



Agriprimatech

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

# **Analysis Of The Effectiveness Of Communication Extension Palm Oil Plantation In Ptpn Iv Regional 1 Land Plantation Of The King, Sei Rampah District Serdang Bedagai Regency**

***Cahaya Frasiska<sup>1</sup>, Nelfita Rizka S. Depari<sup>2</sup>, Khairuna utami<sup>3</sup>, Abraham Ismail Pulungan<sup>4</sup>***

*Universitas Nahdlatul Ulama Sumatera Utara*

*friskacahaya395@gmail.com*

## **ABSTRACT**

The effectiveness of communication plays a very important role in plantation farming activities, the need for information about oil palm cultivation aims to develop agricultural business results, production, and marketing cannot be separated from the role of communication that must be carried out by oil palm farmers on oil palm plantations PTPN IV regional I Tanah Raja plantation. This study aims to determine the effectiveness of communication on the Internal and External Characteristics of Oil Palm Farmers on Oil Palm Plantations PTPN IV regional I Tanah Raja plantation, Sei Rampah District, Serdang Bedagai Regency. Analysis of the Effectiveness of Oil Palm Farmer Communication was carried out using a survey method, sample selection with a purposive sampling method and a Likert scale analysis tool, and descriptive analysis. The effectiveness of group communicationThe score is 13.04, openness with a score of 11.04, Empathy has a score of 14.03, Attitude has a score of 13.05, positive attitude with a score of 14.04 and equality 11.02. Internal characteristics (education, age and gender) and external characteristics (intensity of counseling, accuracy of counseling channels and number of information sources) have a significant correlation with the effectiveness of group and interpersonal communication.

**Keywords:** internal and external characteristics, communication effectiveness, elements of communication

## **INTRODUCTION**

In improving employee work effectiveness, employees must be given strong provisions, because with the demands to be more motivated and supervised, employees will be more optimal in working. Employee direction is one way to make employees more persistent and enthusiastic. Based on the journal of education and business management published



Agriprimatech

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

by (Purnama, 2012) concluded that companies that strive to improve the effectiveness of their employees must be able to direct and provide counseling to their employees so that employee work effectiveness can be improved.

Interpersonal communication is an effective way of communicating in an effort to change a person's attitude, opinion or behavior, because of its dialogic nature, namely in the form of conversation, this will have an impact on the effectiveness of communication.(Yodiq, 2016). Effectiveness of communication plays a very important role in oil palm plantation farming activities in Sei Rampah District, especially for oil palm plantation actors or farmers. The need for information about oil palm cultivation, the aim of which is to develop production farming results, to marketing, cannot be separated from the role of communication that must be carried out by oil palm plantation owners. Therefore, communicators who play a role in providing information to plantation owners need to understand and improve their communication skills.(Littlejohn & Foss, 2019).

The supervisor is more directed at controlling efforts in terms of attendance, discipline, cooperation, work implementation and everything related to activities to achieve company goals. With the presence of supervision employees are increasingly strict in working and not as they please in doing their work. Supervision needs to be done to realize better company goals. A good work environment can provide good work results, so that employees are more enthusiastic about doing their jobs. (Siagian, 2014) the work environment is an environment where employees do their daily work. Another thing according to (Sedarmayanti, 2017), the work environment is a place where there is a group in it there are several supporting facilities to achieve company goals in accordance with the company's vision and mission.

Judging from the conditions at PTPN IV Regional 1 Tanah Raja Plantation, Sei Rampah District, Serdang Bedagai Regency, employee work effectiveness is considered to be still not optimal so that employee work is disrupted. The lack of employee effectiveness can be seen from the failure to provide direction by the company to employees. Employees who have a high level of discipline are very important for the company, because with a high level of discipline, employees are able to utilize their time optimally in working and follow work procedures properly. (PTPN III Archives, 2020)

Based on the data above, it can be seen that the ability to provide counseling to farmers who are employees of PTPN IV Regional 1 Tanah Raja Plantation, Sei Rampah District, Serdang Bedagai Regency, in 2019 the ratio of employee counseling to farmers reached 6.49% and increased to 12.98% in 2020. This statement can be seen in table 1.1. below:

**Table 1.** Extension Ratio to Employee Farmers PTPN IV Regional 1 Plantation Land of King, Sei Rampah District, Serdang Bedagai Regency

No	Year	Extension Ratio to Farmers
1	2019	6.49%
2	2020	12.98%

Source: PTPN IV Regional I Archives, 2020

This indicates that there is a decrease in the level of extension for farmers of PTPN IV Regional 1 Tanah Raja Plantation, Sei Rampah District, Serdang Bedagai Regency. Another thing that needs to be seen in efforts to improve extension of internal and external factors by PTPN IV Regional 1 Tanah Raja Plantation Employees, Sei Rampah District, Serdang Bedagai Regency is the skills of employees in explaining and explaining the function of the effectiveness of oil palm plantation communication to farmers.

