



FACTORS INFLUENCING THE COMMUNICATION BEHAVIOR OF OIL PALM PLANTERS IN PELALAWAN DISTRICT

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Abstract. Communication behavior is an attitude or action that is in a person to obtain the information he needs. Communication behavior can describe how the smallholders' businesses obtain information about farming as a consideration in making decisions for their farming. Oil palm is a leading commodity in Riau Province, Pelalawan Regency is the area with the third largest area of oil palm plantations. The purpose of this study was to analyze the factors that influence the communication behavior of oil palm planters in obtaining information in the Pelalawan District. This research was conducted in Pangkalan Kuras District and Langgam District in Pelalawan Regency. The number of respondents in this study was 140 people who were obtained using the purposive sampling method. The data that has been obtained are then analyzed using Structural Equation Modeling (SEM). The results showed that five factors influenced the planters' communication behavior. Internal characteristics had a negative influence on the farmer's communication behavior, external characteristics, and information sources had a positive influence, while the communication media and program communications had a positive and significant influence on the planters' communication behavior.

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INTRODUCTION

Pelalawan Regency has the third-largest plantation area in Riau Province, covering 306,977 hectares and producing 1,233,641 tons. (Badan Pusat Statistik Kabupaten Pelalawan, 2020). Issues that often occur with oil palm planters include limited capital, markets, and extension programs that have not been implemented as expected, which affects the development of programs as well as product marketing, resulting in the communication processes for development not running concurrently.

Oil palm planters, in conducting their business activities, communicate to gather the necessary information. Communication is a crucial dimension in the process of community development. Research (Hutabarat, 2017) stated that oil palm planters generally cannot access adequate information, whether about technology, input types, or input prices. The way planters communicate will influence their communication behavior. Oil palm planters in Pelalawan Regency still face challenges in receiving

extension services due to the infrequency of extension activities in the area. Researchers need to understand how information is communicated, both formally and informally. It is not easy to find the opinion of the leader, key networks operating in the community, and how the community sustains itself. Communication effectiveness between local planters and external institutions is also a critical factor.

The development of information and communication technology, such as computers and the internet, can bridge the information and knowledge scattered between those who have access to information and those who do not. The internet is one alternative that can be used to bridge the information gap. Information technology offers opportunities, one of which is an alternative to gaining knowledge in plantation management. Planters in various countries show different communication behaviors depending on their awareness of the latest technology, government policies, and other resources that support information and communication technology to reach rural areas where most planters live. (Surya, Satmoko, & Prasetyo, 2021). This research aims to analyze the factors influencing oil palm planters' communication behavior in obtaining information.

Compared to others, the novelty or uniqueness of this study is that it incorporates both internal and external characteristics, information sources, and media, as well as oil palm farming programs as factors that are suspected to influence communication behavior. Previous studies by (Oktavia, Widajanti, & Aruben, 2017) and (Fatmasari, 2015) Stated that communication behavior was influenced by age, education, land area, farming experience, farm group administrators' compensation, communication skills, and the ability to understand planters' desires and disseminate information that suggests program implementation.

METHOD

This research was conducted in two sub-districts, namely Pangkalan Kuras and Langgam Sub-districts in Pelalawan Regency. The sample in this study consisted of 140 respondents selected through purposive sampling from oil palm planters with the criteria of being independent oil palm planters, having received or participated in extension services, and being members of a farmer group. The data used in this study are primary and secondary. Primary data were collected through surveys and interviews using questionnaires. Secondary data were obtained from relevant institutions required for the research. The collected data were then tabulated and analyzed. This study used Structural Equation Modeling (SEM) analysis.

RESULT AND DISCUSSION

Validity and Reliability Test Result

The validity test and its reliability show the extent to which the measurement tool is used to measure what it is supposed to be. The validity testing was conducted with the help of a computer using the IBM SPSS Statistics for Windows version 21.0 program. In this study, validity testing was carried out on 140 respondents. The decision criteria are based on the calculated-r (Corrected Item-Total Correlation) > r-table value. In this study, the value of $df\ 140-2 = 138$; $\alpha = 0.05$, then it is found that the r-table value is 0.166. The data processing results show that all the question items are valid because they have a calculated-r (Corrected Item-Total Correlation) value > the r-table value of 0.166, thus allowing the process to continue to the next stage.

