a catalist, as lenders will be more likely to extend credit to farmers covered by insurance, allowing them to make productivity-enhancing investments.

# 1.3 Agricultural Insurance Development Challenges

In implementing agricultural insurance at least there are several challenges, including:

# • Institutional Aspect

This challenge concerns which institutions will be involved in managing this insurance program. Then, whether the state-owned insurance company will get an assignment as provider and distributor of agricultural insurance, how to encourage private insurance companies to play a role in the development of agricultural insurance, how to coordinate the portion sharing mechanism related to premium payment assistance between the central government and local governments. Second, how to adequately strengthen the legal framework, for example what types of agricultural insurance and what types of crops or livestock are prioritized to receive premium assistance, how long does the premium subsidy take, what is the nature of farmer participation (mandatory or voluntary), whether farmers receiving crop credit are required to purchase plant insurance as a condition of access to credit as well as a guarantee of credit repayment, and so on. Third, should the government integrate the agricultural insurance program with other products and services received by farmers (fertilizer subsidies, seed subsidies, and social assistance).

# • Financial Aspect Challenges

Financial challenges include how the central government (separately or jointly with local



governments) provides various financial supports to develop agricultural insurance. This financial support can be in the form of minimal support (only in the form of providing premium subsidies) to maximum support (in the form of specific legal framework support, premium subsidies, administrative and operational costs subsidies, loss adjustment subsidies), reinsurance support. If the government provides maximum support, the problem is how much funds are allocated by the APBN/APBD and what about the sustainability of the agricultural insurance program in the future.

# Technical Challenge

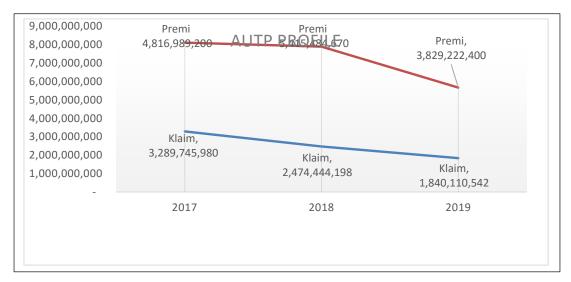
The technical challenges faced are related to the assessment of risk exposure in the agricultural sector and how to design the risk model to determine the maximum loss. These two key things enable the government to develop adequate agricultural risk management policies. Various measures to control the accumulation of appropriate agricultural risks should be addressed if the aim is to expand agricultural insurance for agricultural activities with high risk exposures such as high value crops, fish farming and plantations. Appropriate assessment of agricultural production risk and design of actuarially reasonable agricultural insurance products depend on the availability of agricultural production data, mapping of risk areas and weather data. In this regard, should the government invest in better weather and agricultural information infrastructure and services, for example by compiling a national database and making this database available to all interested private commercial insurance companies, either free of charge or at a certain rate. In addition, does the government need to play an important role in raising awareness of farmers, holding capacity building workshops and technical training programs for staff of insurance companies.



Figure 1. The skema

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Based on data on premium acquisition in 2017, 2018 and 2019 using conventional marketing methods, premium acquisition from agricultural insurance did not show an increase at Asuransi Jasindo Branch Office Purwokerto. In fact, if you look at the regencies under his supervision, namely Banyumas Regency, Purbalingga Regency, Cilacap Regency, Kebumen Regency, Banjarnegara Regency and Purworejo Regency, they have a total land area of 333,277 hectares.

#### 2. Literature Review

Table 1. Data The Exixting Land Area in 6 Regencies Supervised

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Kabupaten	Luas lahan 2019	Luas lahan 2020
Cilacap	110.144	117.296
Banyumas	51.111	52.929
Purbalingga	26.756	29.070
Banjarnegara	18.925	19.204
Kebumen	76.154	73.675
Purworejo	50.587	50.120
Total	333.677	342.294

Based on data on the existing land area in 6 regencies supervised by Jasindo Branch Purwokerto, there should be a minimum of 100,000 hektares. By using conventional marketing concepts, of course, it will be difficult to work on all the potential that exists.

