



Communication Strategy on Agricultural Insurance in South Kalimantan

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ABSTRACT

This study aims to analyze the communication strategy of the agricultural insurance program in the South Kalimantan region to create superior and independent farmers. This communication strategy can contribute to existing development programs in the South Kalimantan region. This research used qualitative methods with SWOT and TOWS analysis techniques. Data collection techniques were open interviews, focus group discussions (FGD), and field observations (research locations and district level). The results of the study showed that agricultural insurance in the South Kalimantan region had obstacles that occurred in the field, many farmers needed help understanding and were not interested in participating in this rice farming insurance. First, the analysis of the agricultural insurance communication strategy in the SWOT analysis in the South Kalimantan region was to increase the quality capacity of government human resources in the field by providing socialization technical training and involving opinion leaders, groups, and village governments in disseminating information. Second, the communication strategy in the TOWS analysis was to optimize the existing social capital in the community, form an information centers at the village level, add variety and diversity in the methods of conveying information by extension workers and Jasindo officers and provide a variety of media sources of information, especially social media, and internet. The agricultural insurance communication strategies important to policymakers in implementing development programs.

Keywords: Communication Strategy; Agricultural insurance; South Kalimantan.

INTRODUCTION

Partisanship with farmers is an essential thing in the development of this nation. Caring about crop failures that often happen to farmers is a crucial thing that must be addressed. According to the 2021 data, in Indonesia, the harvest is likely to decrease by 0.19 percent (Kontan.co.id 2021; BPS 2021). Similarly, in South Kalimantan Province, the decrease will be about 113.34 thousand tons or 14.34 percent. Based on the data from the Central Agency Statistics (BPS) of South Kalimantan, rice production in 2020 was 677.10 thousand tons compared to 2019, which was 790.45 thousand tons, (BPS Kalimantan Selatan 2021)

Agricultural problems often encountered by rice farmers are the uncertainty of production results, such as the uncertainty of weather conditions/climate change which causes floods, droughts, and attacks by Plant Pest Organisms (OPT), making rice plants unable to develop properly. The impact of climate change, such as floods, prolonged droughts, and extreme rainfall, causes crop failure, (Sudarma, 2018; Rasmikayati et al. 2020). Rice farming is very vulnerable to climate change because the level of rice production is highly dependent on the carrying capacity of the climate, (Siswadi, 2016; Salampessy 2018) To minimize the potential for crop failure, the government has created a program, namely agricultural insurance, whose main goal is to transfer losses due to crop failure for farmers to insurance, so that farmers become calmer and safer in carrying out their farming activities. This program has been disseminated to be followed or adopted by farmers, but it is still not optimal, it is suspected to be related to communication in this program that has not run optimally.

As mandated by Law Number 19 of 2013 concerning Protection and Empowerment of Farmers, one of which states that farmers need to be protected from crop failure, the government issued an agricultural insurance program regulated in the Regulation of the Minister of Agriculture Number 40/Permentan/SR.230/7/2015, (Kementan 2016). Then it was strengthened through the Decree of the Minister of Agriculture Number 02/Kpts/SR.230/B/01/2020 dated January 02, 2020 as a Guide to Paddy Farming Business Insurance Premium Assistance (AUTP) (Decree of the Minister of Agriculture in 2020 concerning Guidelines for Rice Farming Business Insurance Premium Assistance), (Direktorat Jendral Prasarana dan Sarana Pertanian 2020).

In the AUTP program, initially, the farmers' self-help premium is IDR 180,000 per hectare in each Planting Season (MT). However, because the government provides premium assistance charged to the State Budget of IDR 144,000 per hectare, farmers only need to pay IDR 36,000 per hectare in each Planting Season (MT). The insurance claim that farmers can obtain if they experience crop failure is IDR 6,000,000 per hectare. In its implementation, the

government cooperates with PT. Financial Services Insurance (PT. Jasindo) as the BUMN or the provider of insurance services. The main task of the insurance service provider is as a guarantor of the risk of crop failure and the financial manager of self-help premiums from insurance participants. Insured agricultural land will receive a claim or compensation if it experiences crop failure in exchange for the premium paid by the farmers, (Kementan 2020).