Reliability testing can be carried out on question items that are declared valid. A variable is said to be reliable or trustworthy if the answers to the questions are consistent. The instrument reliability coefficient is intended to see the consistency of the respondents' answers to the question items. Reliability testing is carried out with the help of a computer using the IBM SPSS Statistics for Windows version 21.0 program using Cronbach's Alpha, where the significance level applied is 5%. A variable is said to be reliable if the Cronbach's Alpha value ≥ 0.6 (Ghozali, 2008). The results of data processing

produce all question items declared reliable because they have a Cronbach's Alpha value > 0.6 . So that the question items in this research variable can be used and continued to the next stage

Testing Stages

a. Outlier Test

Outlier refers to an observation condition in a dataset with unique characteristics that appear significantly different from other observations, which emerges in extreme values either in a single variable or in a combination of variables. (Ghozali, 2008). Outliers consist of two types: univariate outliers and multivariate outliers.

A univariate outlier is an outlier caused by a related or dependent variable. If the dependent variable contains an outlier, then it is most likely that univariate outliers will occur in the data. Valid and reliable data will then undergo an outlier test. The outlier test is conducted using Descriptive Statistics analysis in the IBM SPSS Statistics version 21.0 program, where the data are transformed into Z-scores to obtain the minimum and maximum values.

Good data has Z-scores ranging from -2.58 to 2.58. The data is categorized as an outlier if the Z-score exceeds these values. (Artha, Wigena, & Erfiani, 2022) Explain that outlier data is data that is far from the mean. The general rule is that a Z-score less than -4 or more significant than +4 indicates the data has extreme value. After testing, 10 respondents were found to have values above the threshold and were excluded from the research data to prevent residual normality issues. After this treatment, the data was re-tested for outliers, resulting in data free from outliers.

A multivariate outlier is an outlier caused by a set of independent variables. If any independent variable has extreme values, it can be considered a multivariate outlier. The multivariate outlier test uses the Mahalanobis distance criterion at a probability level (p) = 0.001 with 26 indicators, resulting in $\chi^2(0.001, 26) = 54.052$.

Data is considered a multivariate outlier if it has a Mahalanobis Distance value greater than 54.052. Based on the analysis of the AMOS text output, the maximum value in the Mahalanobis table is 45.176. This value is below 54.052, meaning the data does not exhibit a multivariate outlier across all the indicators and can proceed to the next testing stage.

b. Data Normality

The normality test is conducted to determine whether the data that has been distributed follows a multivariate normal distribution or not. The normality test is performed by examining the statistical value called the Z value. Normality is a requirement that must be met when conducting research using SEM analysis because a good regression model should have data that is usually or close to customarily distributed. (Ghozali, 2008). The sample size will influence the Z value, with larger samples resulting in a more significant Z value. The Z value will be compared to a critical value determined by a significance level of 0.01, resulting in a critical value of ± 2.58 .

Univariate normality is assessed by looking at the critical ratio (c.r.) values for skewness and kurtosis, with the threshold values below ± 2.58 . Multivariate normality is assessed by looking at the multivariate value at the bottom of the table. Data is considered to follow a multivariate normal distribution if the multivariate value is < 2.58 .

The output assessment of normality shows that there are critical ratio values above 2.58 or below -2.58 on one side, but on the other side, there are critical ratio values that are much smaller than these thresholds, so it can still be considered normal or acceptable (Singgih, 2012). For multivariate normality, the critical ratio value is -0.987, which is below -2.58, so the data meets the multivariate normality requirement, allowing the analysis to proceed to the next stage.

c. Structural Equation Modelling Analysis

This structural equation modeling analysis tests the causal relationships between variables in this study. The analysis is comprehensive and covers all the variables and indicators present. The data processing results for the complete SEM model analysis are shown in Figure 1.