## RESEARCH METHODS

According to (Machali, 2021) The type of research used by the author in this study is a correlational study with a quantitative form and there is a subsample taken from the Oil Palm plantation which was drained into 30 people. The study began in January to February 2023. The author conducted research at the Oil Palm Plantation of PTPN IV Regional 1 Tanah Raja Plantation, Sei Rampah District, Serdang Bedagai Regency, Sei Rampah District, Serdang Bedagai Regency, Medan, North Sumatra Province. The study began in January to February 2023.

Sugiyono (2017) said that operational variables are a description of the definition in the study. Research variables are basically anything in any form that is determined by the researcher to be studied so that information about it is obtained, then conclusions are

drawn. The variables in this study are grouped into 2 variables, namely independent variables (X) and dependent variables (Y). The dependent variable in this study is the effectiveness of oil palm plantation extension communication at PTPN IV Regional 1 referred to as variable Y, while the independent variable is the external characteristics of communication counseling (X1), internal characteristics of communication extension (X2), and oil palm farmers (X3).

The score is the result of the scoring work (giving a score) which is obtained by adding up the numbers for each item that the testee (the term for the person taking the test) has answered correctly, taking into account the weight of the answer (Anas Sudijono 2019). Partial tests in a study are used to show how far the influence of one independent variable has a partial influence on the dependent variable, this is usually known as the t-statistic test.

The testing criteria are as follows:

If the probability (significance) is greater than 0.05 ( $\alpha$ ), then the independent variable individually has no effect on the dependent variable.

If the probability (significance) is less than 0.05 ( $\alpha$ ), then the independent variables individually influence the dependent variable.

Testing criteria:

$H_0$  is accepted and  $H_a$  is rejected if the calculated t is less than the t table. This means that the independent variable does not have a significant effect on the dependent variable.

$H_0$  is rejected and  $H_a$  is accepted if the calculated t is greater than the t table. This means that the independent variable has a significant effect on the dependent variable.

## RESULTS AND DISCUSSION

Based on the results of the study of the internal characteristics of farmers are seen from the results of testing the respondent questionnaire data with a frequency test, it is known that the results of the description of the questionnaire on the internal characteristics of farmers who are the samples in this study are; based on Gender, Age, and Last Education. The results of data processing with the frequency test that has been carried out by researchers can be seen in the tables below:

**Table 2.** Respondents Based on Gender of EmployeesPTPN IV Regional 1 Plantation,  
Sei Rampah District, Serdang Bedagai Regency

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	22	73.3	73.3	73.3
	Woman	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Source: Data Processing (2024)

Based on table 1 above, it can be concluded that based on gender, from the male gender, the number obtained was 22 people with a presentation rate of 73.3%, and the female gender, the number obtained was 8 people with a presentation rate of 26.7%. So the total obtained was 30 people, with a presentation rate of 100%.

**Table 3.** Respondents Based on Age of EmployeesPTPN IV Regional 1 Plantation,  
Seirampah District, Serdang Bedagai Regency

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25 – 30	9	30.0	30.0	30.0
	31 – 40	9	30.0	30.0	60.0
	40 – 50	12	40.0	40.0	100.0
	Total	30	100.0	100.0	

Source: Data Processing (2024)

Based on table 2 above, it can be concluded that based on age level, the age of 25-30 years is obtained as many as 9 people, with a presentation of 30.0%, the age of 31-40 years is obtained as many as 9 people, with a presentation of 30.0% and the age of 40-50 years



is obtained as many as 12 people with a presentation of 40.00%. So the total obtained is 30 people, with a presentation of 100%.

**Table 4.** Respondents Based on Education Level In Employees of PTPN IV Regional 1 Plantation, Seirampah District, Serdang Bedagai Regency

Last education		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	8	26.7	26.7	26.7
	JUNIOR HIGH SCHOOL	14	46.7	46.7	73.3
	SENIOR HIGH SCHOOL	8	26.7	26.7	100.0
	Total	30	100.0	100.0	

Source: Data Processing (2024)

Based on table 3 above, it can be concluded that based on the level of education, from elementary school there were 8 people with a percentage figure of 26.7%, from junior high school there were 8 people with a percentage figure of 26.7%.obtainedthe number of 14 people with a presentation figure of 46.7% and from high school got the number of 8 people with a presentation of 26.7%. So the total obtained was 30 people, with a presentation figure of 100%.