In developed countries, farming insurance is a common thing that farmers must follow because the climate change that is currently being faced makes the threat of crop failure predicted to occur throughout the year. Therefore various innovative insurance schemes are formed for farmers, (Kang 2007). Agricultural insurance is a vital tool to manage economic and environmental risks, especially in agriculture, (Carrer et al. 2020; Fahad et al. 2018).

Table 1. National Data on Realization of the Implementation of Paddy Farmer Insurance in 2016-2020

Information	2016	2017	2018	2019	2020
Land target (Million/ha)	0.5	1	1	1	1
Land Realization (ha/%)	499,964 (99.9)	997,960, 55 (99.8)	806,199 (80.6)	971,218 (97,12)	1,000,001 (100)
Province Coverage	23	27	24	24	29

Source: DG PSP-Ministry of Agriculture and Jasindo (2016-2020)

Table 1 above shows that farmers' participation is 100 percent, with a target of 1,000,000 hectares and a land realization of 1,000,001 hectares compared to the area of raw rice fields in Indonesia, which is 7,463,948 hectares, (Sawah 2019). From this data, only 13.39 percent of the existing paddy field area. Furthermore, compared to the harvested area in 2020, which is 10.66 million hectares, the percentage of farmers' participation in the agricultural insurance program is 9.3 percent. It can be illustrated that the level of farmer participation is relatively low.

Farmers face several obstacles in participating in this program. They include the farmers' lack of knowledge about AOTP information and the lack of promotion or socialization attributes. The efforts to convince farmers to join this program are also minimal. These are likely to result in the lack of motivation or driving factors to participate in the rice farming insurance program/agricultural insurance, (Hidayati et al., 2019). In addition, in the field, it was found that when farmers failed to harvest or were hit by a disaster, the claims submitted were rejected by insurance, not to mention the complicated bureaucracy for disbursing funds. Jasindo officers are slow to go to the field to inspect land; POPT and

Jasindo officers often have different verification results as well, (Ningsih 2017; Mustika, et al., 2019).

Furthermore, the extension workers or PPL's lack of preparation at the sub-district level, the low farmer resources, and the insurance terms and conditions that are too convoluted constitute the other obstacles faced by farmers, (Anggraini. 2018; Ustriyana. 2018; Mustika et al. 2019; Sumarno, 2021). The results of research by Managanta et al. (2019), shows that the competence of farmers is weak due to the weak role of extension workers, the lack of communication, and low formal education. Meanwhile, another study on farmer participation in agricultural insurance programs conducted in developing countries showed that farmers understand the function of insurance as a risk mitigation measure in farming under conditions of risk and uncertainty, (Iturrioz 2009; Jin, W. 2016).

Therefore, the role of communication in shaping farmers' perceptions of agricultural risk is something that must be seen in the participation of farmers in the Agricultural Insurance Program, (Gonzalez-Ramirez; et al. 2018). The role of communication in the AUTP Program has obtained a significant position in the success of this development program. In addition, the function of communication in this program is to provide the understanding and to convince and change farmers' behavior to adopt this insurance program to encourage the sustainability of their farming business. Communication plays a strategic and fundamental role in sustainable development, especially in agriculture, where it prepares sustainable methods or techniques so that development can run well.

Furthermore, the farmers' limited information and knowledge regarding AUTP, including the benefits, registration procedures, and the claiming process, causes farmers to be reluctant and misperceive whether AUTP is in the form of assistance or not (Hidayati; et al. 2019). This condition denotes the importance of communication and information in the AUTP program. The lack of ability to access information in agriculture is one of the weaknesses of traditional farmers in Indonesia (Aziz et al. 2020). In farming, access to information is a crucial factor in agricultural activities. Effective integration between ICT and agriculture will lead to a decision-making process for farming in increasing productivity (Sumardjo et al. 2011).

In research conducted in the State of Ghana, 90 percent of farmers think agricultural insurance is beneficial, but only 14 percent of farmers adopt it. Because the product does not reach remote places, the information obtained is low, and the individual characteristics of farmers are low, (Ankrah et al. 2021). Other research shows that the form of communication that is considered effective in agricultural development is where the community provides ideas, information, and opinions to each other so that a dialogical process occurs, which results in a mutual agreement, (Sumardjo et al. 2011; Sutowo et al. 2019). The need for

information for adopting rice farming insurance (AOTP) is one of the determining factors for success. Many factors inside and outside the individual farmer affect the program's success. Agricultural Insurance (AOTP) program can run optimally with an effective communication strategy.

