



Effectiveness of Communication by Corn Agricultural Extension Instructors in Sawerigadi District, West Muna Regency

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Abstract

This research used a quantitative method where the sample consisted of 59 respondents who were divided into two villages, namely Marobea Village with 37 respondents and Lakalamba Village with 22 respondents. The SPSS version 21 program was used to analyze the effectiveness of communication between corn planting teachers. The results of the analysis show that (1) the overall level of farmer participation in agricultural extension activities is included in the less active category. Compared to the participation stage, farmers are more active in implementation than planning. Corn farmers in Marobea Village are more active than corn farmers in Lakalamba Village. (2) Agricultural extension communication between corn farmers in Marobea and Lakalamba Villages is most effective in increasing knowledge (cognitive) and subsequently influencing attitudes (affective), but less effective in encouraging action tendencies (behavioral). Extension communication between corn farmers in Marobea Village is more effective compared to corn farmer groups in Lakalamba Village. The more active farmers are, the more motivated they are to apply extension materials. and (3) Factors that determine the effectiveness of extension communication include extension factors, extension methods, and facilities and infrastructure. Extension factors related to the effectiveness of extension communication are the attitude, communication and knowledge aspects of the instructor. Aspects of method suitability and effectiveness are also related to the effectiveness of extension communication which is supported by the availability of extension infrastructure.

Keywords: *Effectiveness, Extension Communication, Corn Farmers*

INTRODUCTION

Enlargement efforts should be able to increase farmer independence. Furthermore, Siregar and Saridewi (2010) in their letter stated that the performance of agriculture teachers had begun to decline since the implementation of regional autonomy, because several regions considered agriculture teachers to be unimportant because they were deemed to have no direct impact on education. Local Population Income (PAD). Changes in the agricultural extension system affect the form of communication used in extension activities, because communication is the spearhead in agricultural extension activities.

Communication is an important key because agricultural extension activities themselves are communication activities. Communication can determine the effectiveness of agricultural extension activities. Communication is a tool used in the process of extension

activities. Murdiyanto's research (2010) explains that there are differences in results between extension activities that use group communication methods and a combination of group communication methods and interpersonal communication. The expansion of group communication methods causes some farmers to be left behind or left behind in the transformation of agricultural technology due to their personal characteristics, causing farmers to feel marginalized. Meanwhile, the agricultural extension method combines group communication methods and interpersonal communication, namely there is an intermediary from the group who connects the extension agent with farmers, so that the communication process runs well and farmers do not feel excluded. This is what underlies research which examines the effectiveness of communication in agricultural extension activities carried out in Sawerigadi District, West Muna Regency. Based on the background above, the formulation of the research problem is as follows: What is the level of participation of farmers and extension workers in agricultural extension activities for corn cultivation in Sawerigadi sub-district? How effective is the communication of agricultural extension activities in corn cultivation in Sawerigadi District? and What factors determine the effectiveness of corn cultivation extension communication in Sawerigadi District?

RESEARCH METHOD

This type of research is research that uses quantitative methods. Using quantitative methods, the influence of trainer competency, trainer performance, corn farmers and communication media on the process of introducing agricultural innovation was studied. This research was conducted in Sawerigadi District. The informant identification technique in this research was to use a purposive sampling technique based on certain criteria and considerations. Meanwhile, respondents were identified based on population size. The population of this study were all corn farmers in Marobea and Lakalamba Villages, Sawerigadi District. The sample is a portion or representative of the population studied (Arikunto, 2010). To determine the sample size, if there are less than 100 subjects, all of them should be taken so that the research is population research. If the subject is larger, between 20 and 25% can be taken (Arikunto, 2002). In Sawerigadi District, there are two villages that make their living as corn farmers, namely Marobea Village and Lakalamba Village. There are 148 corn farmers in Marobea Village and 89 corn farmers in Lakalamba Village.

The formula used for sampling is:

$$n = 25\% \times N$$

Information:

n = sample size

N = population size

Based on the equation above, the sample is

$$n = 25\% \times N = 25\% \times 237 = 59 \text{ samples}$$

Data analysis technology Validity test and reliability test research question must be able to measure what it wants to measure, and respondents' answers must be consistent. Therefore, to test the validity and legitimacy of a questionnaire, a validity test and a reliability test are needed.

