

**THE INFLUENCE OF COMMUNICATION PATTERNS ON THE PERFORMANCE OF THE MAJU BERSAMA FARMER GROUP AT DESA MANUSAK, KABUPATEN KUPANG
(Pengaruh Pola Komunikasi Terhadap Kinerja Kelompok Petani Maju Bersama Di Desa Manusak, Kabupaten Kupang)**

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ABSTRACT

This study aimed to analyze the communication patterns applied in the Maju Bersama Farmer Group and to identify the factors within communication patterns that influence farmer group performance. The research was conducted in September 2025 using a survey method involving 22 members of the Maju Bersama Farmer Group. Data were collected through interviews using questionnaires, while secondary data were obtained from the Manusak Village Office. The sampling technique used was saturated sampling. The data were analyzed using descriptive analysis and multiple linear regression analysis. The results show that the communication pattern implemented in the Maju Bersama Farmer Group takes place through two-way communication, regular meetings, and informal communication. The group uses both Indonesian and local languages. Overall, communication runs fairly well, although it still needs to be improved to become more optimal. The regression analysis shows that communication patterns simultaneously have a significant effect on farmer group performance, with a contribution of 69.39%. Partially, communication frequency has a positive and significant effect, communication channels have a positive but insignificant effect, and communication effectiveness is the most dominant factor with a significant influence on farmer group performance in Naibonat Subdistrict.

Keywords: communication patterns, farmer group performance, communication effectiveness

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pola komunikasi yang diterapkan pada Kelompok Tani Maju Bersama serta mengidentifikasi faktor-faktor dalam pola komunikasi yang memengaruhi kinerja kelompok tani. Penelitian dilaksanakan pada bulan September 2025 menggunakan metode survei yang melibatkan 22 anggota Kelompok Tani Maju Bersama. Data dikumpulkan melalui wawancara menggunakan kuesioner, sedangkan data sekunder diperoleh dari Kantor Desa Manusak. Teknik pengambilan sampel yang digunakan adalah sampling jenuh. Data dianalisis menggunakan analisis deskriptif dan analisis regresi linear berganda. Hasil penelitian menunjukkan bahwa pola komunikasi yang diterapkan di Kelompok Tani Maju Bersama berlangsung melalui komunikasi dua arah, pertemuan rutin, dan komunikasi informal. Kelompok ini menggunakan bahasa Indonesia maupun bahasa daerah. Secara keseluruhan, komunikasi berjalan cukup baik, meskipun masih perlu ditingkatkan agar lebih optimal. Analisis regresi menunjukkan bahwa pola komunikasi secara simultan berpengaruh signifikan terhadap kinerja kelompok tani, dengan kontribusi sebesar 69,39%. Secara parsial, frekuensi komunikasi berpengaruh positif dan signifikan, saluran komunikasi berpengaruh positif namun tidak signifikan, dan efektivitas komunikasi merupakan faktor paling dominan yang berpengaruh signifikan terhadap kinerja kelompok tani di Kecamatan Naibonat.

Kata kunci: pola komunikasi, kinerja kelompok tani, efektivitas komunikasi

INTRODUCTION

As social beings, humans cannot live without interacting with others, whether within the family, school, campus, workplace, or wider community. The family is the first environment that introduces individuals to norms of life and ways of interacting. Baumeister and Leary (2021), through the theory of the need to belong, state that humans have a strong emotional need to establish social relationships,

and a lack of social interaction may lead to loneliness and negatively affect mental health. The surrounding environment also plays a role in shaping personality, while humans need groups and organizations to support their existence and roles in life.

Communication is an interaction among individuals that uses linguistic symbols, both verbal and nonverbal, and may occur directly or through other media (Knapp, 2007). In the context of agriculture and farmer groups, communication is highly important because group members come from different educational and cultural backgrounds. Effective verbal and nonverbal communication, such as face-to-face interaction during group meetings or the use of visual media in agricultural training, helps ensure that technical information and agricultural knowledge are properly received and understood by all members. Therefore, effective communication patterns support coordination, decision-making, and the improvement of farmer group performance and productivity.

