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Farmers' Perspectives on the Role of Agricultural Extention in the Special Efforts for Corn Plants in North Timor District

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Abstract
One of the districts participating in the Special Efforts (Upsus) program for Rice, Corn and Soybeans (Pajale) in East Nusa Tenggara (NTT) is North Central Timor (TTU) district, especially in Insana sub-district. In order to realize the optimal management of the implementation of the Upsus program, it is necessary for the participation of extension workers in facilitating farmers to increase their knowledge, attitudes and skills in terms of farmer capacity. This study aims to explore the farmer's perspective on the role of extension workers as educators, facilitators, consultants, dynamists, motivators, organizers, and evaluators as well as the factors that influence the implementation of the role of extension workers in facilitating the management of the Upsus Program implementation in TTU District. This study uses a descriptive method with a qualitative approach. The data were analyzed descriptively qualitatively, namely the data obtained were tabulated and then processed with qualitative analysis, namely the technique of examining data derived from the views that were in the minds of the people (informants) which included three streams of activities simultaneously, namely data reduction (data reduction), data presentation (data reduction), and data presentation (data reduction). display), and drawing conclusions (conclusion drawing/verivication), which is supported by the Nvivo 12 analysis tool. The research location was chosen purposively (deliberately) that was determined by researchers in Insana District because it has a Farmer Group that has been carrying out Upsus activities for corn plants since 2015. The results showed that the farmers' perspective on the role of extension workers focused on technical assistance in corn cultivation and growing farmer groups as educators, facilitators, consultants, and dynamists in the medium category, while motivators, organizers, and as evaluators were in the low category. The factors identified that influence the activity of the role of the extension worker in TTU District are: the competence of the extension worker to carry out the duties and functions of the extension, the motivation of the extension worker and the orientation of the extension institution.

Keywords: *Role, Agricultural Extension, Special Efforts, Corn Plants*

Introduction

Collaboration between the government and the community in an effort to achieve food security can occur if the role of extension workers is considered optimally, because optimal utilization of the role of extension workers will make it easier for communities or individuals to improve their behavior by building relationships with various other individuals or communities in various interests in order to achieve food security in accordance with hope.

In general, the agricultural sector consists of several sub-sectors, namely food crops, horticulture, and plantations. One of the agricultural sub-sectors that has the most important role is food crops. In 2015, the Indonesian government launched a Food Sovereignty Program which was implemented, one of which was the Special Efforts (Upsus) program for rice, corn, soybeans (Pajale) to improve Indonesia's food security, which had previously declined. The Upsus program aims to reduce poverty and unemployment, increase

competitiveness, and build food security, namely the condition of fulfilling food for households which is reflected in the availability of sufficient food, both in quantity and quality, safe, equitable and affordable.

Corn is one type of food commodity that is consumed after rice/rice as well as to meet the needs of animal feed and industry. Ministry of Agriculture (2015) that the food crop sub-sector (maize) as part of the agricultural sector continues to be pursued to increase production and productivity which is carried out in the Upsus program. Upsus activities for maize are carried out through the Integrated Crop Management Application Movement (GP-PTT), Corn Planting Area Expansion (PAT maize), provision of agricultural facilities and infrastructure (seeds, fertilizers, pesticides, agricultural tools and machinery), control of Plant Pest Organisms (OPT).), and the impact of climate change, agricultural insurance and escort or assistance.

The form of Upsus activities for corn plants when viewed in national corn production from 2014 to 2018 continued to increase, for example in 2018 it reached 30,055,623 tons in the area of land used for 5,734,326 ha with corn productivity of 5.24 tons/ha (BPS, 2019) and in 2018 Indonesia's population was 265,015.3 million people with corn consumption of 1,600 kg/per capita/year. This amount, if only to meet human needs, is sufficient for the food consumption needs of the Indonesian people. However, corn is also a raw material for animal feed. BPS in the March Susenas (2018) that the use of corn includes feed (9.70%), seeds (0.46%), processed for non-food/industrial (44.67%), scattered (5.00%), other uses (37.57%), and foodstuffs (2.6%). Thus, the highest percentage is corn which is processed for non-food (industrial) at 44.67%.

The increase in corn production from year to year has not been able to keep up with the increasing demand for corn, so Indonesia is still importing corn from the world market to meet domestic demand. Data obtained from Agricultural Statistics (2019) related to the development of the export-import volume of corn in Indonesia from 2014 to 2018 shows that the volume of imports of corn is higher than the value of its exports, such as in 2018 the volume of imports was 1,150,225 tons and exports were 341,523 tons.