Validity test

The validity test shows the extent to which the measuring instrument used can measure what is being measured (Azwar, 1997). The validity test measures whether a questionnaire is valid or not. A questionnaire is said to be valid if the questions (indicators) in the questionnaire can reveal something that the questionnaire will measure (Ghozali, 2006), namely the measurement of the construct or variable that the researcher is studying.

The validity test is carried out by comparing the calculated r value (each question item can be seen in the column "corrected total item correlation") with the r table by looking for the degrees of freedom (df) = N – k. In this case, N is the number of samples and k is the number of independent research variables. If r count > r table and is positive then the question (indicator) is considered valid (Ghozali, 2006).

Trust test

Reliability testing is a tool used to measure the reliability, consistency or robustness of a questionnaire. A questionnaire is said to be reliable if the respondent's answers to the questions in the questionnaire are consistent or stable over time (Ghozali, 2006). In addition, researchers must ask relevant questions to respondents to ensure the reliability of the instrument or questionnaire (Mas'ud, 2004). Researchers measure reliability using the one-shot method, namely H. They measure only once and then compare the results with other questions or measure the correlation between answers to questions in the questionnaire. For this reason, researchers used the SPSS for Windows program tool. SPSS provides a way to measure reliability using the Cronbach Alpha (α) statistical test. A variable is said to be reliable if it gives an α value >0.60 (Ghozali, 2006).

Spearman correlation test

The data analysis technique in this research uses quantitative methods. The measuring tool used to collect quantitative data is a questionnaire. Data collected using a questionnaire will be processed using Microsoft Excel 2007 and SPSS for Windows version 21.0. Quantitative data processing was carried out using the Spearman correlation test. The Spearman Rank Correlation Test is used to determine whether there is a relationship between two variables on an ordinal scale.

$$r_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)}$$

Information:

r_s = Spear Rank

d_i = determinant

n = number of data or samples

Nugroho (2005) explains that the correlation coefficient has a value

between -1 and +1. The plus (+) or minus (-) properties indicate the direction of correlation. The closeness of the correlation can be grouped as follows:

- 0.00 to 0.20 means the correlation is very weak.
- 0.21 to 0.40 means the correlation is weak.
- 0.41 to 0.70 means the correlation is strong.
- 0.71 to 0.90 means the correlation is very strong.
- 0.91 to 0.99 means the correlation is very strong.
- 1 means perfect correlation

RESULTS AND DISCUSSION

The participation of farmers in planning agricultural extension activities is very important so that extension activities are in accordance with the needs felt by farmers. Level of farmer participation in extension activities can be seen in the table below.

Table. Total respondents according to level of participation in extension planning

No	Participation	Marobea Village	Lakalamba Village	Total Respondents
1	active	17	10	27
2	less active	20	12	32
	Total	37	22	59

Source: Processed data results

Based on the table above, it can be seen that the majority of respondents, namely 32 respondents, fall into the less active category in participating in planning engagement activities. When comparing the two corn farming villages, most of the individual corn farmer respondents were in the less active category, namely 20 corn farmer respondents in Marobea Village and 12 corn farmer respondents in Lakalamba Village. The planning of corn farmers in Marobea Village is more active than that of corn farmers in Lakalamba Village. This is because corn farmers in Marobea Village are more productive than corn farmers in Lakalamba Village, so that the corn farmers in Marobea Village who were surveyed have higher productivity. A total of 17 respondents from Marobea Village corn farmers were included in the active category. The high participation of corn farmers in Marobea Village in planning was due to the high level of trust of respondents during the activity. This is because most of the counseling participants have known the lecturer for a long time. Participation in the implementation of counselling. In this research, various educational topics were presented to respondents by local agricultural instructors, including seed technology, healthy land, organic fertilizer, MOL (local microorganism) production, integrated pest management, plant pest organisms, good land management, and agricultural analysis. .

Table: Total respondents according to level of participation in the implementation of counselling

No	Participation	Marobea Village	Lakalamba Village	Total Respondents
1	active	22	15	37
2	less active	15	7	22
	Total	37	22	59

Source: Processed data results

Based on the table above, the majority of all respondents are

included in the active category, namely 37 respondents, of which 22 people come from corn farmers in Marobea Village and 15 people come from corn farmers in Lakalamba Village. The remaining 22 respondents were included in the less active category. This happens because in every extension activity, the extension agent always gives participants the opportunity to ask questions or express opinions so that there is two-way communication between the extension agent and farmers which encourages participants' activeness in carrying out extension activities.

