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## THE NATURE OF FIELD AGRICULTURAL EXTENDER COMMUNICATION VEGETABLE PLANTS IN MUGIREJO VILLAGE SUNGAI PINANG DISTRICT, SAMARINDA CITY

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### Abstract

The nature of communication is the process of conveying messages from the communicator to the communicant, where the messages conveyed are agricultural, whether in the form of new information, new ideas, new technology, or new improved methods. This research aims to determine the nature of communication and communication success of field agricultural instructors. This research was carried out from May to July 2022 in Mugirejo Village, Sungai Pinang District, Samarinda City. The sampling method used was Census with a total of 24 respondents and all vegetable farmers were used as respondents. The data analysis method used is a descriptive method with a qualitative research type. The results of research on the nature of Field Agricultural Instructors (PPL) communication in Mugirejo Village, Sungai Pinang District from four indicators, namely the nature of face-to-face communication 100%, media 62.50%, verbal 54.17%, and non-verbal 50%/ The success of PPL communication among vegetable farmers was successful like communication face to face, media, verbal and non-verbal with an average score of 30.79.

### Keywords

Nature of Communication, Field Agricultural Instructors, Vegetable Plants.



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## 1. INTRODUCTION

The agricultural sector, which is reliable in facing all changes and challenges, needs to make improvements in various aspects, including the quality of human resources. Farmers, as human resources in the agricultural sector, have so far remained in a position that has not been taken into account, partly due to their poor abilities and quality. [1] Efforts to improve the quality of farmers are carried out, among other things, through increasing the role of Field Agricultural Instructors (PPL).

Extension as a learning process (non-formal education) aimed at farmers and their families has an important role in achieving agricultural development goals. Field Agricultural Instructors duties as development communicators are expected to be able to play multiple roles, including as teachers, mentors, advisors, information conveyors, and farmer partners. Therefore, improving Field Agricultural Instructors performance is very important in the continuity of extension programs at the field level. This is closely related to the motivation and job satisfaction that can be obtained by extension workers [2].

Extension is an educational process so instructors must be able to bring about changes in behavioral aspects, including knowledge, traits, and skills. Extension agents must be able to invite extension targets to think, discuss, solve problems, plan, and act together under the guidance of the people among them. As a continuous process, extension must start from the farmer's condition at that time towards the desired goal based on constantly developing needs and interests [3].

Field Agricultural Instructors needs to pay attention to the nature of farmers so that it is easy to overcome various problems related to agriculture in their work area. Characteristics are a reflection of a person's feelings towards objects, events, situations, people, or groups [4]. Communication characteristics can be interpreted as the form or pattern of relationships between two or more people in the process of sending and receiving messages so that the message in question can be understood [5]. Farmers' responses to the nature of agricultural instructor communication need to be known to identify whether farmers are willing to accept, understand, and apply the information conveyed by instructors. The nature of instructor communication can influence farmers' knowledge and understanding of extension activities.

This research aims to determine the nature of communication in agricultural extension for farmers in Mugirejo Village.

## 2. MATERIALS AND METHODS

### 2.1 Time and place

This research was carried out from May - July 2022 in the Mugirejo Village area, Sungai Pinang District, Samarinda City.

### 2.2 Method of collecting data

The data required in this research include (a) primary data obtained by direct observation at the research location and conducting interviews with respondents, namely farmers in the research area, guided by a list of questions, and (b) secondary data that obtained from the Agricultural Extension Center (BPP) office and village offices or other agencies in the form of annual reports, monographic data, and other sources that support this research.

### 2.3 Sampling Method

Population can be defined as objects and subjects that have certain characteristics that have been determined by researchers to be studied and then conclusions drawn. Meanwhile, what is meant by the sample is a portion of the population that is selected to be representative of that population.

This research uses a purposive sampling technique or what is also called a deliberately selected sample which is considered to represent the entire farmer group in Mugirejo Village. The selected sample consisted of 24 people aged between 15 - 45 years.

### 2.4 Data analysis method

Farmers' attitudes towards the pattern and nature of communication were determined by analyzing the data descriptively using a Likert scale, that is, each question given received a score according to the respondent's choice. The scores given differ depending on each answer available. Answer choices consisting of answer A were given the highest score, namely three, while answer choices B and C were given two and one respectively.