Communication problems often occur in government programs from the central level to the level of implementation for farmers. Communication that is not going well often causes a program to fail, especially types of *top-down where* information flow only runs vertically. Problems in the agricultural sector in Indonesia, especially in South Kalimantan, are important strategic issues to be resolved considering that in 2019 most of the livelihoods in South Kalimantan are farmers, namely one-third of the population of South Kalimantan or 32.01 percent. (BPS South Kalimantan, 2020). Previous research on agricultural insurance has focused more on farmer behavior, low farmer resources, complicated insurance provisions for agricultural land areas, access to assistance, insurance management, risk management, and other economic factors related to agricultural insurance, (Patunru, 2017; Gratitude et al., 2020; Hazell, 2020; Carrer et al., 2020; Surning et al., 2018; Alif, 2022), therefore there has been no research on agricultural insurance that has been studied from communication studies. This study aims to analyze the communication strategy of the agricultural insurance program in the South Kalimantan region to create superior and independent farmers. It is hoped that this communication strategy can contribute to the agricultural insurance program in South Kalimantan.

The study used a qualitative method with SWOT and TOWS analysis techniques. The qualitative method was carried out through open interviews with the representatives of AOTP participants and government implementers, i.e. South Kalimantan Provincial Agriculture Office, Barito Kuala and Banjar Regency Agriculture Offices, and PT Asuransi Jasa Indonesia (Jasindo) of South Kalimantan Branch. Focus group discussions (FGD) and observations in the field (research location and district level) were also employed to understand the problems related to AOTP governance and implementation in the field as well as the need and potential for alternative solutions. SWOT Analysis. In planning a program, it is necessary first to analyze the situation so that the strategy can be successful. SWOT analysis is a useful strategic planning technique for evaluating "strengths" and "weaknesses," "opportunities, and "threats" in a development program, both in ongoing and new planning.

RESULTS AND DISCUSSION

The agricultural sector is one sector that has a vital role in the national economy. This sector can obtain profits that generate foreign exchange for the country. It is also a sector prepared to produce quality and economic value products. In

addition, several agricultural commodities have become daily staple foods for the Indonesian people. For these reasons, the alignment of all elements to farmers is undoubtedly expected to continue so that human civilization can continue to run.

Anunga (2014), states that there is an opinion in most communities, that the problems faced by extension workers are communication problems, such as mobilizing and organizing farmers to participate/participate in socialization activities, linkages, design, and management of development campaigns.

Communication strategy combines communication planning and communication management to achieve a goal. In its efforts to achieve the goal, the communication strategy must have the capacity to show how its tactical operations should be carried out with different approaches depending on the situation and conditions.

SWOT Analysis Communication Strategy in Agricultural Insurance

According to Demiryurek (2010), agricultural information can be seen as an important factor that interacts with other production factors such as land, labor, capital, and managerial ability. The productivity of these factors can be improved with relevant, reliable, and useful information and knowledge.

Indeed, the problems faced in implementing the Agricultural Insurance Program are many and must be resolved. However, this study focused on how the communication strategy was carried out. Based on the results of research on the implementation of AUTP in the field, several obstacles were experienced (Ambarawati. 2018). The obstacles included the farmers still feeling reluctant to participate in farming insurance because they felt safe from risks, and their low willingness to pay the premium because they felt that insurance was not very important, (Alif, 2022)

The implementation of agricultural insurance faced numerous obstacles. One of which was from the insurance company, that is, the many delays in paying claims and limited human resources to socialize the AUTP program with a broader reach. Another obstacle was the lack of publications that were not well targeted, resulting in the lack of understanding of the benefits of farming insurance, (Hansen et al. 2019). In fact, a lot of farmers knew about rice farming insurance, but they were unfamiliar with its benefits. This unfamiliarity was due to the lack of socialization from the government and other stakeholders.

