

## The Performance of Agricultural Extension Workers to Increase the Knowledge of Corn Farmers in Barakati Village, Batudaa District, Gorontalo Regency

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### Abstract

*Agricultural Extension is a non-formal education for farmers. This study aims to determine the performance of agricultural extension workers on corn farmers in Barakati Village, Batudaa District, Gorontalo Regency. The data collection method in this study used three methods, first observation, second interview, thirdly disseminating questionnaires as a list of questions made to obtain data. While the data analysis method used is descriptive qualitative, which is a method used in qualitative research describing existing phenomena, descriptive qualitative in this study gives a description of the social symptoms studied by describing the value of variables based on the indicators studied without making relationships and comparisons with a number of other variables. The results of this study, namely the performance of agricultural extension workers in the form of increasing the knowledge of corn farmers in Barakati Village, Batudaa District, Gorontalo Regency, are quite good from the overall number of results, in terms of the intensity of counseling with a percentage of 56.44%, reviewing the counseling method with a percentage of 53.33%, in terms of counseling media with a percentage of 61.01. In increasing the knowledge of farmers, it is hoped that the extension program will be carried out regularly supported by interesting methods and media and is able to provide understanding for farmers. Therefore, it is expected to improve the performance of extension workers both as facilitators, communicators, and motivators.*

**Keywords :** Corn, Performance, Farmer, Extension Officer.

### 1. Introduction

An agricultural extension worker is a person who carries out the task of giving encouragement to farmers to be willing to change their old way of thinking, way of working, and way of life in new ways that are more in line with the times, the development of more advanced agricultural technology. An extension worker must have the soul of an educator who can cause changes in knowledge, skills, attitudes and skills in his employed farmers.

Based on the results of observations, in general, people in Batudaa District, Barakati Village. Most of the people in Barakati Village are corn farmers. In an effort to farm corn, knowledge is needed from the farmers themselves. In this case, this field, there are still many problems found, including low knowledge or insight, low level of skills, lack of motivation, lack of farming ability. The knowledge of farmers becomes very important because by studying the source of the problem, farmers can know the right solution.

Its unsuccessfulness in the development of the agricultural sector, indicates a gap in this regard, therefore the performance of agricultural extension workers is suspected to be very relatively low. Based on this review, the author conducted a study of the gap in the Performance

of Agricultural Extension Workers on Increasing Knowledge of Corn Farmers in Barakati Village, Batudaa District, Gorontalo Regency.

## **2. Literature Review**

### **2.1 The Purpose and Role of Extension Workers**

Counseling as an educational process or learning process means that the dissemination of information and explanations provided can stimulate the process of behavior change carried out through the educational process or learning activities. The purpose of agricultural extension is to change the behavior of the main actors and business actors through improvement and their knowledge, skills, attitudes and motivations (Ministry of Agriculture, 2010)

Counseling activities are services, and those services must be made of high quality so that they can meet the needs and expectations of the counseling targets at the required time. The quality of service services can be seen in terms of reliability, assurance, appearance (tangibility), attentiveness (empathy), and responsiveness (responsiveness). Thus, the target of counseling is expected to increase its ability dynamically to be able to solve every problem it faces by itself

Agricultural extension workers, there will always be two groups actively involved, the first group is the extension group and the second is the group that is counseled. Counseling is a group that is expected to be able to bring the targets of agricultural counseling to the thoughts that have been outlined. Meanwhile, those who are in the suluh are groups that are expected to be able to receive agricultural extension packages, so that later they can be useful in their daily lives (Kastama *et al*, 2013).

The role of counseling includes disseminating information, lighting, behavior change processes, education, and the social engineering process of Setiana (2005). In the role of counseling as a means of disseminating information, extension workers are expected to be able to disseminate information in the form of innovations in a language that is easy to understand for the village farming community to the fullest. The role of counseling as a lighting process means that extension workers must provide information or clarity to village farmers about things that are not yet known.

### **2.2 Performance**

Performance is the result or output of a process (Nurlaila, 2010). According to the behavioral approach in management, performance is the quantity or quality of something produced or the services rendered by someone who performs the work (Luthans, 2005). According to Fandy Tjiptono, (2006) five dominant factors as determinants of quality or quality of service, which in the end will determine the level of satisfaction 1) Reliability (reliability), 2) Responsiveness (responsiveness), 3) and certainty (assurance), 4) Empathy (Emphaty), 5) Tangible (tangible).