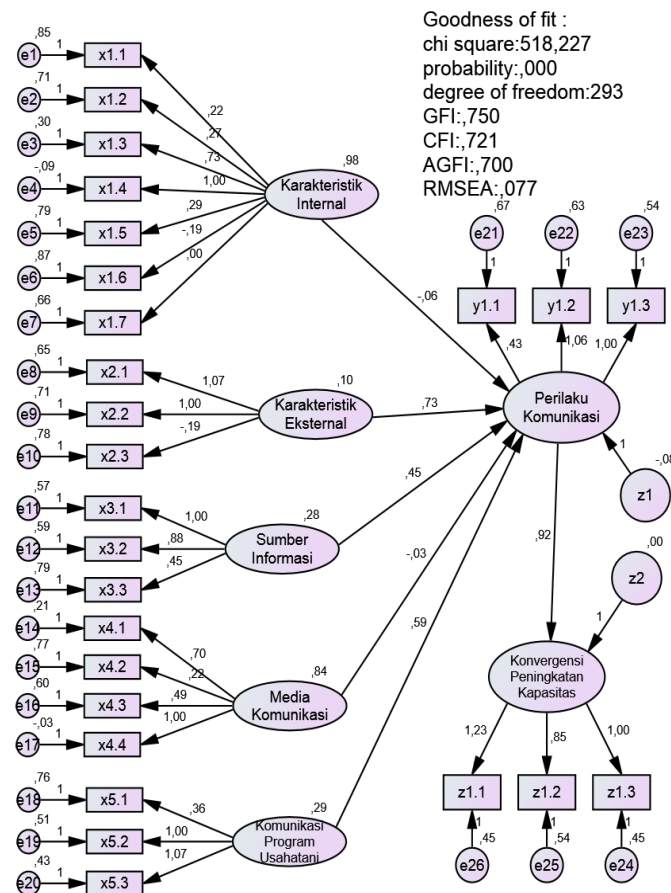


Figure 1. Initial Structural Analysis Model.

Source: Research Data

The critical ratio values in the regression weight table in the AMOS output show several variables that do not have significant relationships because they are below the value of 1.96 ($\alpha = 0.05$), such as the relationship of external characteristics to communication behavior with a c.r. Value of 1.074, as well as the relationship of communication media to communication behavior and internal characteristics to communication behavior. The probability values greater than 0.05 do not meet the required significance level of <0.05 . Based on these results, it can be concluded that several indicators have not yet been able to explain the latent and manifest variables in this study, so further treatment is needed.

d. Assessing Authentication Problems

After conducting the structural model testing, the next step that needs to be done is to assess the identification problem. The identification problem refers to the inability of the developed model to produce unique estimations. If this problem occurs, it is advisable to consider adding more constructs to the model (Putlely, Lesnussa, Wattimena, & Matdoan, 2021). This step is carried out to examine the standard error, variance error, and correlations between estimation coefficients that fall within a range

that could lead to identification problems. Based on the results discussed earlier, some values fall within a range indicating identification problems and a problem in the structural model, which shows the presence of a Heywood case in errors z1, e4, and e17.

A Heywood case refers to a negative variance value, which can occur due to suspected errors in the model specification, the presence of outliers in the data, small sample sizes (<100 or <150), only two indicators per latent variable, or the existence of correlations in the population approaching 0 or 1 (causing under identification). Based on the results obtained, the data has been cleared of outliers, the sample size is >100, and there are more than two indicators per latent variable, but there is a correlation value approaching 0 or 1. A good model should not contain a Heywood case.

e. Evaluation of Goodness of Fit Criteria

A model can be accepted if it meets the criteria for goodness of fit. This step is carried out to assess whether the constructed model satisfies the assumptions of SEM. In this stage, a test is conducted on the model's fit based on various goodness of fit criteria. (Putlely, Lesnussa, Wattimena, & Matdoan, 2021).

Table 1. Model feasibility testing index for Structural Equation Modeling

Goodness of Fit Index	Cut of Value	Analysis Result	Evaluation
Chi-Square	<333.921	518.227	Marginal
Significance Probability	≥ 0.05	0.000	Marginal
GFI	≥ 0.9	0.750	Marginal
CFI	≥ 0.9	0.721	Marginal
RMSEA	≤ 0.08	0.077	Good
AGFI	≥ 0.9	0.700	Marginal
TLI	≥ 0.9	0.690	Marginal

Source: Primary Data (Analyzed), 2025

The testing results conducted on this structural model cannot be considered good because out of the eight criteria tested, only one criterion meets the recommended cutoff value. It can, therefore, be concluded that the structural model built is not yet fit because it does not meet the cutoff value, and several indicators cannot explain their latent variables, as well as variables that do not influence this study. Therefore, this structural model must be modified to meet the criteria for a good model.

f. Model Modification

Heywood's case is not allowed to exist when building an SEM model. (Ghozali, 2008). In the analysis results of the structural model conducted, a negative error value occurred (Heywood case), so treatment is required to eliminate it. There are two ways to remove the Heywood case: deleting the indicator with the negative error value from the model or constraining the model by assigning a small positive value to the error term. The author assigned the smallest positive variance value to the negative error term, 0.005 (for $\alpha = 0.05$) in this study.

