

THE WELFARE ANALYSIS OF OIL PALM SMALLHOLDER FARMERS IN PANGKALAN BANTENG SUB-DISTRICT, CENTRAL KALIMANTAN

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To cite this article:

Setyawan, H., Kurniawan, I., Setiawan, K., & Listianto, H. (2020). The Welfare Analysis of Palm Oil Farmers in Pangkalan Banteng Subdistrict, Central Kalimantan District. *Buletin Penelitian Sosial Ekonomi Pertanian Fakultas Pertanian Universitas Haluoleo*, 22(1), 43 - 50. doi:<http://dx.doi.org/10.37149/bpsosek.v22i1.13292>

Received: August 03, 2020; **Accepted:** August 25, 2020; **Published:** August 31, 2020

ABSTRACT

Oil palm is one of the plantation crops in Indonesia which has the fastest development compared to the other plantation crops, one of them is in the oil palm smallholder farmers sector. However, this development has not been completely and evenly distributed, so that the condition of oil palm plantations in the world is considered not in harmony with oil palm smallholder farmers in rural areas. The level of harmony can be measured based on the level of welfare of the existing oil palm smallholder farmers. The research objective was to determine the welfare of oil palm smallholder farmers in Pangkalan Banteng, Central Kalimantan. The methods used were survey and direct field observation. The farmer who became the research respondents were selected using purposive sampling. The number of respondents was 100. The questionnaire was measured using the Likert scale. The results of the study showed that most of the oil palm farmers in Pangkalan Banteng were in a prosperous standard of living, as evidenced by the fact that oil palm farming was able to meet the consumption needs of all family members, the ownership of savings for the future, the ownership of valuable and durable goods, as well as able to provide social assistance and permanent homeownership. However, some farmer families were still below the prosperous category due to the low productivity of their farming and the small area of land they have, so their income was still low.

Keywords: farmers' income; oil palm farmers; oil palm plantation; social; welfare

INTRODUCTION

Oil palm is a plantation crop that has the fastest development and has the largest area and production compared to the other plantation commodities (Setyawan et al., 2020); (Euler et al., 2017). Oil palm plantations are divided into three groups, namely large state plantations, large private plantations, and smallholder plantations (oil palm farmers). First is the State Large Plantation. Such plantation is owned by the Indonesian government and managed by the Ministry of State-Owned Enterprises (BUMN). The second is large private plantations. This plantation has the largest land area and the highest production compared to the other plantation groups. The last one is the smallholder plantations which contain oil palm farmers. Oil palm farmers are "farmers who plant oil palm" interspersed with other crops, and some workers are their own families whose land area is less than 50 ha.

Smallholders contribute more than 40% of the total oil palm plantations in Indonesia. Farmers are not bound to send their crops to certain factories or institutions (Santika et al., 2019). Smallholders have an important role in maintaining the continuity of the production cycle, especially the supply chain for fresh fruit bunches to palm oil mills that spread throughout Indonesia (Raharja et al., 2020). Smallholders can get the most from their oil palm farming. Smallholder farmers who are able to implement a sustainable agricultural system properly, can increase their productivity to be higher so that they can increase their income (Jelsma et al., 2017); (Santika et al., 2019). Increased income and welfare is a target that must be achieved by the smallholder farmers in rural areas. Increased production can add a significant amount of income to oil palm smallholder farmers (Martin et al., 2015).

Oil palm smallholder farmers in Pangkalan Banteng are spread across 17 villages, but until now there has been no information showing their level of welfare. Based on this, research is needed to obtain clear information about the level of welfare of oil palm smallholder farmers in Pangkalan Banteng. The result of this research can be used as a reference or a source of information for those in need, then apart from being a source of information, there are also many other benefits. Apart from being able to become the main source of livelihood for the family, oil palm farming is also able to contribute to rural development, reduce poverty and contribute to improve the community welfare (Euler et al., 2017).

The research objective was to determine what factors make oil palm smallholder farmers in Pangkalan Banteng categorized to have a prosperous life or not. It is expected that this study can be used as a benchmark in efforts to improve the welfare of smallholder oil palm farmers

MATERIALS AND METHODS

The research was conducted in Pangkalan Banteng Sub-District, West Kotawaringin District, Central Kalimantan Province. The methods used were survey and direct field observation. Research respondents were determined by purposive sampling method, in which the determination of the respondents as research sample is in accordance with the research objectives (Kerlinger, 1986). The number of respondents in the study was 100, who then filled out a research questionnaire consisting of welfare level factors including plantation ownership, family food consumption, savings ownership, ownership of durable goods, social assistance, and permanent housing ownership. The measurement of variables in the questionnaire was done using a Likert scale with an answer interval of 5, namely strongly agree, agree, doubt, disagree, and strongly disagree.

