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FARMERS' PERCEPTIONS OF SELECTING OIL PALM PLANTS DURING RE-PLANTING IN KAMPUNG DELIMA JAYA, KERINCI KANAN DISTRICT, SIAK REGENCY

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ABSTRACT

Oil palm is a plant that has high value as a source of income for the community. But oil palm plants have a maximum age to get optimal results. If after the production age the plant produces but will not get optimal results. The purpose of this study was to determine the characteristics of farmers who are carrying out re-planting activities and to determine the perception of farmers in choosing oil palm as a crop or business during the re-planting period in Delima Jaya Village, Kerinci Right District, Siak Regency. Sampling in this study was carried out using the purposive sampling technique with the sampling criteria being farmers who carried out re-planting activities and chose oil palm cultivation. The number of samples in this study amounted to 100 people. The analysis used in this research is factor analysis. From the results of this study, it can be said that the perception of farmers in choosing re-planting activities is a high selling price (X5) with a Communalities value of 82.8. Based on the results obtained, it can be concluded that what determines a farmer in carrying out tre-planting activities is the selling price of the oil palm. This is because the older the oil palm plant, the lower the selling price because the oil contained in TBS is less. So that farmers prefer to replant their oil palm plants compared to not replanting

Keywords: *factor analysis, farmer's perception, re-planting*

BACKGROUND

Palm oil is one of the important and strategic commodities in Riau because of its large role in encouraging the people's economy, especially for plantation farmers. Riau Province oil palm plantations nationally occupy the top position in Indonesia with an area of 2.2 million hectares or 25 percent of the total area of Indonesian oil palm plantations. Of the 2.2 million hectares of Riau oil palm plantations, Riau Province's CPO production was recorded at 7,045,632 tons and the Joint Operational Plant (PKO) recorded 1,761,408 tons (Ditjenbun, 2021). The price of palm oil commodity products (palm oil) is high, oil palm plantation farmers certainly want their oil palm plants to remain at maximum harvest conditions so that the sales of their Fresh Fruit Bunches (FFB) can bring in a fairly high income (Ditjenbun, 2021). The life of the oil palm farmer community is very dependent on the selling price of the oil palm, while the high price will greatly affect the age of the plants, the use of fertilizers, and the care of the oil palm plants. The condition of the land at the

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research site is very supportive so that the maintenance of these plants is very dependent on the age of the oil palm (Bagio et al., 2020).

Oil palm is a plantation crop that is the prima donna that many farmers cultivate. This means that many farmers are reluctant to carry out replanting activities because farmers think that if they carry out replanting activities they will not have farmers who should carry out replanting but are reluctant to do so because their income is reduced or none at all (Ramlia et al., 2020). In one Delima Jaya village there are 160 farmers who have to replant. Farmers are also not separated from oil palm farming even though they already have other businesses from integrated agricultural activities (Hairiyah et al., 2020). Farmers still have the idea that oil palm is still the prima donna in their area. In this study, the farmers who were the object of research were replanting, there were two groups, namely oil palm farmers who were PIR (People's Nucleus Companies) with PTPTN V Riau and oil palm farmers who were members of cooperatives. Of all the crops and integrated agricultural activities, many farmers still carry out or cultivate oil palm plants as a business while they also carry out re-planting activities (Hutasoit et al., 2015). They still carry out oil palm farming even though they do it when carrying out replanting activities. The way they usually do this is to insert oil palm plants into the plants that will be replanted. So that when the re-planting activity of the inserted oil palm plants can already produce. Or they carry out oil palm farming activities in their yards. The productivity of oil palm plants depends on the age of the oil palm plants. In years 0 to 3, oil palm plantations are immature. Starting in year 4, oil palm plantations begin to produce and then continue to increase until they reach a peak in year 14. The plantation production leveled off until the 18th year, and after that it tended to decline until the 25th year, even in the 30th year the low oil palm production was no longer sufficient to meet the needs of farmers' households (Statistic, 2019).

