

Performance Evaluation of Field Agriculture Extension in the Shallots Planting Program

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Abstract: The dependence of imported West Kalimantan shallots is currently very high because it cannot produce itself; therefore, a solution that can be offered is to promote a shallot planting program supported by a field of agricultural extension team. This study aims to determine the results of counseling that has been delivered by extension officers in the shallots planting program, in this case, evaluating the performance of field agricultural extension officers (PPL) on the shallots planting program, 20 farmers involved with this program. The analysis was carried out using a Likert Scale, followed by determining the lowest score and the highest score, then determining the total range until the final total range was obtained. From the total range value, a final category value is determined that can provide an assessment of instructor performance. The calculation results in the preparation of counseling obtained an average value of answers of 83 and included in the Good category. In the implementation of agricultural counseling, the respondents obtained an assessment of 82, which is included in the Good category. The results showed that in general, the performance carried out by the extension team was good, and from the point of view of counseling, the shallots planting program had been carried out well by the field agriculture instructor, and this activity was worthy of continuing.

Keywords: *performance, extension, shallots, Likert scale*

INTRODUCTION

In Indonesia, shallot plants have long been cultivated by farmers as a development from traditional ways that are subsistence to intensive and market-oriented cultivation methods or commercial farming [1]. The Government has set agricultural development targets, specifically for 2016 the target

of producing of seven leading commodities, namely: rice 76.2 million tons, corn 21.4 million tons, soybean 1.8 million tons, sugar cane 3.27 million tons, various chilies 1.1 million tons, shallots 1.17 million tons, and beef and buffalo 588.6 million tons. In connection with this achievement, the Agricultural Human Resources and Development Agency (BPPSDM) is obliged to support the achievement of these goals through improving the performance and effectiveness of counseling [2].

The province of West Kalimantan experiences a shortage of large amounts of shallots. A total of 4,861,738 residents of West Kalimantan need 1,597 tons of shallots annually. While the existing shallots farmland can only serve 99 tons per year [3]. Viewed from its production, West Kalimantan has a deficit production. The solution that can be offered is to promote the shallots planting program. The West Kalimantan Department of Agriculture, Food and Horticulture (Distan TPH) developed 245 hectares for shallots. This APBN-funded program will be spread throughout the West Kalimantan region [4].

Melawi Regency, Tanah Pinoh Subdistrict, and more precisely in Batu Begigi Village, is an area in the trial period for the development of shallot plants carried out in the area because it has very good potential and is suitable due to environmental factors such as soil and climate in the village. The farmer group that grows shallots is the Bina Bawang Group, guided by two extension officers. With a trial period from October 2018 to the end of December 2018 with a land area of only 3 ha, the farmer group can produce 15 tons of dry shallots, meaning one hectare of land can produce 5 tons. With these results, the extension team felt the results were less than satisfactory because they had not reached the expected target of 11 tons/ha.

METHOD

Evaluation of extension performance on shallot farmers needs to be done in order to obtain information on program sustainability. Until now,

there has been no evaluation of the planting activities that have been carried out. The population of this study was 20 shallot farmers. Observational variables in this study include the characteristics of respondents, namely age, level of education, and land area. To evaluate the performance of the extension, the Extension Performance Assessment Indicator is used, which is seen from two stages of the activity, namely in the preparation and implementation of counseling.

Evaluation is a planned activity to seek the state of an object by using instruments, and the results are compared with benchmarks to obtain conclusions [5]. The following are the alternative assessment of answers used in the measurement as well as the scores given for each grading system:

Table 1. The score of the questionnaire statement

Choice	Score
Strongly Agree	5
Agree	4
Doubt	3
Not Agree	2
Strongly Not Agree	1

Measurement and assessment scores of respondents use a Likert Scale. The results of the data obtained with the Job Performance will be analyzed by referring to the opinion [6] where the range of scores is calculated using the following formula:

$$\begin{aligned} \text{Highest Score} &= \text{Respondent} \times \text{Highest Alternative Answer} \\ \text{Lowest Score} &= \text{Respondent} \times \text{Lowest Alternative Answer} \end{aligned}$$

$$\text{Total range} = \frac{\text{Highest Score} - \text{Lowest Score}}{\text{Highest Range Score}}$$