This study examines how the performance of suppliers on increasing the knowledge of corn farmers in Barakati Village, Batudaa District, Gorontalo Regency. The performance of extension workers is important because the factors related to the performance of suppliers include factors (age, farm duration, land area, and number of dependents) and external factors (intensity of extension workers, extension methods and agricultural extension media).

## **3. Methodology**

In this study, the location determination was carried out purposively with the consideration that the village is one of the largest corn production centers in Batudaa District. The types of data

used in this study are primary data and secondary data, primary data data is collected by researchers themselves through direct interviews with corn farmers in Barakati Village, while secondary data is obtained from related agencies which are supporting data for researchers on the performance of suppliers through the BP3K Office, Batudaa District, Gorontalo Regency.

Data collection techniques, data collection used in this study uses three methods, firstly observations are carried out by direct observation to obtain primary data, secondly interviews in a two-way conversation on the basis of the interviewer's principle to get information from respondents regarding the assessment of the performance of extension workers, the three questionnaires researchers provide draft questions that are made to obtain research data.

The sampling technique uses the census method with a total sample of 63 corn farmers. Sugiyono, (2012) Another term for saturated sampling is census, where all members of the population are sampled. Census is a way of collecting data where all elements of the population will be studied one by one as a whole without exception.

### **3.1. Data Analysis**

The analytical method used is descriptive qualitative is a method used in qualitative research describing existing phenomena. Qualitative descriptive research is a study that describes the social symptoms studied by describing the value of variables based on the indicators studied without making relationships and comparisons with a number of other variables (Sugiyono 2012).

The use of indicators to measure the performance of extension workers using the Likert Scale method, which describes the indicators into several question items or requirements given a score in accordance with the choice of respondents (Riduwan, 2001). The following below is a breakdown of the score for determining the performance of extension workers:

- |   |     |
|---|-----|
| A. Strongly agree/always/very positively scored | = 5 |
| B. Agree/often/positively scored                | = 4 |
| C. Hesitating/sometimes/neutral scored          | = 3 |
| D. Disagree/almost never/negatively scored      | = 2 |
| E. Strongly disagree/never be scored            | = 1 |

As for knowing the interpretation of the data obtained, namely using the number of scores as seen below :

- |     |        |                   |
|-----|--------|-------------------|
| 0%  | -20%   | = Very Unkind     |
| 21% | - 40%  | = Not Good Enough |
| 41  | - 60%  | = Good Enough     |
| 61% | - 80%  | = Good            |
| 81% | - 100% | = Excellent       |

Meanwhile, to find out the results of interpretation using the following formula:

$$Index \% \frac{\text{Total Score}}{\text{Highest Score} \times \text{Respondents}} \times 100$$

**Table 1. Standards (PPL Performance Achievement Value)**

No	Value	Achievements
1	>92	Excellent
2	70 -90	Good
3	62 – 75	Enough
4	51 – 60	Less
5	<50	Bad

Primary Source of processed data 2018

## 4. Result and Discussion

### 4.1. Factor Interna

Based on the results of calculations carried out from five internal factors of extension workers, it can be seen that the age of farmers in Barakati Village is in the productive category, namely in the 30-47-year category as many as 21 people or 33%. The advanced age in the  $\geq$  category of 66 as many as 3 people, this will affect the ability of farmers to manage farming and will also affect the knowledge of farmers. Mulyasa (2003) that the development of abilities occurs with age . in general, younger and healthier farmers have greater physical abilities, when compared to older farmers. Younger farmers respond in accepting the innovation adoption process. On the contrary, older farmers have a prudent and thoughtful nature in accepting a new innovation.

In Education, it shows that the highest education of respondent farmers in Barakati Village is elementary school education of 49 people or 78%, and the lowest percentage is S1 1 person or 2%. This is in line with Panurat *et al* (2014) farmer education is influenced by the frequency of farmers participating in agricultural extension activities, where the concentration of agricultural extension services is recognized as contributing more to the success of agricultural development in Indonesia. Where agricultural extension activities are recognized by many contributing to the effectiveness of agricultural extension is acknowledged by many contributing to the success of agricultural development in Indonesia. Counseling has succeeded in delivering various innovations.