Given that dependence is still on imports, the government continues to strive to increase corn production and productivity with targets for land area, production and productivity as stated in the Strategic Plan (Renstra) of the Ministry of Agriculture through Minister of Agriculture Number 19/Permentan/HK.140/4/2015 with operational basis in the Decree of the Minister of Agriculture of the Republic of Indonesia No. 14.1/Permentan/RC.220/4/2015 concerning guidelines for the implementation of Upsus which involves many agencies, both the coaching team, whose organizational structure refers to the Regulation of the Minister of Agriculture Number 03/Permentan/OT.140/2/2015 concerning Guidelines for Special Efforts (Upsus) for Improvement Production of Rice, Corn, and Soybeans (Pajale).

The Province of East Nusa Tenggara (NTT) also seeks to increase food availability, including the Upsus program for corn plants, and according to the target in the data from the Directorate General of Food Crops (2019) that the production in 2015 is expected to be: 727,790 tons, in 2016: 765,053 tons, and in 2016. 2017: 801,103 tons, and 2018: 841,398 tons of planted area in 2015 which is expected to be 273,694 ha, in 2016: 281,905 ha, and in 2017: 288,228 ha, and in 2018: 296,530 ha. And the realization of production obtained in 2015: 685,081 tons, in 2016: 688,432 tons, and in 2017: 809,830 tons, and in 2018: 859,230 tons, in land area in 2015: 273,194 ha, in 2016: 265,318, and in 2017 : 311,352 ha, and in 2018: 341, 264 ha and the average productivity of the four years is 2.55 tons/ha. This shows that the productivity in the Upsus program for maize in NTT Province in the four years has not reached the desired target (at least 5.04 tons/ha in the new planting area and 1 ton/ha in the existing area). Based on the data on maize production and productivity obtained in NTT above, its sustainability tends to be worrying.

The low production and productivity of maize in NTT is caused by the application of inappropriate technology, low quality of maize products by farmers, uncertain climatic conditions, unproductive land area and lack of maintenance. Efforts to overcome the low production and productivity of maize have been carried out by optimizing the assistance of infrastructure facilities and assistance of assistants in the field. However, corn production and productivity in NTT is still low, so it is considered not optimal. The failure or not success of Upsus on corn is due to the tendency of Upsus activities for corn to only increase production and productivity, human resource factors are not a priority, are centralized by government control both in terms of funds and management systems, communication patterns run linearly between the implementing teams, make corn farmers the object of development targets with assistants as intermediary tools in program

implementation. The program approach developed is centralized and tends to focus on technology transfer rather than focusing on farmers as subjects and learning centers. This condition ignores humans as the main target so that it tends to produce a culture of dependence on the government and this will result in farmers tending to return to their initial pattern after the program is finished.

Field instructors assisting farmers in corn farming activities can act as educators, facilitators, advisors, dynamists, motivators, organizers, and evaluators. The role of this extension agent is highly expected as a bridge for information on upsus corn plant innovation in terms of accuracy, speed, usability, and completeness. According to Mardikanto (2009) counseling is a process of awareness through non-formal education about the importance of development activities to improve the quality of life so that the spirit of trying to achieve the quality of life grows.

The Upsus activity for corn plants in TTU Regency has been running for four years, which has been socialized by the Department of Agriculture through existing assistants to farmers in accordance with their potential to be developed in their respective lands. The communication system was developed interpersonally because farmers in TTU Regency were still in a limited condition both in terms of human resources and the availability of limited farming facilities and infrastructure. According to the data from the TTU Agriculture Office (2019), the 2015 production target is: 26,462 tons, in 2016: 29,665 tons, in 2017: 36,863 tons, in 2018: 59,465 tons, and in 2019: 62,348 tons. And the realization of the results obtained, in 2015: 56,655 tons, in 2016: 70,246 tons, and in 2017: 72,184 tons, and in 2018: 59,017 tons where the average productivity achieved was 2.46 tons/ha.

Taking into account these data, it shows that hopes for the prospect of corn commodity to achieve the target to increase income and food security of corn have not been successful. The low production and productivity of corn in TTU is due to several things, including: farmers still use traditional farming methods with less intensive cultivation technology even though farmers have received socialization and assistance with facilities and infrastructure from the government (without tillage, and/or tillage, without fertilization, and control of plant-disturbing organisms has not been optimal). Other factors are drought, lack of availability of superior seeds, fertilizers, medicines, high pest and disease attacks, limited manpower, low access to information technology, high transportation costs, lack of market for corn products, and limited capital. The various problems above cause the rate of increase in corn planting area to run slowly which in turn has an impact on the low production and productivity of corn.