Relationship between Farmer Characteristics and Extension Participation. The relationship between farmer characteristics and farmer participation, namely planning and implementation. Farmer characteristics consist of age, education, land area, land cultivation, land ownership status, and media consumption. The relationship between farmer characteristics and farmer participation can be seen in the table

Correlation table between respondent characteristics and extension participation by village

No	Respondent Characteristics	Marobea Village	Lakalamba Village	Total Respondents
1	Age	-0,112	-0,374	-0,164
2	Education	-0,208	-0,296	-0,262*
3	Land area	-0,049	0,339	0,028
4	Land Management	-0,049	-0,718	-0,371
5	Land Ownership Status	-0,271	0,252	-0,103
6	Media Consumption	0,416	0,132	0,257*

* = significant correlation at 0.05

The table above explains the results of the analysis using the Spearman Rank coefficient in SPSS 21.0. Media consumption consists of electronic media and print media where the data collected is the total duration (minutes per week) of consuming the media. The results obtained show that as a whole of respondents, there are two variables characteristic of respondents that have a correlation with counseling participation, namely education with a negative correlation of 0.262, which means it has a weak correlation and media consumption with a positive correlation of 0.257, which means it has a weak correlation at a significance level of 0.05.

Level of effectiveness of extension communication

Overall, the degree of effectiveness of extension communication in this research can be said to be effective. This can be seen from the average score of all respondents which reached 3.13 with the score scale used ranging from one to four (Table 4.25). Judging from the number of respondents, communication effectiveness has the highest value, namely the behavioral variable with a value of 3.45. Affective and cognitive variables reached 2.90 and 3.06. This shows that extension activities have a large influence on behavioral variables compared to affective and cognitive variables.

Table of average effectiveness of mentoring communication by village

No	Respondent Characteristics	Marobea Village	Lakalamba Village	Total Respondents
1	Cognitive	3,22	2,89	3,06
2	Affective	2,88	2,92	2,90
3	Behavioral	3,50	3,39	3,45
	Total	3,03	2,90	3,13

Source: Processed data results

Corn farmers in Marobea Village obtained almost the same average score on all indicators of communication effectiveness. The highest average score for corn farmers in Marobea Village is for the behavioral variable, namely 3.50, while for the cognitive variable it reaches 3.22 and the lowest average for the affective variable only reaches 2.88. The average score of corn farmers in Lakalamba village on the affective variable is 2.92. while the behavioral variable has the highest value, namely 3.39, and the cognitive variable has the highest average value, namely 2.89. When comparing two corn producing villages, the average scores are as follows: Corn farmers in Marobea Village performed better with a score of 3.03, while corn farmers in Lakalamba Village only got an average score of 2.90.

Relationship between Extension Participation and Communication Effectiveness

The effectiveness of agricultural extension communication consists of cognitive, affective and behavioral, while participation consists of planning stages and implementation stages. The relationship between extension participation and communication effectiveness can be seen in the following table:

Table of correlation coefficient values between extension participation and the effectiveness of extension communication

No	Extension Participation	Communication Effectiveness		
		Cognitive	Affective	Behavioral
1	Desa Marobea	-0,098	0,148	-0,077
2	Desa Lakalamba	-0,105	0,419	-0,240
	Total	-0,028	0,219	-0,087

Source: Processed data results

The table above explains that overall the effectiveness of affective communication has a weak correlation with a correlation value of 0.219, while the effectiveness of cognitive and behavioral communication has a very weak correlation with a correlation value of negative 0.028 and negative 0.087, respectively. The results obtained in this study indicate that most participation has no relationship with the effectiveness of counseling communication. Overall, respondents indicated that participation in counseling correlated with the effectiveness of affective communication. This shows that the level of respondent participation in extension activities is related to changes in respondent behavior in agricultural activities. Therefore, the more active the participation of farmers in extension activities, the greater the impact on changes in farmer behavior in agriculture. Overall, the extension activities carried out by BP3K Sawerigadi have been successful and have brought about changes in farmers' behavior towards the agricultural practices they carry out.

Communication Effectiveness Factors for Expanding Corn Farming in Sawerigadi District

Characteristics of Extension Officers

The perception of agricultural teachers used in this research is the respondent's perception of the performance of agricultural teachers in their field. Agricultural teacher performance is assessed based on the teacher's personal characteristics, attitudes, communication skills and agricultural knowledge.