The results of the research on the effectiveness of interpersonal communication among farmers can be seen in table 4 as follows:

**Table 4.** Average Score of Communication Effectiveness of Oil Palm Farmers in Groups of PTPN IV Regional 1 Plantation Employees, Seirampah District, Serdang Bedagai Regency

No	Effectiveness	Average Score	Category	Class Interval
1	Cognitive	11.04	Currently	10.00-12.00
2	Affective	14.03	Tall	13.00-15.00
3	Conative	11.05	Currently	10.00-12.00
Average		12.04	Currently	

Source: Processed Data 2024

Table 4 above shows that the level of effectiveness of group communication in this study can be said to be quite effective. This can be seen from the average score obtained from all respondents reaching 12.04, where the score scale used is one to three, meaning that the score of the effectiveness of communication of oil palm farmers in the group shows quite effective, this is in accordance with the conditions in the field, namely that fellow oil palm farmers in the group often participate in open discussions.

In this view, to produce effective communication, openness, empathy, supportive attitude, positive attitude and equality are needed from the communicating parties. To see the picture of the effectiveness of interpersonal communication, see Table 5:

**Table 5.** Average Score of Communication Effectiveness of Oil Palm Planters in Groups of PTPN IV Regional 1 Plantation Employees, Seirampah District, Serdang Bedagai Regency

No	Communication Effectiveness	Average Score	Category	Interval Class
1	Openness	11.04	Currently	10.00-12.00
2	Empathy	14.03	Tall	13.00-15.00
3	Supportive Attitude	13.05	Tall	13.00-15.00

4	Positive Attitude	14.04	Tall	13.00-15.00
5	Equality	11.02	Currently	10.00-12.00
Average		13.04	Currently	

Source: Processed Data 2024

Table 5 above explains that the effectiveness of interpersonal communication that occurred at the research site was quite effective, this can be seen from the score of 13.04 with each variable of openness communication effectiveness with a score of 11.04. Empathy has a score of 14.03. Supportive attitudes based on the results of the study got a score of 13.05, positive attitudes with a score of 14.04 and equality 11.02. This means that when a farmer has an advantage, other farmers also feel happy and happy, not jealous and envious.

**Table 6. T-Test Results**

**Coefficientsa**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	21,134	14,648		1,443	,161
External Counseling Character (X1)	,385	,150	,405	2,566	,016
Internal Counseling Character (X2)	,356	,152	,369	2,338	,027
Palm Oil Farmers (X3)	-,449	,301	-,235	1,491	,148

a. Dependent Variable: Communication Effectiveness (Y)

Testpartial(T-test) is used to prove the influence of extension variables on internal characteristics of farmers (X1), external extension variables on farmers (X2) and oil palm farmers (X3) partially.orindividual on the effectiveness of extension (Y). Testing is done



by comparing the calculated t value with the t table obtained from SPSS processing, while the t table value is obtained from the statistical table, namely the t value at degrees of freedom ( $df = n - k = 28 - 4 = 24$ ), namely 1.701

Based on table 4.9 it can be seen that:

- For the external extension variable of farmers (X1), the t-value result was ( $2.566 > 1.701$ ), at a significance level of  $0.016 < 0.05$ . This means that in condition X1  $H_0$  is rejected and  $H_1$  is accepted.  $H_1$  variable X1 has a positive and significant effect.
- For the internal farmer extension variable (X2), the t-value result was ( $1.338 > 1.701$ ), at a significance level of  $0.027 < 0.05$ . This means that in condition X2  $H_0$  is rejected and  $H_1$  is accepted.  $H_1$  variable X2 has a positive and significant effect
- For the internal farmer extension variable (X3), the t-value result was ( $1.491 > 1.701$ ), at a significance level of  $0.148 > 0.05$ . This means that in condition X3  $H_0$  is accepted and  $H_1$  is rejected.  $H_1$  variable X3 does not have a positive and significant effect on variable Y.

**Table 7.** F Test Results

**ANOVA**

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	112,341	3	37,447	4,746	,009b
	Residual	205,126	26	7,889		
	Total	317,467	29			

a. Dependent Variable: Communication Effectiveness (Y)

b. Predictors: (Constant), Palm Oil Farmers (X3), Internal Extension Characteristics (X2), External Extension Characteristics (X1)

Next, the Fcount value is compared with Ftable, then the Fcount value ( $4.746 > F_{table}$  (3.00)) is obtained at a significance level of  $0.00 < 0.05$ . This shows that internal farmer



Agriprimatch

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

extension, external farmer extension and interpersonal communication simultaneously (at the same time) have a positive and significant effect on the effectiveness of communication on PTPN IV Regional 1 Land of the King of Plantations, Sei Rampah District, Serdang Bedagai Regency. Thus the hypothesis is accepted.