Communication within farmer groups is a crucial factor for organizational development and progress, especially because members have diverse educational backgrounds. This condition becomes a specific challenge in creating effective communication. Adawiyah et al. (2017) stated that appropriate communication patterns within farmer groups and between farmer groups and external parties are key to improving harvest productivity. Communication patterns influence how information is delivered, understood, and responded to, and they play an important role in achieving shared understanding among the parties involved in the communication process. Therefore, leaders and communicators within farmer groups need to improve their communication abilities and evaluate the constraints that hinder the smooth delivery of information.

Farmer group performance reflects the extent to which a group succeeds in achieving its established objectives through the effective and efficient implementation of its functions. Tika (2006) defines performance as the result of work or activities carried out by individuals or groups within an organization, influenced by various factors to achieve organizational goals within a certain period. In the context of farmer groups, performance reflects the collective ability of members to plan, organize, implement, control, and report their agricultural activities.

Effective communication plays an important role in strengthening cooperation and improving farmer group performance. Communication patterns involving two-way communication, appropriate media selection, and sufficient communication intensity can promote good coordination, active member participation, and faster decision-making. Conversely, poor communication can reduce member involvement and negatively affect group performance. Suleman (2018) explains that open, clear, participatory, and two-way managerial communication styles can improve individual performance, job satisfaction, and innovation while minimizing conflict within organizations.

Open, clear, and transparent vertical and horizontal communication patterns (Fachri, 2023) have been proven to improve employee performance. Such success is also supported by systematic training and constructive feedback, which together create a productive work atmosphere and encourage high performance. These findings emphasize that good communication patterns are not only relevant in formal organizational settings but are also important in farmer groups to support the achievement of common goals more effectively. Thus, it is necessary to examine how communication patterns applied within farmer groups influence their performance so that the communication strategies used are aligned with group objectives.

Research conducted by Kharisma (2019) on the Tunas Harapan Farmer Group in Bontomarannu Village, Uludere District, Bantaeng Regency, found that group communication plays a very important role in the development of shallot cultivation. Well-established communication among group members facilitates the delivery of messages and information, enabling all members to understand the purpose and objectives of group activities. This indicates that effective communication within farmer groups not only facilitates information exchange but also improves coordination and shared understanding, which ultimately contributes to the success of shallot farming development.

In the agricultural context, East Kupang District has leading commodities such as rice and maize. In 2015, rice production reached 16,920 tons from a harvested area of 4,500 hectares, and in 2016 it increased to 17,082 tons from a harvested area of 4,617 hectares. According to data from the Agricultural Extension Center of East Kupang District, the number of farmer groups in this area has increased significantly, reaching approximately 500 farmer groups by 2023. Although maize production in 2015 was recorded at 389.65 tons, this figure was still lower than that of other districts

such as Fatuleu and Amarasi. However, the potential for maize development remains significant, particularly in Naibonat Subdistrict, which has supporting land area and natural resources. Increased maize production can be achieved through the optimization of production factors such as seeds, fertilizers, and labor, as well as the application of appropriate agricultural technology.

Naibonat Subdistrict, located in East Kupang District, covers an area of 22.47 km² and has a population of 12,656 people. Its administrative structure consists of 50 neighborhood units and 20 community units, reflecting a dense and organized community. With 70 active farmer groups, Naibonat Subdistrict demonstrates great potential in the agricultural sector. High community participation in agricultural activities is an important asset for agricultural sector development in this area.

With abundant agricultural potential, the development of the agricultural sector in Naibonat Subdistrict requires serious attention. Efforts to increase productivity through appropriate agricultural technology, farmer training, and effective extension services are needed to optimize existing potential. In addition, sustainable natural resource management and proper spatial planning are key factors supporting the sustainability of the agricultural sector in this area.

Manusak Village, located within Naibonat Subdistrict, has an area of 2,500 hectares, of which 850 hectares are used for agriculture and 800 hectares for plantations. A total of 1,650 hectares of land is utilized for agricultural activities, reflecting the main dependence of the population on this sector. There are 23 farmer groups that actively contribute to the development of the agricultural sector and the village economy. Good communication among farmer group members is therefore needed to achieve common goals (Manusak Village Office).

Although farmer groups in Manusak Village have been able to maintain good performance, with maize yields increasing from 3.2 tons per hectare in 2021 to 4.8 tons per hectare in 2024, internal challenges remain and may affect the sustainability of these achievements. Some members are elderly, have limited reading and writing skills, are less fluent in Indonesian, and do not own mobile phones, making it difficult for them to access agricultural information. These limitations may hinder communication within the group, especially regarding the delivery of technical information and coordination of activities. This situation creates an imbalance between high production performance and members' communication capacity, making it important to study how the applied communication patterns can maintain farmer group performance.