Based on the data of the range score,
 Highest Score = (20 x 5) = 100
 Lowest Score = (20 x 1) = 20
 Total range = (100 – 20) / 5 = 16
 Furthermore, to measure the score of employee answers to questions obtained by the range of scores continuum into 5 (five) categories/classifications, namely: very good, good, fair, not good and bad. The continuum achievement scale is as follows:

Table 2. The Range of Statement Scale

Range	Category
89 – 100	Very Good
72 – 88	Good
55 – 71	Fair
38 – 54	Not Good
21 – 37	Bad

RESULT & DISCUSSION

The success of the implementation of agricultural extension can not be separated from the availability of extension officers both in quality and quantity [7]. Based on the results of the study of 20 respondents through questionnaire guidelines distributed, the following characteristics of respondents were obtained:

Evaluation of Extension Officers Performance.

The assessment of extension activities in the shallot planting program is carried out to evaluate the activities and to obtain answers whether these activities are feasible to be continued and to see whether the objectives of the activity are achieved or not. The assessment of farmers is seen from two stages, namely preparation of counseling and implementation of counseling.

Agriculture Counseling Preparation.

A statement was given to the respondents to see whether the extension team had made preparations for counseling in the shallots planting program. The statements and recapitulation results of respondents' answers can be seen in Table 3 below :

Table 3. Recapitulation of counseling preparation

No.	Statement	Result	Category
1	Batu Begigi village has the potential of an area and source of agroecosystem which Agrees for the cultivation of shallots.	90	Good
2	Supervision and assistance in the preparation are carried out based on the RDKK procedures by the extension team and the community together.	78	
3	Arrange an agricultural extension program in Batu Begigi Village together with the community to reach an agreement.	82	
4	Make an Annual Agricultural Extension Worker Plan (RKTTP) based on consultation with farmers and related parties.	82	
Average		83	

Source: Result of Data Analysis, 2019

Based on the results of an average evaluation of Shallot Agriculture Counseling Preparation, the results of the respondents' answers amounted to 83, which means that the respondent agreed that the instructor had made preparations before the delivery of activities. In line with the research of [8], in carrying out their obligations to complete the extension program, an instructor needs to prepare all the needs before the activity takes place, including physical preparation in the form of appearance and

material preparation in the form of props, because these two things become important points to meet farmers' satisfaction.

Implementation of Counseling

The evaluation of the extension team's performance in the implementation process was seen from three things: the material delivered, the motivation provided, and the method used. The implementation that has been carried out by the extension team contains material on planting, pest and disease prevention, fertilization, how to harvest products, how to market products, and how to calculate financing and other sources of information other than extension agents. [9]said that extension officers have a role in increasing knowledge, information dissemination, empowering farmer groups, and empowering farmers in accessing capital.

Evaluation is also seen from the ability of extension agents to motivate farmers, namely extension agents drive to form cooperatives, improve the quality of farmer groups by increasing farmer group meetings, and provide farmer targets to increase their productivity. The method used by the extension team is face-to-face meetings through groups and conducted with field practice. The following is a recapitulation of farmer assessments at the stage of implementation activities, which can be seen in Table 4.

From the results of data analysis, it is obtained information that in the assessment of the material delivered to farmers, farmers, on average, give an assessment of 89.4. This score indicates that the material provided by the extension team is in the Good category. Information obtained from the average farmer assessment results on the ability of extension to motivate farmers amounted to 76, which is included in the Good category. The farmer's assessment of the method used by the instructor was 77.8, and this score was in the Good category. The total assessment in the implementation of the extension was an average of 81, which can be concluded that the implementation phase of the extension was in the Good category.

The second performance appraisal based on the results of the assessment stages of the preparatory and implementation activities obtained an average value can be seen in Table 5 below :

Table 5. Recapitulation of the Extension Officers's Performance

No.	Statement	Score	Category
1	Preparation for extension officers of Shallot Agriculture	83	Good
2	Implementation of Agricultural Extension	81	
	Average	82	

Source: Result of Data Analysis, 2019.

Judging from the average value of the extension of the counseling preparation that is 83 and 81, we can know the average value of the performance evaluation results of the extension team that is equal to 82, which means the value is in the Good category. Overall, the performance of the extension team has been very good and in accordance with procedures and mutual agreement with farmers. Good service from the extension team and good cooperation between extension officers with farmers indicates the satisfaction of farmers to the activities carried out by the instructor. According to Andajani and Pratama [8], PPL service performance is guided by components and indicators of the performance of agricultural extension. PPL performance is successful if farmers'satisfaction can be achieved because farmers' satisfaction is an essential condition so that the programs implemented by PPL can run effectively and efficiently.