Replanting is one of the efforts to increase the productivity of Indonesian oil palm plantations. This effort is considered as a very effective activity to encourage increased production. There are several considerations in determining when farmers should do rejuvenation, namely: a) The age of the plant is old (generally 19-25 years), physiologically, old plants like this have decreasing productivity, so they are no longer seen as providing economic benefits and can even be a loss, and b) Difficulty in carrying out harvesting. In addition to old age, oil palm plants are also getting taller, making it difficult to carry out harvesting. In addition to the positive impact of oil palm rejuvenation, there are a number of new problems that have emerged, following the problems of farmers that have been resolved (Pedoman Peremajaan Perkebunan Kelapa Sawit, 2016). In the household economy of oil palm farmers, there are important problems, namely the income of plasma farmers which depends on the productivity of the oil palm plant, and the productivity of the plantation depends on the age of the oil palm plant. At that time, farmers are obliged to meet the needs of family life and also prepare a number of costs for rejuvenating their oil palm plantations.

Of all the crops and integrated farming activities, many farmers still carry out or cultivate oil palm plantations as a business while they also carry out re-planting activities. They continue to carry out oil palm farming even though they do it during replanting activities. That's how they usually insert oil palm plants on the plants to be re-planted. So that when the re-planting activities of the inserted oil palm plants can produce. Or they carry out oil palm farming activities in their yards. In this study, what became novelty included: the location where the research was conducted had never conducted

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research on farmers' perceptions of re-planting, research that was usually carried out was only related to re-planting activities but had never been seen from a farmer's perspective.

RESEARCH METHODS

The research conducted in March – October 2022 with the research location in Kampung Delima Jaya, Kerinci Kanan District, Siak Regency. The area used as the location of this research is the area of oil palm farmers who are partners of PTPN V. So this research becomes a reference for the company to become a company reference in giving directions to farmers to carry out re-planting activities. The research was conducted by direct application to the community, the implementation technique of farmers will carry out re-planting activities and choose oil palm as a crop as long as their oil palm plants carry out re-planting activities.

The research method used is a survey method, which is an interview and observation technique or direct supervision of farmers who carry out re-planting activities and choose oil palm plants as a side business during the re-planting period. This research was carried out so that researchers get what farmers consider in re-planting activities. Re-planting will greatly assist farmers in increasing their income because re-planting activities will improve the quality of the fresh fruit bunches of the oil palm. So by doing this research will be an opening way to establish communication with farmers so that they want to carry out re-planting activities

The whole object of research is called the population (Arikunto, 2019). the population in this study are farmers who carry out re-planting activities. The population used in this study were farmers in Delima Jaya Village, Kerinci Kanan District, Siak Regency, so the total population was 160 farmers. (Sugiyono, 2017) part of the number and characteristics possessed by the population is called the sample. Sampling in this study was carried out using the purposive sampling technique with the criteria that the farmers carried out re-planting activities and chose oil palm plants as a side business as long as they carried out re-planting activities. The number of farmers is 100 farmers.

Analysis technique to find factors that influence the selection of oil palm as a crop cultivated during re-planting activities using weighting and scoring techniques. The weighting of the criteria related to commodities is determined based on the level of importance of the oil palm re-planting activities. Factor analysis is a multivariate analysis method based on correlations between variables. Factor analysis is one of the statistical techniques that can be used to provide a relatively simple description by reducing the number of variables called factors. Factor analysis is used to reduce data or summarize, from many old variables that have been changed to a few new variables called factors, and still contain most of the information contained in the original variables (Ghozali, 2011).

Factor analysis in multivariate analysis is classified as an interdependence analysis (interdependence technique) where the entire set of interdependent relationships is examined. Variables in one group will have a high correlation while variables in different groups will have a low correlation. In Supranto's writing, it is said that factor analysis is used to reduce data/variables. Factor analysis is used in the following conditions: Recognizing or identifying the underlying dimensions or factors, which explain the correlation between a set of variables. Recognizing or identifying a new set of variables that are not correlated (independent) which are less in number for replace an original set of correlated variables in subsequent multivariate analyses. Recognizing or

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identifying an important set of variables from a larger set of variables to be used in subsequent multivariate analysis. There are two ways that can be used in conducting factor analysis, especially factor score coefficients, namely Principal component analysis (PCA) and Common factor analysis (CFA) (Supranto, 2012).