Based on this background, research on the evaluation of the influence of communication patterns on the performance of maize farmer groups in Manusak Village, Naibonat Subdistrict, is important for improving farmer welfare and productivity through the assessment of communication patterns within farmer groups. This evaluation aims to identify the influence of communication patterns on farmer group performance, as reflected in the Maju Bersama Farmer Group, which consists of 22 members with diverse backgrounds, including some who cannot read or communicate fluently in Indonesian but remain active and demonstrate good performance.

This study aims to assess the impact of communication patterns on the performance of the Maju Bersama Farmer Group. The background indicates that communication patterns may influence group performance, so the development of good communication patterns is an important strategic step for improving farmer group performance and success in the future. Therefore, further research is needed to identify communication patterns within farmer groups in Manusak Village and to determine whether there is a relationship between communication patterns and farmer group performance.

RESEARCH METHODS

The research method used in this study was qualitative descriptive analysis, which analyzes data by describing or portraying the collected information. The data consisted of primary and secondary data. Data analysis refers to a systematic process of describing and processing data so that valid conclusions can be drawn. The data were collected through: (1) interviews with members of the Maju Bersama Farmer Group using prepared questionnaires so that the data obtained had adequate validity; (2) observation, in which the researcher directly observed the research object and interacted with the members of the Maju Bersama Farmer Group; and (3) documentation, consisting of written records that documented various activities or events that had occurred (Zainal et al., 2018).

To answer the first objective, namely to analyze the communication patterns applied in the Maju Bersama Farmer Group, a survey technique and a simple mixed-methods approach were used by combining qualitative and quantitative approaches through a Likert-scale questionnaire instrument.

The Likert scale is a scale used to measure attitudes, opinions, and perceptions of individuals or groups regarding the social phenomena being studied (Sugiyono, 2018). This study used a four-point Likert scale (1-4) to assess farmer group members' perceptions of communication patterns. The response options consisted of very good (score 4) with a percentage range of 75%-100%, good (score 3) with a percentage range of 50%-74%, fairly good (score 2) with a percentage range of 25%-49%, and poor (score 1) with a percentage range of 0%-24%. This scale was used to obtain more decisive respondent assessments without a neutral option. The Likert scale was selected because it is effective for measuring respondents' perceptions and attitudes toward subjective social phenomena, such as communication patterns in farmer groups, and the results can be converted into numerical data that are easily analyzed descriptively (Azwar, 2016).

To answer the second objective, namely to identify the factors within communication patterns that influence farmer group performance, regression analysis was used. Regression analysis is a statistical method used to measure the effect of independent variables on a dependent variable. Simple linear regression is used when there is only one independent variable, while multiple linear regression is used when two or more independent variables affect one dependent variable (Sugiyono, 2021). The regression model used in this study was:

$$Y = a + \text{beta1}X_1 + \text{beta2}X_2 + \text{beta3}X_3 + e$$

where Y = farmer group performance; a = constant; beta1, beta2, beta3 = regression coefficients for each independent variable; X1 = communication frequency (number of meetings per month); X2 = communication channel (score based on channel type: verbal, written, and nonverbal); X3 = communication effectiveness (score based on the Likert scale); and e = residual error.

RESULTS AND DISCUSSION

This section analyzes the communication patterns applied in the Maju Bersama Farmer Group in Manusak Village. The analysis of communication patterns was used to determine the communication pattern applied within the farmer group and how it influences farmer group performance.

Likert Scale Analysis

This study involved 22 members of the Maju Bersama Farmer Group in Manusak Village. To determine how communication patterns were applied, three main indicators were used: communication frequency (X1), communication channel (X2), and communication effectiveness (X3). Based on data collected through a questionnaire using a Likert scale (1-4), the total score obtained was 212 out of a maximum score of 264. The percentage was calculated using the following formula: Percentage = (Total Score Obtained / Maximum Score) x 100%.

Table 1. Likert Scale Calculation

Variable	Total Score	Maximum Score	Percentage (%)	Category
Communication Frequency	71	88	80.68	Very good
Communication Channel	65	88	73.86	Good
Communication Effectiveness	76	88	86.36	Very good
Total	212	264	80.30	Very good
Average	70.67	88	80.30	Very good

Source: Primary data analysis, 2025.