A very important factor in supporting the effectiveness of communication to increase farmer behavior change is the role of the companion. The role of this facilitator is as a bridge that helps farmers make their own decisions by providing options for them and helping them develop insight into the consequences of their respective choices. However, it has not been used properly so it is necessary to pay attention to strengthening the role of assistants in providing information to farmers so that it can run optimally. This is in accordance with the expression of Mardikanto (2009) which states that an extension worker is someone who has carried out the duties and functions of extension such as: education, information dissemination, facilitation, consultation, supervision, monitoring and evaluation.

To realize the application of organic rice cultivation, it is necessary for the participation of extension workers in helping farmers improve their knowledge, attitudes and skills in terms of the Upsus program for corn plants. Based on the initial discussion conducted by the researcher with related parties (coordinator of extension workers, agricultural extension workers, Upsus farmers and community leaders) it appears that there is an interesting process to be investigated and studied more deeply, namely the role played by extension workers to farmers, the questions that arise is how the role of extension workers in facilitating the management of the implementation of Upsus for corn plants in TTU Regency. Therefore, in general, this study aims to reveal the role of the extension worker and the factors that influence the implementation of the role of the extension worker in the management of Upsus corn in TTU District.

Research Methods

This research was conducted in TTU District, namely: Insana District. The location was determined intentionally by the researchers because the sub-district has a Farmers Group that has implemented the

Upsus Corn Plant Program since 2015. This research was carried out from August 2020-January 2021. This study used a descriptive method with a qualitative approach, namely clearly describing how the role of extension workers in Upsus corn plant. The qualitative approach was chosen because the researcher wanted to know and understand in depth about the role of the extension worker for the Upsus corn crop program in Insana District. Informants from this study were farmers participating in Upsus corn plants in Insana District. Each selected several farmers from each group who will provide and share their experiences during the counseling in the Upsus corn crop program. Furthermore, informants were also selected from PPL in each village that has a target group in the development of the Upsus program for corn plants in their working area. The main data topic is the implementation of the role of the extension worker according to Mardikanto (2009), namely: the role of the extension worker as an educator, facilitator, consultant, dynamist, motivator, organizer, and evaluator. To explore information related to the topic of the data observed, the researcher is guided by a semi-structured interview guide that elaborates questions with references to 5W + 1H (What, Who, When, Where, Why and How), so that the identified data can answer the problem formulation that has been formulated. put forward. Key informants (key informants) are determined by Snowball Sampling, namely the technique of determining respondents by following information from previous informants (Sugiyono, 2011). Snowball Sampling is a sampling technique that initially is a small number, then becomes a lot. It's like a rolling snowball that grows bigger over time. In determining the sample, first one or two people are selected, but if these two people do not feel complete with the data provided, the researcher looks for other people who are considered to know better and can complete the data provided by the two previous people. And so on so that the number of samples becomes large. In this study, the number of key informants was 6 farmers, 6 informants consisting of 2 group administrators, 1 community leader, 1 head of the Agriculture Service, and 2 PPLs. Thus the total number of key informants and informants is 12 people. The data were analyzed descriptively qualitatively, namely the data obtained were tabulated and then processed with qualitative analysis, namely the technique of examining data derived from the views that were in the minds of the people (informants) which included three streams of activities simultaneously, namely data reduction (data reduction), data presentation (data reduction), and data presentation (data reduction). display), and drawing conclusions (conclusion drawing/verification), which is supported by the Nvivo 12 . analysis tool.

Results And Discussion

1. The role of the Special Effort Extension Officer (Upsus) for Corn Plants in TTU District

The role of the extension worker in this study can be seen as the interaction between the extension worker and the farmer as: educator, facilitator, consultant, dynamist, motivator, organizer, and evaluator. For more details can be described in table 6.5 below.

Table 1. Proportion of Upsus Farmers in Corn Plants Based on the Role of Extension Workers Upsus Corn Plants in TTU Regency, 2020

NO	Faktor	Rata-Rata	Ideal	Keterangan
1	Educator	7,26	10,00	High
2	Facilitator	6,21	10,00	High
3	Consultator	6,00	10,00	High
4	Dynamisator	6,06	10,00	High
5	Motivator	5,11	10,00	Low
6	Organisator	4,81	10,00	Very low
7	Evaluator	5,47	10,00	Low

Source: Primary Data, 2020

1.1. Educator

Educators can be interpreted as people who advance one's mental, moral, psychic, and knowledge by providing training, courses related to agriculture in improving the knowledge and skills of farmers. The role of extension workers as educators in this study can be measured in increasing knowledge in the form of

information about corn farming technology, and improving farmers' skills in the form of training on corn farming techniques, as well as conducting discussions/dialogues related to upsus corn plants.
Based on the results of the study (table 1), it shows that the role of the instructor as an educator is mostly in the high category in the range of 7-8 (47 percent), and the range of score achievement is in the range of 6 to 12. When viewed from the average score achievement in the role of extension workers as educators in Insana District, TTU Regency, which is 7.26 which means that they are in the high category. The high role of the corn crop Upsus instructor for farmers in Insana District, TTU Regency is due to the fact that the extension worker can translate new information or knowledge related to the corn crop Upsus into a language that can be understood by farmers, but the extension worker is still low in improving the skills of farmers through training as a form of training. model with farmers in implementing the Upsus corn crop program, farmers discuss with extension workers regarding the Upsus corn crop but their mindset is still using farming methods that are known from their parents' inheritance. This is in accordance with the results of an interview with Mr. YL as the head of the Moenmuni farmer group in Oinbit Village on Saturday, October 26, 2020 that:

> *Pak, hai i…penyuluh nfe kai hanaf noe het sen pena Upsus…hai mfe data lel ni ni meo nuakin… i… hiat penyuluh sin ni nfekai nek uab meto…alekot… nobesat miuab…mes kanfekai noena on le pelatihan. Hai mi hian mes he tmoele ka mi hian fa…(*Sir, we are here, the extension workers give us information for this Upsus program, like we give data related to land area using the local language, so it is very good. But we weren't taught how to farm)

For this reason, it is hoped that the role of extension workers as educators will provide increased knowledge through examples of joint corn farming as a model and training so that farmers' skills in corn farming will also increase in the future.

1.2. Facilitator

The role of the extension worker as a facilitator in this research is that the extension worker can serve the needs felt by the farmers participating in the Upsus. In this condition, the extension worker gives more of a role as an intermediary or mediator in the Upsus activities of corn plants.
Based on the results of the study (table 1), it shows that the role of the instructor as a facilitator is mostly in the high category in the range of 6-7 (41 percent), and the range of score achievement in the role of the instructor as a facilitator is in the range of 2 to 8. The achievement score in the role of the extension worker as a facilitator in Insana District, TTU Regency is 6.21. The high role of the extension worker as an Upsus facilitator for corn for farmers is because the extension worker can assist in every activity, help meet the needs of facilities and infrastructure, find additional media to help understand information, and assist farmers in building cooperative partners with other institutions. However, the efforts made by extension workers in directing and assisting farmers did not match the conditions that occurred. Based on an interview with Mr AB conducted on Saturday, 19 October 2020 said that:

> *Program ije…na tonan kai, noe he tapen bantuan penfini… pupuk, pestisida. Pertama: haim usul cpcl oke onan KT es 25 Ha… Mes uab i…nte namuin….kan ma tom fa….cpcl kan ma tomfa nok le haim usul, bantuan nemat olas het sen…fin jen….hai mipenjaha fini….pupuk nok pestisida ka mipene…..es haim sena penfini le nan mbi jaha po nini…es onan haim tuet he le program i je tail taloet ne fe…hen ma tom nok I na nao ne mbi hai kuan ne…*(In this program, we were told that we would receive assistance with seeds, fertilizers, pesticides, and first we proposed a CPCL where the land area per KT is 25 Ha. However, this program was not in accordance with our proposal, the aid arrived late and we only received assistance with seeds while fertilizers and pesticides had not been received, so the seeds we got were only planted in the yard of the house. Therefore, we request that this program be reviewed and adapted to the conditions of our region).

This is the opposite of the Kemenprint (2016) that the government provides several policies related to input policies including the policy of subsidizing fertilizers, seeds, pesticides, and including other agricultural inputs, as well as loan interest subsidies in order to support national food security, which comply with the 6 principles, namely: type, quantity, price, place, time, and quality. The impact of the condition of the lack of understanding of farmers on the role of government policies is that farmers can cultivate Upsus corn plants in the fact that there are members who exceed the area according to the agreement, as well as corn prices that are not in accordance with the reality of the results of the socialization resulting in dissatisfaction and trust from group members to the management groups and extension workers decreased. As in an interview with Mr. GN on Friday, November 23, 2020 that:

> *Hai na tonan kai, nako penyuluh….nak of le anmui bantuan… he tapen penfini… pupuk, nok pestisida. Of le bantuan i….. ulnen saon…hi mipen…mes esat hen mpao nek in me nuan 25 Ha….. Mes uab i…nte namuin….bantuan i…kan tom fa….nemat olas het sen…an fin jen….hai mipenjaha fini….pupuk nok pestisida ka mipene…..es haim sena penfini le nan mbi jaha po nini…*(we were told that later there would be assistance with seeds, fertilizers, and pesticides where everyone had to prepare 25 hectares of land. This assistance will arrive later in the rainy season, now we need to prepare the land…..But the result of this socialization is that when it rains the seeds arrive late, we can't get fertilizer and pesticides…as a result, we can only plant the seeds in our yards)

Based on some of the descriptions above, it can be concluded that the lack of understanding of farmers on the policy of the Upsus program for corn can have an impact on farmers' attitudes in accepting the program, such as farmers can only plant in their yards, the land is not large as a form of participation and it is shown that they also plant other types of corn. help.