Developing agriculture can not only be done by one institution, but must be jointly and comprehensively involved from the upstream to downstream processes. Insurance is one of the supporting components of an agricultural business ecosystem. In Banyumas Regency, as a pilot project for the development of the integration of agricultural business ecosystems, cross-sectoral collaborations have begun, involving many parties, including from the upstream sector, involving UPJA which is engaged in the business of providing seeds, planting, cultivating rice fields and even harvesting. In addition to involving UPJA in Banyumas Regency, other business ecosystems also involve Agricultural Facilities and Infrastructure Distributors. To support the agricultural business ecosystem from the capital aspect, financial institutions are involved in the form of providing micro people's Business Credit (KUR) with very low interest rates of only 6% per year.





With this capital support and guarantee of business certainty through insurance schemes, in principle, agriculture is no longer a high-risk business so that it is more attractive to develop.

Dinas Pertanian Banyumas Regency has a significant role as an agent of change bringing the adoption of technology and innovations that are expected to be able to empower farmers. The presence of UPJA in each sub-district facilitates interaction between farmers and UPJA operators so that aspects of the speed of agricultural services are getting better. More specifically, the roles and functions of each institution can be written as follows:

#### 2.1 PT. Asuransi Jasindo

Actively communicates and is ready to support events related to the socialization of AUTP products in Banyumas Regency. The Branch Manager, Marketing, and all other staff at PT. Asuransi Jasindo Purwokerto are always cooperative with the Department, UPJA, Banking, farmer groups, to sit together to solve all problems with the best solutions for all parties. PT. Asuransi Jasindo Purwokerto provides various facilities and is always open in supporting the creation of an agricultural business ecosystem in Banyumas district. The main role of PT. Asuransi Jasindo is to carry out the insurance process and provide a sense of security in the form of protecting farmers against all risks of crop failure.

# 2.2 Dinas Pertanian Kabupaten Banyumas

The role of success in creating an agricultural business ecosystem lies with the Office in charge of agricultural functions in Banyumas Regency. The agricultural service actively encourages officials from the Head of Service level to the ranks of field extension workers to be active according to their respective roles in the context of AUTP registration or ease of service when claiming. The role of the local government of Banyumas Regency is to provide budget support. Activities, travel, socialization, and frequent symbolic events for Submission of AUTP Claims and publications in print or electronic media so that the wider community can know about the agricultural insurance program in Banyumas Regency.

#### 2.3 Bank BNI

So far, few financial institutions have dared to disburse their capital in the form of business loans to farmers or the agricultural sector because they are considered to have a fairly large business risk. With the guarantee of rice farming business certainty through rice farming insurance, Bank BNI Purwokerto branch is interested in participating in the agricultural business ecosystem in Banyumas Regency. Trust in PT. Asuransi Jasindo institution which guarantees business continuity is an important factor for smooth business processes because it is based on trust and professionalism. These two financial institutions often collaborate on special events related to Low Interest Farmer Financing. In 2020 the KUR Tani activity is one of the main programs of the Ministry of Agriculture so that it further strengthens the agricultural ecosystem in Banyumas Regency with the participation of financial institutions. Bank BNI Purwokerto has a role in providing working capital for farmers in Banyumas Regency who have taken rice insurance first.



# 2.4 Unit Pelaksana Jasa Alsintan (UPJA)

The existence of UPJA in each district has a vital role in accelerating the AUTP process in various districts, one of which is in Banyumas Regency. In Banyumas Regency, the UPJA consists of 63 Upja with the target given by the Agriculture Service is around 100 Ha/Season with the number of planting twice a year, each UPJA can register at least 200 Ha per year. With a total of 63 UPJAs, the potential land that can be covered by rice insurance covers an area of 12 thousand hectares per year in Banyumas Regency.

The advantage of UPJA in Banyumas Regency is that it is almost entirely active and meetings are often held to get to know one another. Commitment of the UPJA Institution, Bank BNI Purwokerto Branch, Agriculture Service, Agricultural Facilities Distributor and PT. Asuransi Jasindo to form a UPJA Parent named UPJA CHAMPION which was carried out by signing the MOU at the Jasindo Office in early March 2020. Good communication factors, close friendship between various elements This forms a complementary agricultural business ecosystem.