RESULT AND DISCUSSION

From the results of data processing obtained from filling out questionnaires that have been distributed to both farmers and extension workers, the following results were obtained: the data were processed using factor analysis from the SPSS program.

KMO and Bartlett's Test

The results of the values from the KMO and Bartlett's Test, the first data entered into the application shows the number 43.3% can be seen in table 1 and this figure is not in accordance with the provisions where the analysis will continue if the KMO and Bartlett's Test values are more than 50%. So that further follow-up is needed, namely by removing several indicators whose MSA value is less than 50%. After this is done, namely the disposal of the missing indicator, the KMO and Bartlett's Test values are obtained to be 52.0% and this is in accordance with the provisions so that the analysis can be continued. The results can be seen in table 2. The KMO results are the first step of the factor analysis used. The results obtained indicate whether this analysis can be continued or not. From the results of table 10 it shows that the KOM value is less than 0.5, so several indicators must be removed until a KMO value of 0.5 or more is obtained. Table 2 shows that the KMO value is 0.520. so that factor analysis can be continued for the next step.

Table 1. KMO and Bartlett’s Test 1

Description		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.433
Bartlett's Test of Sphericity	Approx. Chi-Square	410.552
	Df	210
	Sig.	.000

Table 2. KMO and Bartlett’s Test 2

Description		Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.520
Bartlett's Test of Sphericity	Approx. Chi-Square	264.359
	Df	136
	Sig.	.000

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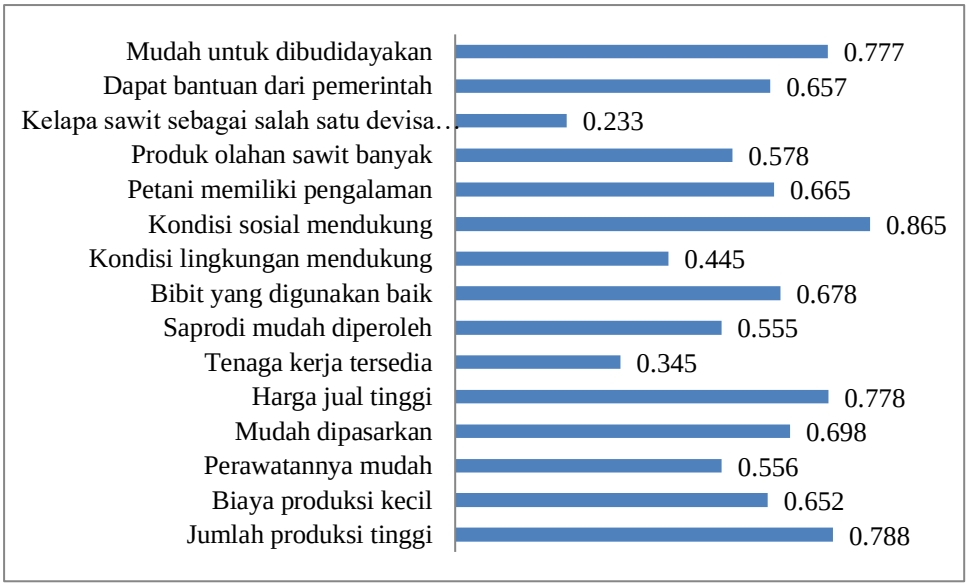
Vol 7 (1): 176-182, March 2023

Measures of Sampling Adequency (MSA)



Picture 1. MSA Value 1

The results obtained from this analysis show that the Anti Image Correlation value which is less than 50% will be removed and by eliminating the indicator whose anti-image correlation value is less than 50% will increase the KMO and Bartlett's Test values. From this result, the previously entered indicators amounted to 15 indicators, after deleting indicators whose value was less than 50%, 12 indicators were left. From this calculation the missing indicators include: Supportive environmental conditions, Supportive social conditions, Palm oil as one of the country's foreign exchange.