Overall, the highest average rating was achieved for the lecturers' personal characteristics with an average score of 3.00. The results obtained indicate that the trainer's personal characteristics are included in the "good" category, including characteristics in providing material and characteristics in guiding farmers. Another highest average score was obtained in the attitude aspect with an average score of 2.95, which

means the lecturer's attitude in communicating with corn farmers is classified as good. The communication skills aspect has an average value of 2.92. The knowledge of extension workers in providing information to farmers is supported by

Lecturer communication skills so that the material can be conveyed well. Best extension communication skills

namely the possibility of choosing the language used by the lecturer for the counseling participants in such a way that it is easily understood by the counseling participants. For convenience, lecturers also use local regional languages

Obtaining materials from expansion activities. However, for some extension participants, trainers are sometimes too quick in teaching extension material so that it is not uncommon for farmers to ask other farmers about material that they do not understand.

Expansion material

In this research, the extension material is information about agriculture that supports agricultural activities and is disseminated from instructors to agricultural extension participants. Some of the material presented by the lecturer is:

Information on the use of quality seeds, land preparation, pest control, post-harvest and agricultural analysis.

The majority of respondents were of the opinion that the content of the material presented in extension activities tended to be in the "good" category. This is shown by the proportion of respondents of 38 people. However, if we compare corn farmers in Marobe Village and Lakalamba Village, the assessment of material content that falls into the "good" category occurs more often among corn farmers in Marobe Village, reaching 28 respondents, while among corn farmers in Lakalamba Village it only reaches 28 respondents and 10 respondents.

Extension method

This factor discusses the methods used by extension agents in delivering extension material to farmers and participants

The consultant can understand and understand the content of the information provided by the trainer. The extension methods used in the two corn growing villages are:

Group and individual methods. The group method is in the form of group meetings, while the individual method is in the form of training and extension visits to farmers at home or in villages, although the time period for the two methods is different. The method extension factor is seen from the suitability of the method and the effectiveness of the method.

Overall, the average rating of respondents' perceptions of extension methods in all aspects reached 2.92. The average values for the aspects of method suitability and method effectiveness are 2.95 and 2.89 respectively. When comparing these two aspects, the value of the suitability of the method is higher than the effectiveness of the method, which shows that this is the case.

The extension method implemented has high suitability because the extension method is adapted to the material, farmers' environmental conditions, farmers' characteristics, social culture, climate and seasonal conditions, as well as the agricultural conditions faced by farmers.

Facilities and infrastructure

Extension Facilities and infrastructure in this research are physical equipment or buildings used to carry out extension activities, including extension places, extension aids, and extension training facilities. Overall, the average score for all aspects based on the number of respondents reached 2.97. Meanwhile, it is valuable from both aspects

Accessibility averages above aspects of availability of expansion options and infrastructure. The value determined for the accessibility

aspect reached 2.99, availability of counseling facilities was 2.94. When compared with the two corn farmers, the overall average score of corn farmers in Marobea Village is higher than the average score of corn farmers in Lakalamba Village, namely 3.00 and 2.93 respectively. This shows that corn farmer respondents in Marobea Village have a better assessment of the condition of facilities and infrastructure for corn farmers in Marobea Village compared to corn farmers in Lakalamba Village.

CONCLUSION

Based on the research results, several conclusions can be formulated as follows: The overall level of farmer participation in agricultural extension activities is included in the less active category. Compared to the participation stage, farmers are more active in implementation than planning. Corn farmers in Marobea Village are more active than corn farmers in Lakalamba Village. Agricultural extension communication between corn farmers in Marobea and Lakalamba Villages is most effective in encouraging action tendencies (behavior) and then influencing attitudes (affective), but is less effective in increasing knowledge (cognitive). Extension communication between corn farmers in Marobea Village is more effective compared to corn farmer groups in Lakalamba Village. The more active farmers are, the more motivated they are to apply extension materials. Factors that determine the effectiveness of extension communication include extension factors, extension methods, and facilities and infrastructure. Extension factors related to the effectiveness of extension communication are the attitude, communication and knowledge aspects of the instructor. Aspects of method suitability and effectiveness are also related to the effectiveness of extension communication which is supported by the availability of extension infrastructure.

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