Many goodness-of-fit criteria are still not met, so the model constructed is not good and cannot be accepted. The SEM model needs to be modified to meet the model feasibility test. According to (Latan, 2013), a model that does not meet the testing criteria needs modification or re-specification. Model modification in the AMOS program can be done by examining the Modification Indices (MI) output. The MI output for covariance with the largest values must be correlated with each other (Latan, 2013). The model modification in this study was performed by correlating those with the largest modification indices until the constructed model met the criteria. The result of the model modification is shown in Figure 2.

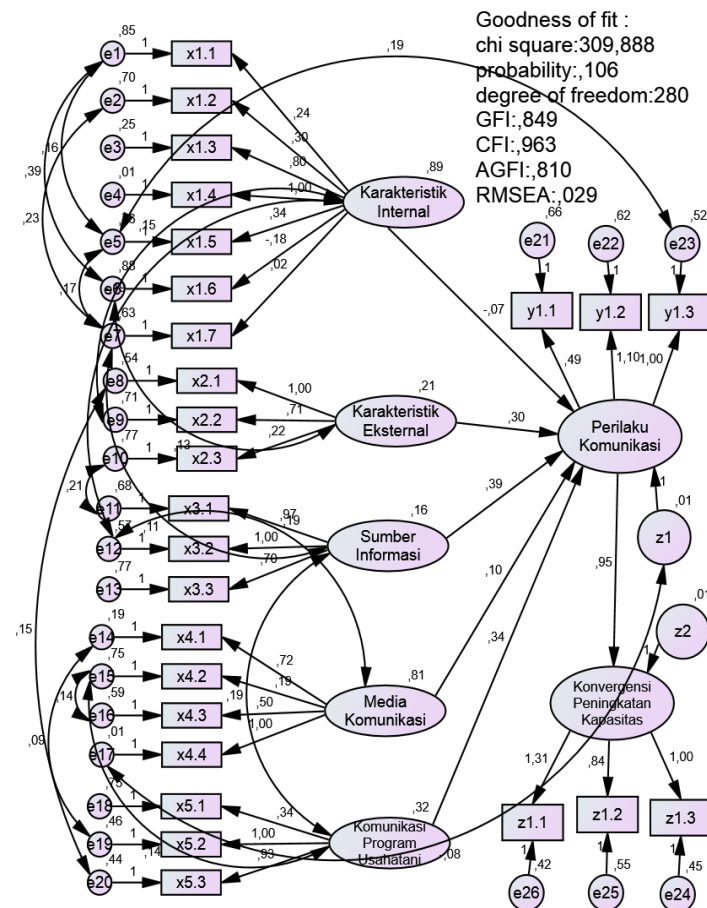


Figure 2. Modified Structural Model Analysis

Source: Research Data

The evaluation results of the SEM model built after modification, as shown in Figure 2, produced a model without any Heywood case. The feasibility test conducted on the modified model shows changes from the initial model before the modification.

Table 2. Index of model feasibility test for the modified structural model analysis

Goodness Of Fit Index	Cut Of Value	Analysis Result	Evaluation
Chi-Square	<320.028	309.888	Good
Significant Probability	≥ 0.05	0.106	Good
GFI	≥ 0.9	0.849	Marginal
CFI	≥ 0.9	0.963	Good
RMSEA	≤ 0.08	0.290	Good
AGFI	≥ 0.9	0.810	Marginal
TLI	≥ 0.9	0.957	Good

Source: Primary Data (Analyzed), 2023

The modified model met the goodness of fit criteria, although two criteria were still not in the "good" category. However, they are very close to the "good" category, namely the GFI and AGFI values, which are in the marginal category because they did not meet the established cutoff value. Nonetheless, the model can be categorized as good and therefore accepted.

g. Model Interpretation

Based on the analysis, the planters' internal characteristics influence their communication behavior. (Sasongko, 2014) Stated that internal characteristics such as age, education, income, land area, years of experience, and level of cosmopolitanism influence planters' communication behavior. Based on Figure 2, the internal characteristics affecting planters' communication behavior have a value of -0.07, meaning that for every one-unit increase in the internal characteristics of the planters, their communication behavior will decrease by 0.007 units. This is because several internal characteristic indicators do not significantly affect communication behavior, such as years of farming experience and level of cosmopolitanism.