This research will be able to capture a variety of thorough and nuanced descriptive qualitative information, the data collected is in the form of words in sentences or images that have more meaning than just statements of quantity or frequency in the form of numbers. After collecting data in the form of interviews, all the data collected was then processed and analyzed using the qualitative descriptive method by thoroughly describing the data obtained during the research, revealing that qualitative data processing was carried out through several stages, namely:

- (a) Data reduction: Data reduction is the process of selecting, and abstracting, rough data information that emerges from field notes. The steps taken are sharpening the analysis, classifying or categorizing each problem through brief descriptions, directing, discarding unnecessary ones, and organizing data so that it can be retrieved and verified. The data reduced includes all data regarding the research problem.
- (b) Data presentation: After data reduction, the next step in the analysis is data presentation. Data presentation is a collection of structured information that provides the possibility of drawing conclusions and taking action. Data presentation is directed so that the reduced data is organized, and arranged in a relationship pattern so that it is easier to understand. Data presentation can be done in the form of descriptions, narratives, charts, relationships between categories, and flow diagrams. Presenting data in this form makes it easier for researchers to understand what is happening. In this step, the researcher tries to compile relevant data so that the information obtained is concluded and has a certain meaning to answer the research problem.

Drawing conclusions and verification: this stage is the stage of concluding all the data that has been obtained as a result of the research. Drawing conclusions or verification is an effort to search for or understand the meaning, regularity, explanation, cause, and effect flow or proposition. Before drawing conclusions, data reduction, data presentation, and conclusion drawing or verification from previous activities are carried out [6].

**Table 1.** Maximum and Minimum Scores of Communication Characteristic Success Indicators

No	Indicators	Minimum Scores	Maximum Scores
1.	Face to Face	4	8
2.	Media	3	6
3.	Verbal	6	12
4.	NonVerbal	3	6
Amount		16	32

**Source:** Primary Data (processed), 2023

According to [7] the class intervals can be determined as follows:

$$C = \frac{Xn - Xi}{K} = \frac{32 - 16}{2} = 8$$

Information : C = class interval; Xn = maximum score; Xi = minimum score, and K = number of classes

The calculated scores above can be used to determine the category of communication characteristics based on a recapitulation of the scores of the three indicators. The nature of communication is determined into three levels, namely unsuccessful and successful, which can be seen in Table 2.

**Table 2.** Categories of Vegetable Farmers' Characteristics on the Communication Characteristics of Field Agricultural Instructors

No	Class Interval	Category Characteristics of Farmers
1	16,00 - 24,00	Not successful
2	24,01 - 32,00	Succeed

**Source:** Primary Data (processed), 2023

### 3. RESULTS AND DISCUSSION

#### 3.1 Nature of Communication

The nature of communication is the behavior of Field Agricultural Instructors (PPL) in the Mugirejo Village, Sungai Pinang District, which varies, they communicate face-to-face, using media, verbally and nonverbally. The communication that has been carried out by PPL is verbal and non-verbal communication because PPL conveys information, not quickly, and not slowly and the instructors provide direct examples to farmers in the field. The nature of communication desired by farmers is face-to-face communication because according to farmers, with face-to-face communication farmers can interact directly with extension workers so that there is reciprocity between extension agents and farmers [8].

The nature of communication with instructors in agricultural extension activities in Mugirejo Village, Sungai Pinang District, Samarinda City can be seen from four indicators consisting of face-to-face, media, verbal, and non-verbal. The following details of the four indicators can be seen in Table 3.

**Table 3.** The nature of communication with extension workers in extension activities in Mugirejo Village, Sungai Pinang District, Samarinda City

No	Nature of Communication	Amount Score	Percentage (%) Nature of Percentage (%)	Number of respondents	Percentage (%)
1	Face to Face	24	37,50	24	100,00
2	Media	15	23,44	24	62,50
3	Verbal	13	20,31	24	54,17
4	Non Verbal	12	18,75	24	50,00
	Amount	64	100	24	

**Source:** Primary Data (processed), 2023

Based on the results of Table 3 above, the most widely used communication characteristic is face-to-face communication given to 24 respondents. However, if we look at the various characteristics of communication used by PPL, the percentage distribution is as follows, namely: the nature of face-to-face communication is 37.50%, the nature of media communication is 23.44%, the nature of verbal communication is 20.31%, and the nature of non-verbal communication is 18.75%.

Based on the results of research on the nature of PPL communication in Mugirejo Village, Sungai Pinang District, they are as follows:

**a. Face to face**

Face-to-face communication is communication carried out by extension agents with farmers by meeting directly, where farmers can ask questions directly to the extension agent[9]. Based on the research results, 19 respondents stated that the extension workers were quite good and active so there was reciprocity between farmers and extension workers, in group meetings the extension workers were open to each other to achieve common goals. Then 5 respondents stated that extension workers always provide direct face-to-face guidance so that farmers feel that their knowledge has increased after receiving guidance from extension workers. There were no farmers who responded poorly to face-to-face communication in Mugirejo Village. This proves that the nature of communication carried out by extension workers has had a good impact and should be maintained.