In Banyumas Regency, KUR TANI from Bank BNI has been disbursed. One of the main elements is the trust of the Banks to the parties, especially the trust that if the harvest fails, there is a guarantee from Jasindo. In addition to trust in Distan Banyumas will provide technical assistance and assistance to farmers. With a comprehensive appeal, the insurance process in Banyumas goes well, because for UPJA, there are many advantages, including:

- Ease of access to registration because each data registration is submitted to the PPL, it is the PPL who registers the Farmer's Land to the SIAP System.
- Easy of Claim service, UPJA Party goes to the field to show natural plots to choose which farmers to claim (farmers do not have to participate, making it easier for farmers).
- Ease of collective registration from UPJA even in Banyumas from 5 tractors (3 TR and 2 Hand tractors, then 1 tractor is specifically operated only to support paying for AUTP registration).
- Ease of claim service from PPL and Jasindo. It is easy to claim because the location is close to the Branch Office so that claims can be surveyed in a short time.
- Alsin support assistance from the Banyumas Distan through the Aspiration of the DPR
- Assistance with marketing facilities (tents / berosur / leaflets / snack funds, etc. from Jasindo)

#### 3. Research Methodology

#### 3.1 Research Site

The research location was conducted in PT. Asuransi Jasindo Branch Office Purwokerto. The market coverage or operational target at Banyumas Regency. Specific research will also be carried out on similar businesses which are UPJA existed before this research was conducted.

# 3.2 Type of Research

This study is an exploratory descriptive study. This is because this study aimed to explore various problems or questions that are the focus of a study activity. This type of exploratory study is



considered to be the most suitable for the needs because the knowledge that researchers have on the problem under study is still limited, so it requires exploration with various approaches in the study process, which involves various related parties.

# 3.3 Scope of Research

In this research, the aspects that are studied in depth are operational aspects and financial aspects. On the operational aspect in terms of marketing patterns by establishing an agricultural business ecosystem and service mechanism that involves several parties to sell products. Meanwhile, from the financial aspect, in terms of the acquisition of premiums, the value of claims decreases, thereby increasing profits.

#### 4. Results

# 4.1 Result of Operational Aspect Analysis

The agricultural business ecosystem has been formed. Agricultural insurance products have received a new pattern of sales involving UPJA and through the KUR Tani scheme from Bank BNI and always supervised by the Dinas Pertanian.

# In the planting process:

- UPJA rents machineries including insurance costs for one planting season and also UPJA as an agent 46 to serve and an extension of Bank BNI.
- Bank BNI distributes KUR Tani protected by an insurance program.
- Fulfillment of the budget absorption target at the Dinas Pertanian

# 4.2 The Results of the analysis of financial aspect

Based on the results of the analysis on the financial aspect, the acquisition of premiums and the decrease in the value of claims can be presented in the form of a table as follows:

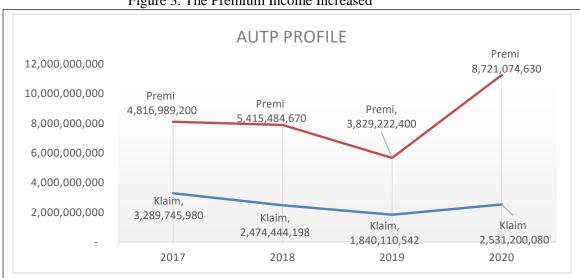


Figure 3. The Premium Income Increased



Based on the results of the analysis on the financial aspect, premium income increased by 227% from 3.829 M in 2019 to 8,721 M in 2020

#### 5. Discussion

Based on historical data for 2015 - 2019, premium acquisition from AUTP shows a good trend. In addition, the marketing pattern by involving several parties and the establishment of an agricultural business ecosystem provide an alternative to conventional marketing patterns which of course will require more effort if we convey insurance to farmers.

# 6. Conclusion

In general, the key to successful implementation is the cooperation of various parties in implementing AUTP in Banyumas Regency. The process of building the AUTP Business Ecosystem takes quite a long time with several socializations of strong commitment from all parties involved.

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