1.3. Consultant

The role of the extension agent as a consultant is an effort by the extension worker in responding to the problems of implementing the Upsus agribusiness corn crop, providing alternative changes in terms of technical, economic, and cultural values of farmers, and actively asking the problems faced by farmers and providing solutions. In this study, the role of the extension agent as a consultant can be seen from the effort to provide instructions on the benefits of using upsus corn technology, and provide suggestions for improvement related to problems faced by farmers in upsus corn plants.

Based on the results of the study (Table 1), it shows that the role of the extension worker as a consultant is mostly or dominant in the high category in the range of 6-7 (45 percent), and the range of score achievement in the role of the instructor as a consultant in Insana District, TTU Regency is between 2 and 8. If we look at the average score in the role of the instructor as a facilitator in Insana Subdistrict, TTU Regency, it is 6.00.

The high role of the extension agent as a consultant for Upsus corn for farmers is because the extension agent can respond to problems in implementing the Upsus corn crop such as pest attack problems, and is active in the field in asking the problems faced by farmers and providing solutions. However, the solutions offered to farmers are not complete. For example, the extension worker told the type of caterpillar pests that attacked the leaf buds that were about 1 month old and the corn plant medicine used such as folidol to spray the insecticide on the affected corn plants but the dose used was not taught. Thus, the extension worker did not open up and gave less consideration regarding Upsus because the extension worker did not meet farmers in locations such as the farmer group in Oinbit village and Fatoin.

1.4. Dynamist

The role of agricultural extension as a dynamist is a person who is able to move in a process the use of new technology, and actively uses it so as to further increase the growth of his agricultural business. In this study, the role of the extension agent as a dynamist can be seen from moving farmers to use Upsus technology for corn plants, and moving farmers to be active in upsus corn plant activities.

Based on the results of the study (table 1), it shows that the role of the extension worker as a dynamist is mostly or dominant in the high category in the range of 6-7 (50 percent), and the range of score achievement in the role of the instructor as a dynamist in Insana District, TTU Regency is between 2 to 8. If we look at

the average score in the role of the extension agent as a dynamist in Insana Subdistrict, TTU Regency, it is 6.06. The high role of the extension agent as a dynamist is because farmers perceive that the extension agent has encouraged them to know the mistakes and successes of previous farming. Furthermore, based on this information, farmers are active in follow-up activities so that preparation for farming can be done so that previous mistakes can be avoided and success can be increased. However, the efforts made by the extension workers in mobilizing farmers to use the corn crop of the Upsus program did not provide additional efforts such as the instructor's discipline due to the fact that the extension workers were often not in place, were transferred, and the extension workers were not given training related to the activities in question.
The implementation of Upsus for corn plants is an opportunity for farmers to develop their farms, but the weakness in the Upsus program for corn plants is that the assistance provided does not run continuously for farmer groups or farmers but moves from place to place. Another thing is that farmers who tend to be successful due to their independence in previous corn farming, are reluctant to change because they feel they have succeeded, even though changes through Upsus corn plants are faster because of their short lifespan, there is assistance with superior seeds, fertilizers, and pesticides. This raises the role of extension agents as dynamists that are still needed by farmers in responding to the existing corn farming, namely between Upsus corn plants and local corn by adjusting farming techniques according to the technology package.

1.5. Motivator

The role of the agricultural extension as a motivator is as a person who has the ability to provide encouragement or stimulation to farmers to do something (corn crop Upsus). In this study, the role of the extension agent as a motivator can be seen from the efforts to encourage farmers to use Upsus technology for corn plants, and efforts to encourage farmers to be active in Upsus activities for corn plants.
Based on the results of the study (table 1), it shows that the role of the instructor as a motivator is mostly or dominant in the low category in the range of 4-5 (50 percent), and the range of score achievement in the role of the instructor as a motivator in Insana District, TTU Regency is between 2 and 8. If you look at the average score of the role of the instructor as a motivator in Insana Subdistrict, TTU Regency, it is 5.11. The role of extension workers as motivators was assessed by farmers that most were in the low category due to the availability of seeds, fertilizers, and pesticides that were not in accordance with the planting time and their use, causing the extension workers to have difficulty motivating farmers. As in an interview with Ms. MF as a member of the Moinmuni farmer group, Oinbit Village on Saturday, October 26, 2020 that:

> *Hai i…nfekai uab…nfekai tenab hem sean pena Upsus…natuin luas lahan le an nba baet kai…..bantuan ne mat nterlambat… o..haim sean mi lae jen….es onan haim sean ka naek fa…(*we were given information so that the Upsus corn plant should be in accordance with the allotted area of land. However, the aid came too late so we planted it with the local corn that was available, so the Upsus corn that was given to us was planted but it was not as large as expected).