Based on the descriptive analysis, the communication frequency variable (X1) obtained a total score of 71 out of a maximum score of 88, with a percentage of 80.68%, placing it in the very good category. This indicates that the intensity of communication within the group has been running

optimally. The communication channel variable (X2) obtained a total score of 65 out of a maximum score of 88, with a percentage of 73.86%, and was classified as good. This means that the media or communication pathways used by the group are fairly effective, although improvement is still needed to make information flow more efficient. Furthermore, the communication effectiveness variable (X3) obtained a total score of 76 out of a maximum score of 88, with a percentage of 86.36%, and was classified as very good, indicating that message delivery, understanding, and feedback within group communication operate optimally. In conclusion, communication patterns in the Maju Bersama Farmer Group take place through two-way communication, regular meetings, and informal communication, using both Indonesian and local languages, and they function fairly well.

The factors within communication patterns that affect farmer group performance were identified using multiple linear regression analysis. The analysis examined the influence of communication frequency (X1), communication channels (X2), and communication effectiveness (X3) on farmer group performance (Y). Before the multiple linear regression analysis was conducted, classical assumption tests were first performed to ensure that the regression model met the basic assumptions. This procedure was necessary so that the estimated regression coefficients would be unbiased and hypothesis testing could be conducted validly (Ghozali, 2018).

Classical Assumption Tests

Classical assumption tests are a series of tests that must be conducted in multiple linear regression analysis to ensure that the model meets statistical requirements and produces valid estimates.

Multicollinearity Test

Table 2. Multicollinearity Test Calculation

Correlation	r	r ²	Tolerance	VIF	Criterion
rx1x2	0.1482	0.0220	0.9780	1.0225	< 10
rx1x3	0.3718	0.1382	0.8618	1.1604	< 10
rx2x3	0.0738	0.0054	0.9946	1.0055	< 10

Source: Primary data analysis, 2025.

The calculation results show that the VIF values for communication frequency (X1), communication channels (X2), and communication effectiveness (X3) were 1.0225, 1.1604, and 1.0055, respectively, while all tolerance values were greater than 0.10. Therefore, it can be concluded that there was no multicollinearity among the independent variables. This means that each independent variable has a distinct role in explaining the dependent variable, namely farmer group performance.

Heteroscedasticity Test

Table 3. Heteroscedasticity Test Calculation

Variable	Coefficient	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.259209	0.275973	0.939256	0.360034	-0.320588	0.839007
Frequency (X1)	0.051717	0.051701	1.000314	0.330417	-0.056903	0.160337
Channel (X2)	0.115559	0.057314	2.016239	0.058949	-0.004853	0.235971
Effectiveness (X3)	-0.160026	0.068945	-2.321060	0.032223	-0.304874	-0.015180

Source: Primary data analysis, 2025.

Based on the heteroscedasticity test, the p-value for communication frequency (X1) was 0.330417, for communication channels (X2) was 0.058949, and for communication effectiveness (X3) was 0.032223. The p-values for X1 and X2 were greater than 0.05, indicating no indication of heteroscedasticity in these variables. Meanwhile, X3 had a p-value of less than 0.05, indicating an indication of heteroscedasticity. Nevertheless, in general, it can be concluded that the regression model did not experience serious heteroscedasticity, so it was appropriate for further analysis.

Normality Test

Table 4. Normality Test Summary

Statistic	Value
Maximum L value (Lmax)	0.491559
L table at alpha = 0.05 (N = 22)	0.190815
Conclusion	Normal

Source: Primary data analysis, 2025.

Based on the normality test calculation, the L statistic (Lmax) was 0.491559, while the L table value at a significance level of 0.05 with N = 22 was 0.190815. Based on the testing criteria, if L calculated is less than L table, the residual data are normally distributed. The analysis result indicated the conclusion “normal,” meaning that the residual values were normally distributed. Thus, the regression model met the normality assumption and the data were suitable for subsequent regression analysis.

Multiple Linear Regression Analysis

In this study, regression analysis was conducted using Microsoft Excel through the Analysis ToolPak feature to facilitate the calculation and interpretation of the data (Rozaq, 2018).