From Picture 1 it is known that there are 3 indicators whose value is below 0.05 so that indicator is removed to increase the KMO value according to tables 1 and 2. The indicators removed include available labor (0.345), supportive environmental conditions (0.445) and oil palm which became the State's foreign exchange (0.233). this happens because farmers do not feel that the three indicators are the determining indicators for them. Labor at the study site is available and can even be obtained easily, "environmental conditions that support" this indicator is indeed one of the determinants but according to the farmers this is not a significant thing because the environment can be improved by using fertilizers, while "oil palm which is become the country's foreign exchange" this indicator is not a determinant for farmers because for farmers it is the selling price of the palm oil product.

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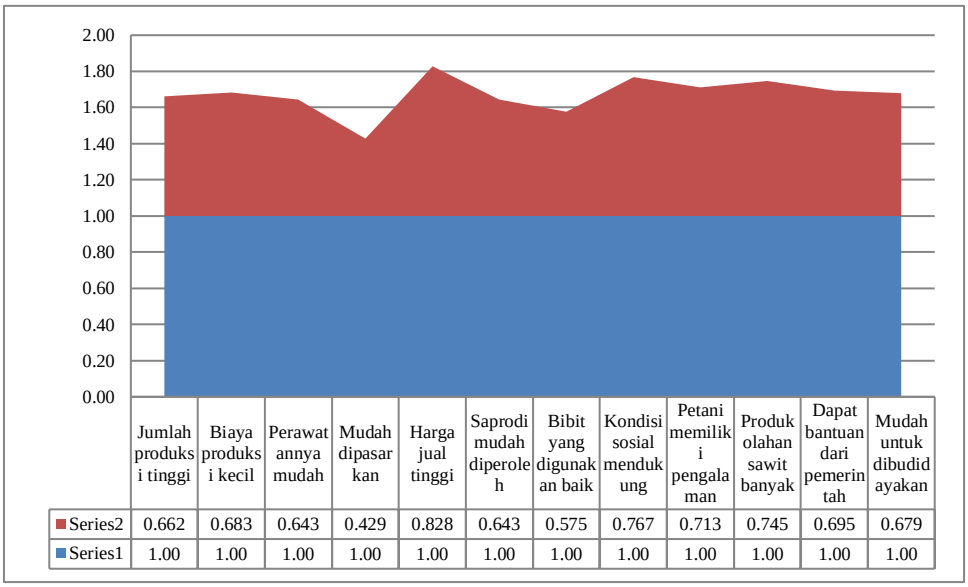
Communalities



	Jumlah produksi tinggi	Biaya produksi kecil	Perawatannya mudah	Mudah dipasarkan	Harga jual tinggi	Saprodi mudah diperoleh	Bibit yang digunakan baik	Kondisi sosial mendukung	Petani memiliki pengalaman	Produk olahan sawit banyak	Dapat bantuan dari pemerintah	Mudah untuk dibudidayakan
Series2	0.662	0.683	0.643	0.429	0.828	0.643	0.575	0.767	0.713	0.745	0.695	0.679
Series1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Picture 2. Communalities Value

From picture 2 it is known that the determining indicator that influences farmers in carrying out re-planting activities is the high selling price, which is 0.828. this happens because the farmers who are the respondents are core farmers from PTPN V, where the company will guarantee that the core farmers who carry out re-planting activities will receive assistance and also for the results to be obtained will get a high selling price. So this is what makes farmers want to carry out re-planting activities. In addition, the high age of the plant will also affect the selling price, the higher the age of the plant, the lower the selling price. The results obtained in this table show that the indicator with the highest value is the indicator based on the farmer's perception. From these results, the highest value is the indicator High selling price with a value of 82.8.

CONCLUSION AND SUGGESTION

From the results of this study, it can be said that the perception of farmers in choosing re-planting activities is a high selling price with a communalities value of 82.8. Based on the results obtained, it can be concluded that what determines a farmer in carrying out tre-planting activities is the selling price of the oil palm. This is because the older the oil palm plant, the lower the selling price because the oil contained in TBS is less. So that farmers prefer to replant their oil palm plants compared to not replanting. From the results obtained, researchers provide suggestions related to the perception of farmers in carrying out oil palm re-planting activities that are influenced by the high selling price of palm oil.

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Vol 7 (1): 176-182, March 2023

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