Regarding the program socialization, Sayugyaningsih et al (2020), stated that the role of farmer groups and extension workers was very important as the main source of information that farmers could access. The involvement of farmer groups and extension workers had contributed to change the direction of communication. According to Servaes (2018) Development Communication Strategy is communication that has changed in its direction from linear to dialogical so that it is not centred on one party but creates an understanding of meaning instead. Communication and information play a strategic and

fundamental role in sustainable development. Communication for development can provide a "mechanism" for participation and thus create opportunities for greater sustainability in development.

Furthermore, contended that there were three essential aspects in the practice of development communication, i.e., *purposive*, *pragmatic*, and *value-laden*. In relation to these aspects, the results of Kusumadinata (2021) dissertation research denoted that farmers were not interested in participating in the AOTP program because of the farmers' distrust of banking institutions and too much institutional involvement. This situation illustrated that communication that changed perceptions of insurance was still not successful. The farmers' participation in agricultural insurance programs indicated that farmers understand the function of insurance as one of the mitigation risks in farming in conditions of risk and uncertainty (Iturrioz 2009; Jin et al. 2016; Gonzalez-Ramirez; et al. 2018)

Other research shows that the form of communication considered as effective in agricultural development is that people give each other ideas, information and opinions so that a dialogical process occurs, resulting in a mutual agreement, (Daniel et al 2008; Sutowo et al. 2019). The need for information for adopting rice farming insurance (AOTP) is one of the determining factors for success. Many factors, inside and outside the individual farmer, affect the program's success. Indeed, effective communication of innovation will make the AOTP optimal.

In this study, based on the results of interviews and FGDs, the researchers conducted an alternative policy analysis using SWOT and TOWS analysis. SWOT analysis was employed to analyze the strengths, weaknesses, opportunities, and threats in ongoing conditions. Meanwhile, the TOWS analysis was used to develop strategies that use strengths to optimize opportunities (SO), strategies using strengths to minimize threats (ST), strategies to minimize weaknesses by taking advantage of opportunities (WO), and strategies that minimized weaknesses and avoided threats (WT). The SWOT and TOWS analysis results are presented in the matrix below.

Table 2.
SWOT Analysis

Internal Strengths (S)	Internal Weaknesses (W)
<ul style="list-style-type: none"> • The need for farmers in disaster-prone areas to participate in Insurance • Farmers' social capital • Farmers need information about Insurance 	<ul style="list-style-type: none"> • Low interest in taking Insurance • Limited information on agricultural Insurance • Lack of knowledge of farmers • Low participation in socialization. • Farmers think that agricultural Insurance is government assistance.

Table 2.
SWOT Analysis

Internal Strengths (S)	Internal Weaknesses (W)
<ul style="list-style-type: none"> • Interaction with extension workers is high. • Farmers who tend to be open to new information 	<ul style="list-style-type: none"> • Farmers whose agricultural land is not endemic feel free to take Insurance. • You have a convoluted insurance claim process. • Lack of operational personnel at the village level. • Some farmers are denied insurance claims. • Differences in farmers' perceptions of the results of verification and compensation
External Opportunities (O)	External Threats (T)
<ul style="list-style-type: none"> • Strong desire to implement SOEs (Jasindo) • Government sides with the farmers • Availability of field staff such as extension officers and POPT in each sub-district, as an insurance information center • Availability of internet in rural areas. • The increased target number of participants • High enthusiasm for protecting farmers • Online registration • There is a farmer card as a data-based 	<ul style="list-style-type: none"> • Limited number and capacity of human resources from the government and Jasindo • Lack of clear division of tasks • knowledge of farmers • Low participation in socialization • No involvement of the apparatus village • The limited reach of socialization • Mixing of socialization materials with other materials • Methods of delivering socialization that tends to be boring • Limited sources of information obtained by farmers • Lack of laptop/PC facilities, internet credit, or fluctuating networks. • Lack of staff incentives. • The damage verification results must be synchronized between POPT officers and Jasindo.

Sources: processed by researchers (2022)

The table above depicts that the minimal number of farmers participating in the socialization activity was due to the farmers' limited understanding of the rice farming insurance products and the benefits of being a participant in the socialization. Locations that were difficult to reach also impacted farmers' lack of information dissemination. In addition, the lack of understanding of field officers, such as extension workers and other officers who are in direct contact with farmers, caused information to be less understood by the farmers.