In addition to the corn that has been produced, there is not enough market that can accommodate it at a reasonable price. This can bring down the will of farmers. The motivation of the extension agent in increasing changes in farmer behavior is very dependent on the extension material in the form of innovation/technology that comes from the Extension Source. Innovation is something that is considered new in the form of ideas, technology (ways, methods, goods). Characteristics of innovation: limited validity period (if people are familiar with it, the nature of the innovation fades), its application must provide added value/advancement, can be disseminated, and needs to be tested (field test/adaptation) so that it can be applied in the field. The terms of the extension material include the basic requirements and additional requirements. The main requirements are divided into 3, namely technical requirements, economic conditions, and social conditions. Technical Terms. Technically doable. Must be suitable with the situation of farmers, especially in accordance with the level of education, knowledge, and basic skills of farmers. The necessary facilities or materials must be available locally or close to the residence. In accordance with the conditions of the physical environment (geography, climate). Economic Terms, economically profitable. Recommended extension materials should benefit farmers. The application of the new technology provides higher profits than the old technology. The value added of production is higher than the value added of the cost. Social requirements, socially acceptable to society. Accepted if it does not cause a negative social

impact. Negative social impacts do not occur if the new technology is suitable, appropriate, does not conflict with values, norms, customs, population conditions, availability.

Based on the results of the study, it was shown that the farmers' perspective on the Upsus corn plant instructor in Insana District, TTU Regency in the extension material provided by the extension worker, to farmers only related to Upsus corn plants and ways to achieve the results, farmers were not notified regarding the knowledge of the changes that would be obtained related to Upsus corn plants as well as information on the capital and marketing of production. Extension workers can be present to provide information related to places for borrowing capital and marketing results in outreach activities to farmers, but the information provided is not in accordance with the information expected from the initial selection of prospective farmers/prospective locations as well as, land area as well as related to capital and market prices of products. . This condition causes many farmers to only plant corn in their yards while local corn is planted in their gardens. Meanwhile, the extension material is classified as high and very high because individually, family/friends are directly related to the extension worker or from the Agriculture Service or the TTU Trade and Industry Office. Broadly speaking, these points can be seen in the following figure.

Source: Primary Data, 2020.

Figure 2 Context of Conversations related to Extension Materials.

The points of the counseling material above received the attention of Mr. AB in an interview conducted on Saturday, 19 October 2020. In the interview he disclosed the facts that occurred in the implementation of the program, as follows:

> *Program ije…na tonan kai, noe he tapen bantuan penfini… pupuk, pestisida. Pertama: haim usul cpcl oke onan KT es 25 Ha… Mes uab i…nte namuin….kan ma tom fa….cpcl kan ma tomfa nok le haim usul, bantuan nemat olas het sen…fin jen….hai mipenjaha fini….pupuk nok pestisida ka mipene…..es haim sena penfini le nan mbi jaha po nini…es onan haim tuet he le program i je tail taloet ne fe…hen ma tom nok I na nao ne mbi hai kuan ne…*(In this program, we were told that we would receive assistance with seeds, fertilizers, pesticides, and first we proposed a CPCL where the land area per KT was 25 Ha. However, this program was not in accordance with our proposal, the aid arrived late and we only received assistance with seeds while fertilizers and pesticides had not been received, so some of the seeds obtained were only planted in the yard of another house on the prepared land. Therefore, we request that this program be reviewed and adapted to the conditions of our region).

Discussions on farmers' perspectives on the role of extension workers have different emphases. The emphasis is not only related to the role of extension workers in providing extension intensity but also to the extension workers' efforts to motivate farmers. This is in line with Mardikanto, (2009) that extension materials in motivating farmers must have problem-solving properties, contain instructions and recommendations to be implemented, are instrumental in nature, i.e. they do not have to be consumed in a short time, but which need to be considered and have long-term benefits. However, extension workers are still needed by farmers as a source of information that can direct them to increase the willingness of farmers to use corn farming technology so that they have the enthusiasm to be active and maintain corn farming

which is at risk of failure. For this reason, farmers need to be motivated by extension workers to be able to face failures either because of the existing technological system by not being used, market conditions available at low prices experienced by farmers in the research location. This means that the failure obtained is to keep trying or not to be discouraged but can be motivated as a learning time in improving its management so that over time the farmers are strongly motivated and independent.

1.6. Organizer

The role of the agricultural extension as an organizer is as a person who has the ability to regulate an activity (corn crop Upsus) so that it can run according to the technical implementation available for the target (farmers). In this study, the role of the extension agent as an organizer can be seen from the efforts of farmers to work together in managing the technology for upsus corn plants, and utilizing group resources for the implementation of upsus corn plants.