In the land area, it can be seen that the one with the most land area in the respondent farmers ranges from 0.6 to 1 Ha with a total of 36 people or 57%. Where it can affect the performance of extension workers in increasing the knowledge of farmers. Land area has a positive effect on trying to farm, which means that the more land owned, the greater the results obtained. On the contrary, the narrower the land area owned, the less the results obtained and affect farming (Tobing 2019).

The number of family dependents is seen that the highest 3-4 people are 36 respondents or 57%, then the number of dependents of 5-6 people is around 5 respondents or 8%. The large number of family dependents will affect the level of knowledge of farmers, the greater the number of family dependents, the more needs must be met. This is in line with the theory presented by Wirosuharjo (1996) that the number of dependents is very closely related to productivity, because human resources are actually started or started from the family environment, when they do not have influence or development on human resources, it means that there is no effort or intention to improve work abilities and skills. The number of family members will determine the level of work crafts from the results used because family members in working age are a source of labor, so efforts to improve work abilities and skills will be fulfilled, thus the standard of living will increase.

### 4.2. Factor External

In this external factor, the researcher looked at three sides, the first was the intensity of the extension workers, the second the agricultural extension method, the third the extension media. From the results of the calculation of the intensity of extension workers, it shows that the intensity of counseling is divided into three categories including the low category (5-11), the medium

category (12-18) and the high category (19-25). In this case, the intensity of counseling in Barakati Village is in the moderate category (60.32%) which is obtained with the highest number of questions and score scores. The intensity of counseling can affect the performance of extension workers in increasing farmers' knowledge. Agricultural counseling in Barakati Village is routinely carried out 4 times a month. However, during the extension service, the majority of farmers in Barakati Village only participate in counseling 2-3 times a month. This is because when counseling is carried out, it coincides with farmers being busy with their work, including there are farmers who are still on farmland, some are doing side jobs. The counseling material provided was in the form of knowledge related to corn farming, including the use of appropriate fertilizers. In its implementation, the material provided by extension workers is easily understood by farmers because it is presented with methods and media that are of interest to farmers.

Efforts to increase farmers' knowledge can be done by providing materials or teaching that are in accordance with the needs of farmers in Barakati Village. In addition, the extension program in Barakati Village is also followed by various activities or practices in the field with the aim that farmers are able to understand and apply the knowledge gained from counseling in their farming activities. Therefore, the performance of extension workers plays a very important role in increasing farmers' knowledge. This is in line with Arnoud *et al* (2008) that ideally field extension workers should behave more professionally accompanied by the ability to improvise responsibly according to the situation and field conditions faced.

The counseling method is divided into three categories including the low category (5-11), the medium category (12-18) and the high category (19-25). The agricultural extension method is in the moderate category (65%) obtained by calculating the number of questions and the highest and lowest score scores. The methods most widely used by extension workers in providing counseling include the lecture method, using pictures, and percentage using Power Point.

Agricultural counseling using the lecture method seeks to convey orally about counseling materials related to increasing corn production. In this case, extension workers also open opportunities for farmers to exchange opinions and ask questions related to the counseling material presented. Extension workers realize that using only the lecture method will cause saturation for farmers who take part in counseling. Therefore, counseling materials are also presented in the form of drawings and percentage slides so that they become more attractive to farmers. In addition, counseling in Barakati Village is also accompanied by providing assistance to farmers in the form of corn seeds, and fertilizers. The provision of such assistance is only reserved for members of farmer groups.

The method used in delivering counseling materials is closely related to the performance of extension workers in increasing farmers' knowledge. The more interesting the methods provided by extension workers to farmers, the easier it will be for farmers to absorb and understand and apply the information obtained from counseling. Thus, there will be an increase in farmers' knowledge, especially in increasing the production yields of their farming businesses so that in the future it is also expected to have an impact on increasing farmers' incomes. In line with Notoatmojo (2007) that the counseling method is one of the factors that influence the achievement of an optimal counseling result. In addition, to influence their activeness in agricultural extension activities, a way of delivering material that is easier to understand is needed, so that farmers can know good farming methods so that farmers can improve their family's economy.