Furthermore, the submission of socialization materials that tended to be boring or monotonous made farmers less interested and resulted in farmers' less understanding. The farmers' low interest was also caused by the tendency of delivering material in one direction and dominating the communication. Not only that, but access to information sources were also difficult to obtain; social media and websites related to rice farming insurance were not yet available. The presence of an online information centre would likely make it easier for organizers to explain in detail. Village governments were less involved in the implementation of rice farming insurance. In fact, as the smallest government unit, the village government had strong formal and informal authority to make the program succeeded. With adequately substantial village funds, the village can allocate a budget to support the implementation of AOTP, (Hidayati; et al. 2019).

Carrer et al. (2020), conducted a study on agricultural insurance in Brazil and indicated the factors that cause farmers to adopt the insurance program. The factors included farmers having a high level of education, good farming and agricultural risk management, and good access to information. Additionally, the results of research conducted in Pakistan showed that several factors influenced the success of the adoption of agricultural insurance. They comprised the socio-economic and information communication factors that affected farmers' perceptions. The better the farmers' perceptions and attitudes towards the risk of crop failure, the more farmers followed insurance, (Fahad et al. 2018).

Regarding the farmers' participation in agricultural insurance, officers in the field – in this case are agricultural extension workers – faced an obstacle. Before taking a program, farmers would usually see whether a program offered by the government benefits them or not, and they would see the evidence of whether this insurance was indeed beneficial for them. Nevertheless, this government program in the field of agricultural insurance has received much attention from farmers. Many of them have adopted it so that the consequences obtained from implementing the AOTP Program are seen in the success of farmers who live a better *life*.

Farmers and the government certainly desire the sustainability of this program by providing trust to farmers in the benefits of agricultural insurance, (Akter et al. 2016; Cole, 2017). The government involvement signifies that the role of an institution is very much needed in the process of development activities to

improve all development infrastructure, both physical and non-physical, for the welfare of people's lives. This institutional role has a function that can provide social energy, which is the internal strength of the community to face or overcome a problem.

Research from [Adnan et al. \(2020\)](#), on the adoption of green fertilizer by farmers in Malaysia, states that communication channels, environmental and socio-psychological factors, socioeconomic aspects, and innovation attribute level of education, age, participation in agricultural activities Greef Fertilizer.

The results of the study by [Managanta et al. \(2019\)](#), showed that the competence of farmers was weak due to the invalid role of the extension workers, the lack of innovation received by farmers, and the low level of formal education. The capacity of farmers needed to be strongemore vitalanize and adapt to the environment due to their low competence. This condition resulted from low institutional capacity and support, thus affecting the independence of low-income farmers in terms of competitiveness. Moreover, the weak level of farmers' competence is influenced by the weakness of (1) the intensity factor in attending both formal and non-formal education, (2) motivation for farming development, (3) the role of agricultural extension workers, and (4) institutional support.

Communication strategy on TOWS analysis

Servaes (2008) states that in a development model where the initiative comes from grassroots participation, the communication structure becomes very important. Indirectly, media needed that is controlled by local communities, organizations, and movements. This will encourage them to choose the information that matters and form a positive picture of themselves. To obtain the right strategy, a way is needed so that the communication strategy is following the typology of society. Models and strategies can be properly analysed and designed, so it requires in-depth knowledge and understanding of external factors (threats and opportunities) followed by looking at internal factors (weaknesses and strengths), especially from a communication point of view.

Specifically, until now there has been no research on agricultural insurance communication strategies or rice farming insurance, especially in South Kalimantan, where almost all the agricultural land is dominated by swamps, both tidal swamps, and lowland swamps. Indirectly the typology of the people will also be different, the people of South Kalimantan are dominated by the Banjar and Dayak tribes, but many other tribes inhabit this area of South Kalimantan.

TOWS analysis contains strategies to improve existing weaknesses in the communication of Rice Farming Insurance (AOTP) / agricultural insurance, the complete strategy is in the table below.