### **Internal and External Characteristics of PTPN IV Regional 1 Plantation Farmers, Sei Rampah District, Serdang Bedagai Regency**

Based on the results of the study, the internal characteristics of farmers are seen from their age, they are in the productive age, namely an average age of 47 years, the majority of education levels are in junior high school or junior high school, and the gender of farmers is mostly male, as many as 22 people with a percentage figure of 73.3%.

### **Effectiveness of Farmer Communication in PTPN IV Regional 1 Plantation Group, Sei Rampah District, Serdang Bedagai Regency**

Level The effectiveness of group communication in this study can be said to be quite effective. This can be seen from the average score obtained from all respondents reaching 12.04, where the score scale used is one to three, meaning that the score of the effectiveness of oil palm farmer communication in the group shows quite effective, this is in accordance with the conditions in the field, namely that fellow oil palm farmers in the group often participate in open discussions.

### **The Effectiveness of Interpersonal Communication of PTPN IV Regional 1 Plantation Farmers, Sei Rampah District, Serdang Bedagai Regency**

The effectiveness of interpersonal communication that occurred at the research location was quite effective, this can be seen from...score which is 13.04 with each variable of communication effectiveness of openness with a score of 11.04, meaning that the aspect of openness shows a fairly effective category, this is because in the conditions in the field, oil palm farmers react honestly when they get new knowledge. Empathy has a score of 14.03, this figure explains that the ability of oil palm farmers to understand and feel what other farmers feel is in the effective category, this can happen because of a sense of kinship and mutual assistance between farmers and farmers with good extension workers in paying



Agriprimatech

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

attention and knowing what their interlocutors are experiencing related to their farming and social life. The supportive attitude based on the results of the study got a score of 13.05, this score explains that farmers are willing to listen to the views of other farmers, and if the views of other farmers are right and their views are wrong, then the farmer immediately changes his position and is willing to implement the views of other farmers together, then a positive attitude with a score of 14.04 and equality 11.02, this means that farmers respond positively to the advantages of other farmers. This means that when a farmer has an advantage, other farmers will feel happy and joyful, not envious and jealous.

## CONCLUSION

- a. The effectiveness of interpersonal communication has a score of 13.04, openness with a score of 11.04, empathy with a score of 14.03, attitude with a score of 13.05, positive attitude with a score of 14.04 and equality 11.02.
- b. For the external farmer extension variable (X1), the results obtained were  $t_{count} (2,566) > t_{table} (1,701)$ , at a significant level of  $0,016 < 0,05$ . This means that in condition X1  $H_0$  is rejected and  $H_1$  is accepted.  $H_1$  variable X1 has a positive and significant effect
- c. For internal farmer extension variable (X2), obtained the t-value ( $1,338 > 1,701$ ), at a significance level of  $0,027 < 0,05$ . This means that in condition X2  $H_0$  is rejected and  $H_1$  is accepted.  $H_1$  variable X2 has a positive and significant effect
- d. For the internal farmer extension variable (X3), the t-value result was ( $1,491 > 1,701$ ), at a significance level of  $0,148 > 0,05$ . This means that in condition X3  $H_0$  is accepted and  $H_1$  is rejected.  $H_1$  variable X3 does not have a positive and significant effect on variable Y.
- e. The result of the t-test data processing is 1.701, then the Fcount value ( $4,746 > F_{table} (3,00)$ ) is obtained at a significant level of  $0,00 < 0,05$ . This shows that internal farmer extension, external farmer extension and interpersonal communication simultaneously (simultaneously) have a positive and significant effect on the effectiveness of communication at PTPN IV Regional 1 Tanah Raja Perkebunan, Sei Rampah District, Serdang Bedagai Regency, thus the Hypothesis is accepted.



Agriprimatch

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

## SUGGESTION

1. Seeing the conditions in the field, farmers should be more active in increasing their knowledge/non-formal education such as seminars, training, courses, coaching and so on.
2. In external factors, there are many weaknesses that need to be strengthened, such as the performance of agricultural institutions, accessibility, absolute requirements and facilitating requirements.