Based on the results of the study (table 1), it shows that the role of the extension worker as an organizer is mostly or dominantly in the low category in the range of 4-5 (47 percent), and the range of achievement scores in the role of the instructor as an organizer in Insana District, TTU Regency is between 2 and 8. If it is seen from the average score of achieving the role of the instructor as a facilitator in Insana District, TTU Regency, it is 4.81. The role of the extension worker as an organizer is assessed by farmers that most of them are in the low category. The low role of the extension agent as an organizer is due to the limited availability of time for the extension worker to manage farmer groups due to the large number of assisted groups, the mutation of the extension worker does not match the time limit, the number of extension activities outside of their main task which is quite time-consuming for farmer group activities. This causes the management of Upsus technology for corn plants with farmers to be disrupted due to lack of interaction with farmers, besides that the management of farmer groups is less than optimal, marked by the large number of farmer groups with the status as farmer groups in the beginner class and only one farmer group, namely the Nespol women farmer group, Manunanin Village. A which is in Advanced class. As conveyed by Ms. DC as Chair of the Women Farmers Group Orbale Nunusili in her interview on Saturday, October 12, 2020 who said that:

> *Hai kelompok i…a loben….mes hai ka mi hian nfa nan sa es hai kelompok na balaha…pemula….hai im sa…PPL nemat nobaha nmui program na nem…pindah ham sa hai ka mi hian fa…..(* We've been in this group for a long time but don't know why our status is just rookies. PPL is also here, sometimes new programs appear…sometimes we move places, we don't know).

However, in collaboration with the TTU District Agriculture Office, the extension workers always carry out activities to encourage togetherness with farmers, the extension workers are aware of their duties in empowering the potential of the farmer groups, and the awareness of farmers to pick up information related to Upsus corn plants such as group administrators, and members can access information from the media. existing information (interpersonal). For this reason, extension workers as organizers need to describe the success of other farmer groups in managing upsus corn technology through continuous interaction and socialization so that farmers can understand each other and be aware of the existence of farmer groups and in farming activities, learn from each other or exchange information, and can create mutual attitudes. respect each other's roles.

The farmer's perspective on the role of extension workers in Insana District, TTU Regency can be seen from the context of the following picture.

Source: Primary Data, 2020.

Figure 2. Context of Extension Officers in the Perspective of Farmers in TTU District

Figure 2 above shows that farmers need extension workers, but extension workers in Insana District are still limited. Existing extension workers are busy with traditional affairs, churches, and others, so they don't have enough time to provide counseling to farmers. Therefore, they expect additional competence of extension workers and additional extension workers. Several points regarding the intensity of counseling from the extension workers were stated by Mr. AB as the head of the Cahaya Sap'an farmer group in Fatoin Village on Saturday, October 12, 2020 that:

> *Haim mbi i…lo alaha moe kelompok tani…hai mi pen penyuluhan kalo nmui program….kalo kan nmui penyuluh ka nema…sen ti ni napenen menas lon nmaet naha…ni hem toet moe me…penyuluhan nem ka noefa le senat nane len…(*we are only here to create a farmer group…we can get counseling if there is a program otherwise there is no. If the plant is attacked by pests and diseases, it is left to die, I want to ask where if the extension worker comes, it's another matter).

The same thing was conveyed by PN as a member of the Moenfuli farmers group of Oinbit Village in his interview on Saturday, November 23, 2019, it was said that:

> *Haim mbi i…lo alaha moe kelompok tani…penyuluh na feten kai…an kasi pindah es bale bian…..haim sa at ka mi hian fa….nobesat na koordinator ppl kecamatan na nem nail kai….ni penyuluhan noe le hai sean tini mbi Upsus an kurang* (we are here, only when we create a new group there is an extension worker here, after that we were released, there was a transfer to another place without a replacement, sometimes the sub-district ppl coordinator came to see us so that counseling related to Upsus was low or lacking).

Thus, it can be said that in general the intensity of extension on Upsus corn plants is low, so it needs to be increased again by the extension workers themselves as their obligations to farmers and farmers must also be able to independently seek information that is needed for the technology of Upsus corn plants. In addition, the lack of intensity of extension received by farmers is due to limited extension services such as in Oinbit Village and Fatoin Village (including a political mutation system), and extension workers do not have access to good information. Extension workers are expected to have a very limited role in terms of financial/financial needs to assist the community, so that the development of a technology is still running modestly, without paying attention to the development and improvement of the quality of existing technology. Thus, this is not in accordance with the quantity of the implementation of the extension activity itself, which should occur 16 times a month (Law No. 16 of 2006 concerning Extension). Therefore, the increase in the role of extension must always be improved, so that it will move in line with improving the quality of the farmers themselves.