**b. Media**

Media communication is where the instructor conveys information and material using extension media in the form of pictures, objects, and extension equipment[10]. Based on the research results, 7 respondents stated that they did not understand the use of the Internet to obtain new information in the agricultural sector so extension workers were not able to discuss with farmers via the Internet. Then 16 respondents stated that communication with the media was quite good because the extension workers discussed with farmers through media in the form of sheets so that farmers understood the material being conveyed. Meanwhile, 1 respondent had a bad attitude because farmers had not felt helped by internet media. This proves that it is necessary to increase communication carried out by extension workers using the media.

**c. Verbal**

Verbal communication is where the instructor conveys information and material to farmers using clear words, speaking neither fast nor slow, with clear intonation, short and clear. Based on the

research results, 18 respondents stated that communication using words was very good because farmers needed extension workers to help farmers convey information about superior seeds or seedlings, and planting and plant diseases that could damage plant growth. Then 6 respondents also stated that the voice intonation used by instructors when providing information could be easily received by farmers, instructors used clear words, spoke neither quickly nor slowly, and were polite and friendly in conveying material to farmers. This proves that it is necessary to improve and increase verbal communication carried out by instructors.

**d. Non-verbal**

Non-verbal communication is the nature of communication between extension workers and farmers by providing direct examples and showing concrete evidence[11]. Based on the results of research in the field from 24 respondents, 18 respondents were adequate because extension workers played a role in developing a farmer group in Mugirejo Village and there were facilities provided to farmers that everyone could experience. Then 6 respondents behaved well because the instructors approached the farmers directly at the farmer's location and the instructors always gave real examples to the farmers. This proves that there is a need to improve and increase non-verbal communication between extension workers and farmers.

**3.2 Successful Nature of Communication**

The successful nature of PPL communication with vegetable farmers is generally in the successful category, meaning that the instructor communicates with farmers well or is easily understood by vegetable farmers, both from face-to-face, media, verbal, and non-verbal aspects. The results of research regarding the scores and categories of success levels of the nature of instructor communication are presented in Table 4.

**Table 4.** Scores and categories for the level of success of the nature of extension communication in Mugirejo Village, Sungai Pinang District, Samarinda City

No.	Indicator	Score	Category
1	Face to face	32,00	Succeed
2	Media	30,31	Succeed
3	Verbal	30,44	Succeed
4	Non Verbal	30,44	Succeed
Average score		30,79	Succeed

**Source:** Primary Data (processed), 2023

The results of the research show that the most frequently used communication characteristics are face-to-face communication with a score of 32,00 which is 100% of the communication characteristics used by PPL. With this face-to-face process, farmers can meet, listen, and ask questions directly to the PPL. The knowledge or messages conveyed by PPL can also be better received by farmers.

The research results show the nature of media communication with a score of 30,31 from the nature of the communication used by PPL. This type of communication is given to farmers as an addition or complement to the extension that is given face-to-face. Farmers usually use telephone media to contact PPL when there is an urgent matter that needs to be consulted, and PPL also sometimes uses electronic media such as playing videos when providing extension material to farmers.

The results of the research show that the nature of verbal communication with a score of 30,44 and the nature of communication used by PPL, because the words and voice intonation used by instructors when providing information can be easily received by farmers. The nature of verbal communication has elements such as clear pronunciation of words, speaking speed that is not too fast and not too slow, and clear voice intonation. All these verbal elements have been carried out to provide an extension to farmers so that farmers understand the material presented.

The research results showed that it was non-verbal with a score of 30,44 from the nature of communication used by PPL. This type of communication is only given to farmers who already understand the information through words and can only understand the information through direct demonstration and concrete evidence carried out by agricultural extension workers.

#### **4. CONCLUSIONS AND RECOMMENDATIONS**

##### **4.1 Conclusion**

Based on the results of research and discussion, the following conclusions can be drawn:

1. The nature of PPL communication in Mugirejo Village, Sungai Pinang District from four indicators, namely the nature of face-to-face communication 100%, media 62,50%, verbal 54,17%, and non-verbal 50%
2. The success of nature of PPL communication among vegetable farmers was successful like face-to-face, media, verbal, and non-verbal communication with an average score of 30,79.

##### **4.2 Suggestion**

Based on the research results, it can be suggested that:

1. Apart from receiving material and guidance, farmers are expected to be able to apply it in their agricultural activities.
2. It is hoped that farmers will be more active in participating in every meeting whether held by the head of the farmer group, PPL, or from the Department of Agriculture.

It is hoped that PPL can further improve the monitoring process and improve the delivery of information.

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