## BIBLIOGRAPHY

- Afriyadi, F. (2020). The Effectiveness of Interpersonal Communication Between. *EJournallmuKomunikasi*, 3(1), 362–376.
- Anas Sudjono, 2019, Likert Scale Calculation Technique, page 22
- Benny Usman. (2019). The Influence of Interpersonal Communication on Employee Performance at the Faculty of Economics, PGRI University of Palembang. *Journal of Media Wahana Ekonomika*, Vol. 10, No. 1, April 2013: 1 -18, 10(1), 1–18.<https://jurnal.univpgri-palembang.ac.id/index.php/Ekonomika/article/view/2754/2552>
- Devito, 2009, The Concept of Effective Interpersonal Communication
- Fatmasari, & Adha, WM (2022). MANDAR: Management Development and Applied Research Journal. *MANDAR: Management Development and Applied Research Journal*, 5(1), 119–124.
- Gunawan, H. (2018). Types of communication patterns between parents and children who are active smokers in Jembayan Village, Loa Kulu District, Kutai Kartanegara Regency. *Journal of Communication Science*, 1(3), 218–233.
- Handoko, 2013, Effectiveness of Public Relations Communication in the Socialization of the SIM Online Program by the Surabaya Police Traffic Unit. *E-Communication Journal. Understanding of Farmer Conservation SUT. Journal of Agricultural and Fishery Sciences*



Agriprimatech

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

- Hutasuhut, SR, Ayu, SF, & Chalil, D. (2023). Analysis of the Effectiveness of the Community Oil Palm Rejuvenation Program in Nibung Hangus District, Batubara Regency, North Sumatra, Indonesia. *Agro Bali: Agricultural Journal*, 6(2), 459–469. <https://doi.org/10.37637/ab.v6i2.1126>
- Josep A, 2018, *Research Methods for Business and. Management*, MacMillan Publishing Company, New York
- Littlejohn, S., & Foss, K. (2019). *Communication Theory*. Salemba Humanika, 1–49.
- Machali, I. (2021). Quantitative Research Methods. In *Laboratory of Research and Development of TROPICAL PHARMACY*, Faculty of Pharmacy, Mualawarman University, Samarinda, East Kalimantan (April Issue). [https://digilib.uin-suka.ac.id/id/eprint/50344/1/Quantitative Research Methods %28Practical Guide to Planning%2C Melaksa.pdf](https://digilib.uin-suka.ac.id/id/eprint/50344/1/Quantitative%20Research%20Methods%20Practical%20Guide%20to%20Planning%20Melaksa.pdf)
- Mannan, A. (2019). Interpersonal Communication Ethics of Communication Science Students of the Faculty of Da'wah and Communication to Lecturers via Smartphones. *Aqidah Journal*, 5(1), 1–22.
- Mulyana, 2017, Effectiveness of Public Relations Communication in the Socialization of the Online SIM Program by the Surabaya Police Traffic Unit. *E-Communication Journal*. Understanding of Farmer Conservation SUT. *Journal of Agricultural and Fishery Sciences*
- Nazir, 1988, *How to Include Literature*, p. 10
- Extension, PS, & Agriculture, K. (2010). By: AINI NUR ASTUTI H 0402024 FACULTY OF AGRICULTURE.
- Purnama, 2012, *The Influence of Work Discipline and Employee Commitment on Employee Productivity at PT. Maja Agung*
- PTPN IV Regional 1 Plantation Land of King, Sei Rampah District, Serdang Bedagai Regency
- Ramana, Budi; Yulida, Roza; Kurnia, D. (2021). Analysis of the Effectiveness of Communication of Oil Palm Plantation Extension Using the Self-Help Pattern in Pangkalan Kuras District, Pelalawan Regency. *Journal of Agribusiness*, 23 Number 1, 1–8.





Agriprimatech

Vol. 8 No. 1 April 2025

e-ISSN : 2621-6566

Research Methods for Business and. Management, MacMillan Publishing Company, New York

Rozaq, M., & Sudaryanto, E. (2018). The Influence of Agricultural Extension Communication on the Performance of Farmer Groups in Karang Tinoto Village, Rengel District, Tuban Regency. Representamen, 4(01).<https://doi.org/10.30996/representamen.v4i01.1428>

Soares, S. (2019). Relationship between Farmer Characteristics and the Effectiveness of Agricultural Extension Communication in the SL-PTT Program (Case of Farmer Groups in Kerkap District, North Bengkulu Regency). Jurnal Professional, 151(2), 10–17.

Sugiyono, 2019, Population Calculation, page 15

Suharsaputra, 2018, Documentation, page 15

Tubbs & Moss, 2017, Communication Science

Yodiq, M. (2016). The Role of Principal's Interpersonal Communication on Teacher Work Motivation at Samarinda Islamic Senior High School. Ejournal of Communication Science, 4(2), 24–35.