However, there are farmers who are actively involved in socialization or counseling, as well as technical development of agribusiness corn plant technology, namely in Manunain A Village, Manunain B Village, Nunmafo Village, and Bitauni Village. Active farmers are very familiar with technical knowledge and how Upsus technology works. However, not all farmers develop it sustainably, so that currently many corn plant

technologies are experiencing setbacks in the community. Thus, the role of extension workers must always be improved and developed continuously and always see the condition of corn plant technology as a solution to overcome crop failure. According to Rogers (2003) that perception is the starting point for attitude towards information, innovation, or modern technology that currently exists. The ability of farmers to use and maintain a technology is a must that must be owned by each farmer, so that if there is a problem or damage (both small and large) that can interfere with the production process, it can be addressed immediately, without having to wait for the initiative of experts (local extension workers).) to solve it. Thus, the use of agribusiness corn plant technology can be felt and enjoyed continuously. And of course in terms of relative advantages (economic terms) it will save maintenance costs if it is carried out by the adopter.

1.7. Evaluator

The role of the extension worker as an evaluator is the extension's effort to carry out measurement and assessment activities that can be carried out at the end of the Corn Plant Upsus activity . In this study, the role of extension workers as evaluators can be seen from assessing the activities of upsus corn plants , and informing the results of the assessment to farmer .

Based on the results of the study (table 1), it shows that the role of the extension worker as an evaluator is mostly or dominantly in the low category in the range of 4-5 (58 percent), and the range of achievement scores in the role of the extension worker as an evaluator in Insana District, TTU Regency is between 2 to 8. If it is seen from the average score of achieving the role of the extension worker as an evaluator in Insana District, TTU Regency, it is 5.47. The low role of extension workers in evaluators in Insana District, TTU Regency is due to the fact that the instructors did not carry out a thorough assessment and only those who were judged successful in cultivating Upsus corn plants, while those that were less successful were rarely taken into account. This results in the lack of knowledge of the extension workers and farmers in knowing the mistakes and successes of the farming, which is actually based on this information the farmers know additional efforts in follow-up activities so that farming preparation can be done so that previous mistakes can be avoided and success can be increased. On the other hand, the assessment carried out can only be known by the closest people, often the extension workers are not in place, are transferred, and the extension workers are not given training related to the activities in question.

1. Factors Affecting the Role of Extension Officers in the Implementation of Upsus on Corn Plants in TTU District

The presence of assistants or agricultural field extension workers (PPL) either PNS/PPPK or self-help agricultural instructors (PPS) becomes a complementary role integration between each extension agent in the midst of farming communities because the role of extension workers is still very much needed to improve human resources. (farmers) so that they are able to change the mindset of farmers from using conventional farming to farming that pays more attention to environmental sustainability. From the description above, we can see the division of the role of extension workers in carrying out their roles as educators, facilitators, consultants, dynamists, motivators, organizers, and evaluators. However, from the results of observations by researchers in the field, it was found that several factors were identified that influenced the implementation of the role of extension workers in assisting Upsus farmers in corn plants in Insana District, TTU Regency, including 1) The competence of extension workers was still weak. The ability of extension workers is only limited to technical assistance in cultivation. In fact, Sumardjo (2010) explained that extension workers have at least the following competencies: (a) personal, (b) social, (c) andragogic, and (d) innovative communication, motivation of extension workers and orientation of extension institutions. 2) The motivation of the instructor; What affects the motivation of the extension workers in the field is the inequality in welfare and honorarium between the extension workers who have the status of daily freelance agricultural extension workers (THL-TBPP) and extension workers who have become Civil Servants (PNS), while in the field the number of extension workers who THL is more than the civil servant extension. 3) Orientation of extension institutions; Extension institutions function more as a "container" for extension programs that have been established by the government, including the corn crop Upsus development program. This condition has implications for the orientation of farmers to the Upsus

corn extension program, no longer on increasing farmer's human resources and strengthening group capacity, but rather on how farmers get assistance through programs brought by extension workers through these extension institutions.

Conclusion

1. The role of extension agents (educators, facilitators, consultants, and dynamists are in the medium category, while motivators, organizers, and evaluators are in the low category). The orientation of the role of extension workers focuses on technical assistance in corn cultivation to increase production and productivity of corn plants, while growing farmer groups has not been going well. The role of extension workers is still minimal in strengthening institutions and bridging relationships with other stakeholders.
2. The factors identified that influence the activity of the role of the extension worker in Insana District, TTU Regency are: the competence of the extension worker to carry out the duties and functions of the extension, the motivation of the extension worker and the orientation of the extension institution.

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