Counseling media is divided into three categories including the low category (5-11), the medium category (12-18) and the high category (19-25). The counseling media used by extension workers in Barakati Village in providing counseling is in the moderate category of 40%. The media

that are often used by extension workers in providing counseling are slides, posters and summaries of material in the form of books.

The use of percentage slides in counseling as a tool to convey information about corn farming. Percentage slides make it easier for farmers to understand the counseling material because it contains a summary of the material supported by the display of interesting images related to information related to corn farming. In addition, farmers are also equipped with posters related to the counseling material presented. The posters can be posters depicting. Extension workers also provide books to farmers who attend counseling containing information related to corn cultivation and are used as a guide in applying the counseling materials that have been given.

Based on the counseling media used, it is enough to provide satisfaction for farmers in Barakati Village in understanding the counseling material. The media used by extension workers in providing counseling is one of the factors that determine the performance of extension workers in increasing farmer knowledge, so that farmers are easy to understand the material presented by extension workers. Thus, the necessary media must be able to attract attention to be able to participate in counseling. This is in line with Hutabarat (2011), the requirements that must be possessed by counseling materials are that they must be in accordance with the potential of the village, low cost, and real profitable. The media used by extension workers tends to be simple media so that it can be easily understood by farmers.

**Table 2. Scoring value of agricultural extension officer performance indicators on the knowledge of corn farmers in Barakati Village, Batudaa, Gorontalo Regency**

No	Indicators	Total Score	Maximum Scoring Value	Percent Tase (%)	Interplay Scoring Criteria
1	Intensity of counseling	889	1.575	56,44	Good Enough
2	Counseling methods	840	1.575	53,33	Good Enough
3	Counseling media	961	1.575	61,01	Good
<b>Total</b>	<b>2.690</b>	<b>4.725</b>	<b>56,93</b>	<b>Good Enough</b>	

Primary Data Sources After Processing 2018

In table 2, it shows that the performance of extension workers is due to the increase in knowledge of farmers in Barakati Village is quite good, judging from the intensity of extension workers of 56.44%, meaning that efforts to increase farmer knowledge and provide innovation to patani have been implemented properly. Mardikanto et al (2003) stated that the role of agricultural extension workers as agents of change has a dual task, namely conveying information and at the same time trying to change the behavior of the target community to be able to participate in development.

Judging from the extension method, the performance of agricultural extension workers in Barakati Village in the category is quite good with a percentage of 53.33%, meaning that the method used is good enough what the extension workers apply. Basically, the method is very important at the time of counseling, the method also greatly determines whether or not the understanding given by the extension worker depends on the method of delivery whether or not it is good to provide new knowledge provided by the extension worker. The extension method is something that plays a role in influencing the speed of adoption and diffusion of innovation. The use of effective methods will make it easier for farmers to understand. The extension method is

very necessary so that the message and innovation from extension activities can be received and applied by the target or beneficiary.

Judging from the counseling media, the performance of agricultural extension workers in Barakati Village, Batudaa District is in the good category with a percentage of 61.01%, meaning that the application of media is implemented properly. Muslihat et al, (2015), the competence of an extension worker so that it can be seen as competitive by the media community, the more knowledge it has and the greater the opportunity to answer farmers' problems. It can be inferred from the total scoring value and the overall percentage of the intensity of the extension workers, the extension method, and the extension media, which is in the category of 56.93% or Good Enough.

## **5. Conclusion**

Based on the results of research and discussions on the performance of agricultural extension workers in Barakati Village, it is quite good in terms of intensity, media and extension methods are considered not too optimal to increase farmers' knowledge related to increasing farm production, especially in corn commodities. So overall it can be concluded that the response of Barakati Village farmers to the performance of extension workers is further improved in increasing farmers' knowledge, it can be concluded that the performance of extension workers is quite good or 56.93%.

## **6. Acknowledgement**

The authors thank Dr. Zainal Abidin and Ulfira Ashari, SP, M.Si in Ichnan University for advice in writing of this manuscript. This study was supported in part by Post Graduate Program, Faculty of Agriculture, University of Ichnan, Indonesia.

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