Table 3.
TWOS Analysis

	Opportunities (O)	Threats (T)
Strengths (S)	<p>S-O</p> <ul style="list-style-type: none"> ▪ Effective communication between insurance implementers and strengthening their role ▪ Involving farmers in every socialization activity ▪ Utilizing social capital to increase the number of farmers to participate in insurance. ▪ Simplify the insurance claim procedure to compensation. 	<p>S-T</p> <ul style="list-style-type: none"> • Strengthening human resources of implementers • Improve the capacity of insurance implementers and outreach of socialization. • The implementation of socialization activities is carried out not mixed with other materials, focusing on agricultural insurance. • general guidelines should be more operational, such as technical guides so that the information will be easier to understand. • Establish an information center in each sub-district. • Optimizing farmers' social capital in disseminating agricultural insurance information. • Develop technical guidelines for clearer verification so that all parties will have the same perception and understanding.
Weaknesses (W)	<p>W-O</p> <ul style="list-style-type: none"> • Optimizing the role of the government and Jasindo in socialization, so that farmers' knowledge and understanding become good. • Optimizing the online registration process. • Integrate other agricultural programs such as subsidized popuk programs, farmer cards and other assistance. • Simplify insurance claim procedures and involve village officials in verifying the validity of photos. 	<p>W-T</p> <ul style="list-style-type: none"> • Develop technical guidelines such as socialization • Involving the role of village government • Maximizing farmers' understanding • Improve the ability of field officers in the registration process to insure claims. • Add variety and diversity of information delivery methods. • Provide a choice of various media sources of information, such as social media IG, FB, Tweet, Youtube, Website, leaflets and so on. • Provide electronic means for optimizing communication • Provide incentives for field officers. • Optimizing the role of formal and informal opinion leaders •

Sources: processed by researchers (2022)

The study's results revealed that, although socialization activities were very important to get participants, i.e., farmers who would be the main focus of this program, socialization activities were still minimal and less than optimal. The role of socialization activities in development programs is a crucial factor in the success of development activities, (Ustriyana 2018).

Furthermore, some benefits will be obtained from disseminating information to inform farmers about the importance of participating in agricultural insurance. For this reason, it is important to compile technical guidelines for socialization from the central level to the province, then to the levels of agencies, sub-districts, and village. Additionally, the technical guidelines for socialization should be at the level of farmer groups/farmer group combines with the farmers themselves. Therefore, socialization is not only held by the organizers but also by farmers who must be involved in the socialization. According to Martini et al. (2017), senior farmers' role influenced other farmers' decisions to adopt an innovation. Thus, opinion leaders must be involved in socialization activities. The role of opinion leaders is very important in implementing development communication programs. Opinion leaders are individuals who could influence opinions, attitudes, behaviors, and beliefs. They are trusted and respected figures that can make the communication have a more positive effect. They also have the role to bridge the dissemination of information to other users. Besides that, social media as a means of information plays a role not only in disseminating accurate and useful information but also in clarifying less precise information.

It should be noted that dissemination of information through socialization activities must attract attention and have variations in delivery methods. Communication methods for disseminating an innovation can use the media of interpersonal interviews, deliberation, dialogue/exchange of opinions, lectures, farm visits, farmer visits to officers and other methods.

Concerning the delivery methods, the development of variations of information dissemination can be done through the currently most widely used channels, namely, online media. According to van Dijck (2013), an online media platform focused on the existence of users who facilitated them in activities and collaboration. Meanwhile, Nasrullah (2016) explained that social media is media on the internet that allows users to represent themselves and interact, cooperate, share, communicate with other users, and form virtual social bonds. A person can connect with people who use the same social media to share information and communicate through social media. Social media has a more interactive nature than traditional forms of media such as TV and radio. People can directly interact with each other through the comments column or talk directly virtually through social media.

Information about agricultural insurance should be adjusted to the farmers'

needs, potential, circumstances, and desires. Looking at the diversity of socialization methods will certainly be an attractive way for farmers. The dominant factor in the integration of agricultural programs is the appropriate use of information technology, as well as changes in the digital environment that exist in the community, (Yoon et al 2020). Social Marketing Communication through online media, in this case in agricultural marketing through WhatsApp, is one of the best methods of behavior change. It is because through this media, farmers can discuss different opinions and provide solutions through the media, (Das, 2021). The role of social media and information are two interrelated things, i.e., it is used as for information seeking and sharing. According to Havakhor et al (2018), social media is an important means of diffusing knowledge. They also explained that there were several different roles of social media users in the diffusion of information.