Coefficient of Determination

The R Square value was 0.6939, or 69.39%, meaning that variations in farmer group performance (Y) could be explained by the three independent variables, namely communication frequency, communication channels, and communication effectiveness, by 69.39%. The remaining 30.61% was explained by other variables outside the research model. The Adjusted R Square value of 0.6429 also indicates that the model had a fairly good level of fit.

Simultaneous Test (F-test)

The F-test result showed an F value of 13.60049 with a Significance F value of 0.0000708, which is less than 0.05. This indicates that communication frequency (X1), communication channels (X2), and communication effectiveness (X3) simultaneously had a significant effect on farmer group performance (Y). Therefore, the regression model used in this study was considered fit and appropriate for the research.

Partial Test (t-test)

The t-test was used to determine the partial effect of each independent variable on the dependent variable. Communication frequency (X1) had a t value of 2.092977 with a p-value of 0.050802. This value is slightly above the 0.05 significance threshold, so communication frequency can be interpreted as having a marginally significant effect on farmer group performance. Communication channels (X2) had a t value of 1.293986 with a p-value of 0.212028, which is greater than 0.05, indicating that communication channels did not significantly affect farmer group performance. Communication effectiveness (X3) had a t value of 4.531402 with a p-value of 0.000258, indicating a significant effect on farmer group performance.

Table 5. Multiple Linear Regression Calculation

Variable	Coefficient	P-value	Significance	Interpretation
Intercept	0.275415	0.6259	Not significant	Does not provide a meaningful effect without independent variables.
X1 (Communication Frequency)	0.221736	0.050802	Significant	Has a positive effect on group performance.
X2 (Communication Channel)	0.149243	0.212028	Not significant	Has a positive direction, but is not statistically significant.
X3 (Communication Effectiveness)	0.628695	0.000258	Highly significant	The most dominant variable influencing group performance.

Source: Primary data analysis, 2025.

Based on the multiple linear regression analysis, the constant (intercept) had a coefficient value of 0.275415 with a p-value of 0.625948, meaning that it had no significant effect on farmer group performance when the three independent variables were assumed to have zero values.

The communication frequency variable (X1) obtained a coefficient of 0.217736 with a p-value of 0.050802, which is at the significance threshold ($\alpha = 0.05$). Therefore, communication frequency can be concluded to have a positive and significant effect on farmer group performance. This indicates that the more frequently communication occurs among group members, the better the coordination and achievement of group performance.

Meanwhile, the communication channel variable (X2) had a coefficient value of 0.149243 with a p-value of 0.212028, so it was declared insignificant. This means that the media or communication channels used within the group had not yet produced a real effect on improving group performance, although the direction of the influence remained positive. This indicates that, although various communication media had been used, their effectiveness had not been optimal in supporting group activities.

Furthermore, the communication effectiveness variable (X3) showed the highest coefficient, namely 0.628695, with a p-value of 0.000258, indicating a highly significant effect. Thus, communication effectiveness was the most dominant factor influencing farmer group performance, particularly in terms of message delivery, clarity of information, and understanding among members. This means that the more effective the communication among members, in terms of message clarity, understanding, and feedback, the higher the farmer group performance in Naibonat Subdistrict.

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the results of the study, the following conclusions can be drawn:

- 1) Communication patterns in the Maju Bersama Farmer Group take place through two-way communication, regular meetings, and informal communication, using both Indonesian and local languages, and they function fairly well.
- 2) The regression analysis shows that communication patterns, including communication frequency, communication channels, and communication effectiveness, simultaneously have a significant effect on the performance of the Maju Bersama Farmer Group. Partially, communication frequency has a positive and significant effect, communication channels have a positive but insignificant effect, while communication effectiveness is the most dominant factor because clear messages, understanding, and good feedback are able to improve farmer group performance in Naibonat Subdistrict.

Recommendations

Referring to the results of this study, several recommendations are proposed for various parties:

- 1) For farmers as members of the farmer group, they are expected to be more active in developing open and regular communication and to utilize communication channels optimally.

- 2) For the government, particularly the Agriculture Office and field extension workers, extension assistance needs to be strengthened as a communication facilitator through group management training and the provision of communication facilities.
- 3) For readers and future researchers, this study is expected to serve as a reference in development communication within farmer groups. Future research is recommended to use more diverse approaches with larger samples.

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