According to results on the field, on average, the farmers have over 16 years of farming experience because the research area is transmigration. Planters with extensive farming experience tend to have low communication behavior because they believe their farming abilities are already good, so they are less receptive to new technologies or information. They focus mainly on farming activities based on their previous experiences. This is also due to their age, as they have reached an older age, making it challenging to adopt new technologies.

The low level of cosmopolitanism among planters is due to their limited reading skills, based on field results. Only a few planters, typically younger ones, who often read things related to their farming business read and seek information online, as there are few books with agricultural information available in the area. Most planters focus on their farming activities, leaving little time to interact with other planters.

External characteristics also affect planters' communication behavior with a value of 0.30, meaning that for every one-unit increase in external characteristics ability, the planters' communication behavior will increase by 0.30 units. This is consistent with the (Wardhani, 2006) Opinion that both internal and external influences shape planters' behavior. In this study, the external characteristics of planters observed include leadership influence, social systems, and environmental support in using technology.

Planters' communication behavior is influenced by the source of information by 0.39 units. This means that for every one-unit increase in the source of information, planters' communication behavior will increase by 0.39 units. In this study, the information sources were measured by three indicators: the farmer's knowledge about the source, the ease of access to information sources, and the availability of information sources. All three indicators significantly affect the source of information.

Communication media influence planters' communication behavior by 0.10 units, meaning that every one-unit increase in communication media will increase planters' communication behavior by 0.10 units. The media used by planters for communication is a measurement indicator in media communication. The farmer's ability to use communication media also affects media communication. Based on the results, planters have good communication media, where they own smartphones, mobile phones, and televisions. However, only some planters can use them effectively. Only a few planters can maximize the use of smartphones, as many of them are elderly and find it challenging to use them. Additionally, the internet network support in some rural areas is insufficient for practical use.

Based on the analysis, the communication of the oil palm farming program affects planters' communication behavior by 0.34 units. This means that every increase in the oil palm farming program communication by one unit will increase planters' communication behavior by 0.34 units. The indicators of program sources, program implementation, and program benefits all significantly affect the communication of the oil palm farming program. According to the results, the program sources come from the government, private sector, and self-help. In practice, the program received by planters is quite suitable because some programs are short-term and unsustainable. Some planters benefit from the

program, which enhances their ability and capacity. However, many planters have not yet felt the program's benefits because some have not been able to adopt the program effectively.

Planters' communication behavior influences the convergence of communication for planters' capacity building. Based on the results depicted in Figure 2, an analysis value of 0.95 was obtained. This means that every increase in planters' communication behavior by one unit will increase the communication convergence for capacity building by 0.95 units.

Based on the analysis, several indicators influence planters' communication behavior, with each variable contributing a different value. Internal characteristics have a negative influence, while external characteristics, i.e., information sources, communication media, and oil palm farming program communication, have positive and significant influences. Some studies on behavior change show that the process of behavioral change in planters does not occur linearly.

Planters' communication behavior is influenced by their knowledge, which they gain from education, their cosmopolitan level in obtaining information, their ability to acquire information, their ability to use communication media, and the knowledge gained from the programs they participate in. It is also influenced by their skills, which can be seen from their farming experience, age, ability to use and take advantage of communication media to obtain the information they need, and the skills gained from the programs they participate in, as well as their attitude toward receiving information and adopting new technologies (Damanik & Meilvis, 2020).

Factors Affecting the Communication Behavior of Planters

Planters' communication behavior varies from one farmer to another due to differences in their knowledge, attitudes, and skills. Several factors also influence planters' communication behavior. Based on the analysis in Table 4, the factors affecting planters' communication behavior are illustrated.