Besides utilizing social media, in order to overcome the confinement of officers in the field, the role of the village government should be optimized. The contribution of the village government from an informal perspective can mobilize various potential social capitals in the community in supporting this agricultural insurance. The village government will certainly be aware of the problems faced by farmers. They can act as facilitators and the source of information that farmers can rely on. The active role of the village government in advancing agriculture is to motivate farmers to take agricultural insurance so that their agricultural land can be protected and safe. Therefore, involving the village government can play an important and active role in disseminating information and monitoring so that the agricultural insurance of the region runs smoothly and well develop, (Hidayati; et al. 2019).

In addition, increasing the number of facilities and infrastructure to optimize this program must be considered. The ability of insurance implementers from the local government (office officers or agricultural extension workers) needed to be improved. The extension workers required to be facilitated with some devices, such as laptops or other electronic devices. Moreover, the officers had to travel very long distances that made the information was not optimal enough to reach the farmers. The means of communication were likely becoming the obstacles that officers often faced. However, with the inclusion of the internet network in villages, the communication process between extension workers and farmers could be facilitated. Another effort to optimize the program was by increasing the number and capacity of officers at the sub-district level and the responsible insurance company (Jasindo). This can be done by providing technical training to increase the capacity of officers in the field.

The role of farmer groups or a combination of farmer groups must also be empowered in this agricultural insurance. The position of farmer groups in this insurance is the spearhead in delivering information to farmers. Moreover, if there

is an insurance claim, the payment process is through the farmer group. Considering the important role of farmer groups. [Waskito et al. \(2016\)](#), stated that one of the communication factors to increase the communication effect of innovation is the farmer's need for information through social communicators such as colleagues, farmer group leaders, combined farmer groups (Gapoktan) leaders.

The aforementioned discussion reveals that the low institutional support is due to several factors. They comprise the suboptimal support from agricultural institutions, the low support from local governments, the suboptimal support for farmer groups, and the low support from agribusiness companies. In addition, the weakness of agricultural institutions occurs due to the lack of number of extension workers and the inadequate capacity of extension workers. The roles of the extension workers influences agricultural technology innovation. Their roles comprise several aspects, namely as educators and mentors, analyzers, planners and experts in evaluating extension activities and results, ([Pello et al 2019](#)).

According to [Destrian et al., \(2018\)](#), technological progress in society is strongly influenced by the environment. Individual and inter-group interaction is an important factor in determining the success of conveying information in communication. communication that is interconnected and mutually influencing between communicators and communications to achieve common goals forming communication networks. In this case it is hoped that communication networks between farmers can run well.

Furthermore, weak institutions result in inefficient farming systems and low profits received by farmers. Thus, farmer institutional development is very helpful in improving market functions, building product processing facilities and strengthening tenure security, and farmer participating in activities that support innovation, ([Deininger et al. 2014](#); [Managanta et al. 2018](#)).

In order to improve the agricultural insurance program, it is also necessary to increase social groups around the community, such as integrated service groups in villages, recitation groups, youth groups, and others. Besides, the resilience of farmers in the face of disasters certainly requires support from the government. The role of the government is very important in the survival of farmers.

CONCLUSION

The obstacles encountered in this agricultural insurance program can be seen from the low level of farmer participation in this program, one the obstacles faced is information and communication factors that are not optimal, counselling factors and media factors are an important part of this activity. The communication strategy in this agricultural insurance program states that the more precise the information obtained, the better the farmers decide to participate in agricultural insurance. Furthermore, in the SWOT analysis it can be seen that,

the village apparatus was not involved, opinion leaders in the socialization of agricultural insurance became one of the sources of problems, human resources in conveying agricultural insurance information were still lacking, information sources played a very important role in the dissemination of insurance information.

In the TOWS analysis, it can be concluded that, by increasing the capacity of human resources in the field it can be impactful, the use of communication media is currently more dominant than the internet and social media as general information media, the communication strategy leverages all types of communicators at all levels, shaping messages according to the needs of farmers, formation of information centres at the village level, maximize the role of opinion leaders and optimize the diversity of information delivery method, facilitators/extensionists have a very important role in agricultural insurance activities as agents of change and evaluation of farmer perceptions.

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