The evaluation that represents the results of the performance evaluation is inseparable from the activities carried out by the extension officers. Some of these activities include:

1. The extension is done in a month.

Based on the description of all respondents, they stated that counseling activities are often carried out as many as four times in a month or usually carried out on Friday every week. The counseling team provided extension materials on Friday because the counselors considered that the respondents were resting this time so that the extension team could be used to counsel the shallots farmer groups.

2. Farmer group meetings.

From the statement of the farmer groups, they stated that they had a meeting with fellow farmer groups, namely two times a week. With this meeting, they discussed the constraints and solutions to the problems they faced in the field. They also discussed how to cultivate shallots.

3. Suggestions for the material needed.

Simultaneously and similarly, the respondents stated that if there were no suggestions for additional material, they wanted to be paid more attention to every process in the field. They want more time given by the counseling team to respondents in the fieldwork practices conducted by respondents so that they can determine the right steps and stages without any hesitation in carrying out these stages.

The various programs and results that have been achieved certainly cannot be separated from the role of agricultural extension officers in carrying out their duties and responsibilities in fostering farmers. In the implementation of the extension program, the duties and responsibilities of agricultural extension officers are clear, so they strive to create excellent performance [10].

In order to accelerate the adoption of shallots innovation in Batu Begigi Village, the extension team formed a group of Red Shallots farmers. According to [11], the group approach is considered more efficient, because the group functions as a vehicle for learning, a vehicle for cooperation for its members so that changes in behavior are expected to be better in the business, which in turn will increase production and income.

From the results of the instructor's performance evaluation, information was obtained that the farmers felt that the counseling time given was appropriate and in accordance with mutual agreement, which was four times a month. From the counseling meeting, the farmers also held meetings between fellow farmers twice a week. However, from the results of the counseling given, farmers prefer that extension is given directly to the fieldwork practice because it is considered easy and immediately understands the stages that are passed. Even this has been done, farmers still think that the time given is still lacking in the field because they sometimes face different problems from each activity they do. However, extension officers also provide consultations and communicate directly

with farmers so that they can easily communicate in finding solutions they face.

The most significant element of bureaucracy, dealing directly with farmers and becoming the spearhead of agricultural development, is agricultural extension officers. Their presence is crucial in determining the success of farmers' development activities [12]. Based on the results of the instructor's performance evaluation, it can be said that the instructor has carried out his duties well where coaching has been carried out to farmers starting from forming farmer groups, providing counseling with materials tailored to the needs of farmers, providing farmer discussion space, and providing marketing information. In line with the opinion of [13] which says that coaching conducted by a field agriculture instructor is expected to increase the role of farmers/farmer groups in anticipating the development of the times through technological improvements, to increase business productivity and efficiency and take advantage of market opportunities to achieve the goal of increasing income and the welfare of farmers and their families.

Table 4. Recapitulation of Agricultural Counseling Implementation

No.	Statement	Score	Category
	Extension Material	89,4	Very Good
1	Extension officers provide information about planting techniques to farmers.	92	
2	Extension officers provide information about pests and diseases	92	
3	Extension officers provide information about fertilization	92	
4	Extension officers provide information about how to harvest.	97	
5	Extension officers provide information on how to market the product.	87	
6	Extension officers provide information on how to make a financial report	88	
7	Extension officers provide information on other sources of learning material that can be obtained through the internet and books.	78	
	Motivation to the farmers	76	Good
8	Extension officers motivate group members to form cooperatives union	69	
9	Extension officers motivate group members to improve the quality of farmer groups	68	
10	Extension officers provide farmers with targets to increase their productivity	91	
	Extension Method	77,8	Good
11	Extension officers conduct agricultural counseling to farmers directly	95	
12	Extension officers conduct agricultural extension by collecting farmer groups in one place	96	
13	Extension officers provide models and ways of cultivation with field practice	60	
14	Extension officers give a model of how to harvest with field practice	60	
	Average	81	Good

Source: Result of Data Analysis, 2019.

CONCLUSION

Counseling preparation conducted by extension officers reached an average evaluation value of 83, while the implementation phase gained an almost similar average value of 82. From the evaluations of the instructors' performance, in general, the Red Shallots Program extension activities included in the Good category, and thus the extension activities can be continued.

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