According to the structural equation modeling analysis conducted, the factors affecting the communication behavior of planters were identified. Variables have a significant relationship if the probability value is between $0.05 < \text{probability} < 0.10$, with a significance at a probability < 0.05 . The smaller the probability value, the more significant the relationship is.

Table 4. Results of Decision Testing

			Estimate	S.E.	C.R.	P	Description
Communication Behavior	←	External Characteristics	0.302	0.157	1.925	0.054	Accepted
Communication Behavior	←	Information Sources	0.391	0.205	1.903	0.057	Accepted
Communication Behavior	←	Communication Media	0.099	0.049	2.008	0.045	Accepted
Communication Behavior	←	Farming Program Communication	0.342	0.147	2.324	0.02	Accepted
Communication Behavior	←	Internal Characteristics	-0.069	0.041	-1.683	0.092	Accepted

Source: Primary Data (Analyzed), 2023

a. Internal Characteristics of Planters (X1) towards the Communication Behavior of Oil Palm Planters in Pelalawan Regency

The internal characteristics of planters (X1) have a negative and quite significant relationship with the communication behavior of planters. Based on Table 4, the probability value of the internal characteristics of planters against the communication behavior of planters is 0.092, and the coefficient of regression (c.r.) is -1.683, which is above 1.645 ($\alpha = 0.10$), with an estimated value of -0.069. This result indicates that the internal characteristics of planters negatively affect the communication behavior

of planters, meaning that for every increase of one unit in the internal characteristics of planters, the communication behavior of planters will decrease by 0.069 units.

Age, years of education, income, land area, activity in groups, farming experience, and cosmopolitan level are indicators of the internal characteristics of planters. Based on the results obtained, most of the planters in the study area are over 40 years old and have low education, which affects their characteristics. Low education influences the attitude and mindset of planters, in line with Mardikanto's opinion in (Damihartini & Jahi, 2005) The planters' education influences their way of thinking and mindset when carrying out farming activities. The higher the education, the more dynamic the farmer becomes.

The length of farming experience has a negative value toward the internal characteristics of planters at -0.177, which means the longer a farmer's farming experience, the lower their internal characteristics will be. This is because, in this research, planters with more years of farming experience tend to be more resistant to adopting new technologies and innovations. They rely more on their previous experiences, which affects their communication behavior, consistent with the research by (Kusumo, Rasmikayati, & Mukti, 2018), which found that planters with more extended farming experience tend to do things based on their past experiences, making it difficult to accept new things.

b. External Characteristics of Planters (X2) towards the Communication Behavior of Oil Palm Planters in Pelalawan Regency

The external characteristics of planters (X2) have a positive and quite significant relationship with the communication behavior of planters. Based on Table 4, the probability value of the external characteristics of planters against the communication behavior of planters is 0.054, and the coefficient of regression (c.r.) is 1.925. This shows that the external characteristics of planters have a significant and positive effect on their communication behavior. With an estimated value of 0.302, which is categorized as a weak correlation, every increase of one unit in the external characteristics will increase the communication behavior of planters by 0.302 units.

The influence of leadership, social systems, and environmental support in accessing information are indicators of the external characteristics of planters. Based on the results, the influence of leadership is categorized as moderate. Planters' group leaders can influence planters and provide information, ideas, and knowledge related to farming activities. However, most leaders have not been able to establish relationships with external parties and engage all members. According to (Windo, 2020), leadership affects motivation and behavior. A leader with good leadership qualities can motivate their members, influencing their behavior.

c. Information Sources (X3) towards the Communication Behavior of Oil Palm Planters in Pelalawan Regency

Information sources (X3) have a positive and quite significant relationship with the communication behavior of planters. Based on Table 4, the probability value of information sources against the communication behavior of planters is 0.057, with the coefficient of regression (c.r.) of 1.903, indicating that information sources have a significant and positive effect on the communication behavior of planters. With an estimated value of 0.391, every increase of one unit in information sources will increase the communication behavior of planters by 0.391 units.

The need for information to support farming activities is crucial. Farmers have several reasons for utilizing various information sources, depending on time, location, and the type of commodity they are farming. In the study, the sources of information included the planters' knowledge about information sources, the availability of information sources, and the relevance of the information to the planters' needs.

The information sources used by planters are mass media and interpersonal communication. (Far-Far, 2011) States in his research that interpersonal communication is the most commonly used source of information for planters, with some using mass media. The difficulty of accessing mass media in remote locations leads planters to engage more in interpersonal communication with fellow planters, farmer groups, and extension workers. Limited access to mass media such as newspapers, magazines, or books, along with the lack of internet support in most areas of the study, makes planters prefer interpersonal communication due to these limitations. The internet, a readily available source of information, is not easily accessible to oil palm planters in Pelalawan Regency. Only a tiny portion of planters know what the Internet is, how to use it, and use it frequently, while most planters are aware of the Internet but do not know how to use it. There are even planters who are unaware of what the Internet is, let alone how to use it

d. Communication Media (X4) towards the Communication Behavior of Palm Oil Planters in Pelalawan District

Based on Table 4, it is known that the probability value of communication media towards the communication behavior of planters is 0.045, and the coefficient of regression (c.r.) value is 2.008, indicating that communication media has a significant and positive effect on the communication behavior of planters. The estimated value of 0.099 means that for every increase of one unit in communication media, the communication behavior of the farmer will increase by 0.099 units.

Media is important in communication because communication media are tools or intermediaries to convey messages or information to the recipient. In this study, communication media is viewed from the media used by the planters, the media used in extension services, the planters' ability to use the media, and the number of media owned by the planters.

Planters' ability to utilize media is still low, which is influenced by the characteristics of the planters themselves, as stated by (Mulyani, Suryantini, & Setyorini, 2006), that the level of media utilization is influenced by the user's characteristics, such as education, occupation, age, and level of cosmopolitanism. The internal characteristics of the planters are generally low, which affects their use of communication media. Most planters have adequate communication media but are unable to use them optimally. The utilization of media is also influenced by the knowledge and experience that people have (Ruyadi, Winoto, & Komariah, 2017).

The media used by extension workers is usually in the form of brochures or direct presentations, with only a few extension workers using video or social media. Printed media such as brochures are considered more efficient, easy to understand, and can be read repeatedly. Sulaiman in (Ruyadi, Winoto, & Komariah, 2017) States that media that do not match the knowledge and language of planters are unlikely to be adopted by them, so the use of appropriate extension media is very influential in shaping planters' communication behavior.

The media owned by planters will have a positive impact if they can utilize it well, as stated by (Wijaya, Sarwoprasodjo, & Febrina, 2019) The presence of communication/information media becomes valuable when it is used properly, and its presence is important to support activities. Planters who own communication/information media have a greater chance of benefiting from it than those who do not. The more communication media they have, the better the benefits they will gain.

e. Palm Oil Farming Program Communication (X5) towards the Communication Behavior of Palm Oil Planters in Pelalawan District

Table 4 shows that the probability value of palm oil farming program communication towards the communication behavior of planters is 0.02. The coefficient of regression (c.r.) value is 2.324, so it can be concluded that the communication of the palm oil farming program (X5) has a significant and positive relationship with the communication behavior of planters. With an estimated value of 0.342,

this means that for every increase of one unit in palm oil farming program communication, the communication behavior of the planters will increase by 0.342 units.

Farming programs in the form of training efforts aim to improve planters' quality, knowledge, attitude, and skills, which will influence the planters' behavior. Farming programs are an important variable in forming the competence of planters. (Anwas, 2013). Most of the programs received by planters in the research area are self-funded, and the programs from the government are mostly not sustainable, so the benefits of these programs are not fully realized. There are also programs from private companies, as the area is near a company. If the programs received by planters are implemented well, they will provide good and maximum benefits for the planters. However, some planters have yet to apply the knowledge they gained from the programs they participated in. so it does not impact them significantly.

CONCLUSION

Five variables influence the communication behavior of oil palm planters in obtaining information: internal characteristics, external characteristics, information sources, communication media, and the communication of the oil palm farming program.

The internal characteristics of planters negatively influence the planters' communication behavior. External characteristics have a positive and quite significant influence on planters' communication behavior, as does the information source, which has a positive and quite significant influence on the communication behavior of planters. Meanwhile, communication media positively and significantly influence planters' communication behavior. Furthermore, the oil palm farming program communication also positively and significantly influences planters' communication behavior.

Extension workers should use communication media that are easy to understand and effective for planters in conducting outreach. Extension workers need to provide internet training and how to use it for oil palm planters, as the internet now provides a wealth of information that planters need.

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