The respondent's data is then calculated using the following formula:

$$P = \frac{f}{n} \times 100\%$$

Information :

P : percentage

F : the frequency of each answer

N : total ideal score (Sugiyono 2017)

Table 1. Percentage of interval classes

Interval class	Criteria
81% - 100 %	Strongly Agree
61 % - 80 %	Agree
41 % - 60 %	Doubt
21 % - 40 %	Disagree
0 % - 20 %	Strongly Disagree

RESULTS AND DISCUSSION

Oil palm smallholder farmers who became the research respondents were spread across 17 villages located in Pangkalan Banteng Sub-District, West Kotawaringin District, Central Kalimantan (Figure 1). The villages in Pangkalan Banteng District have different oil palm land areas for oil palm plantations. The largest area of oil palm was in Amin Jaya Village, while the smallest area was in Sido Mulyo Village, which was 798 ha and 20 ha (Figure 1).



Figure 1. Village map in Pangkalan Banteng sub-district (Central Bureau of Statistics for West Kotawaringin District 2018)

Oil palm land area has a significant effect on the amount of production, and the amount of production has an influence on the income and welfare of the farmers. Welfare is a dynamic condition where all social, physical, mental, and spiritual needs are met, showing that the family can live according to its environment and allows children to grow and develop and get the protection needed for the formation of quality attitudes, mental and personality. Welfare is inseparable from income. The income obtained from oil palm farming is a supporting factor for a farmer whether he is living in prosperity or not. Meanwhile, the results of the analysis of farmer household welfare were measured by income, consumption expenditure, food security, as well as physical and spiritual health (Tambo & Wünscher, 2017).

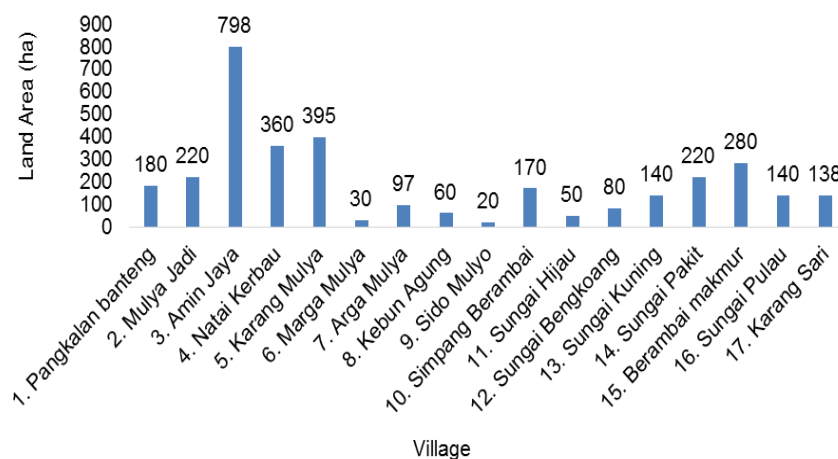


Figure 2 area of oil palm plantation in Pangkalan Banteng

1. Family Food Consumption

One way to assess the welfare of farmers is through the family food consumption. Prosperous farmers can generally meet the family food needs. Food needs are not only concerning the quantity but also the quality. Prosperous farmers will be able to meet the family's food needs at least 3 times a day with balanced nutrition and protein (4 healthy 5 perfect).

The welfare measurement of "family food consumption" was based on the results of the questionnaire to 100 respondents using the Likert scale interval. The results of the questionnaire were in the form of percentage so that the percentage of families that had their daily consumption fulfilled and families whose daily consumption needs were not fulfilled was obtained. The percentages are presented in Figure 3.

The results of the analysis showed that the food consumption of the farmer families showed that 65% of the farmers "agreed" that with their income as oil palm farmers, they can meet their food needs for 3 times a day. As much as 28% of them answered "strongly agree", 7% answered "doubt" and no one answered "disagree" or "strongly disagree". This figure indicates that oil palm farming was able to meet the family's daily consumption needs.

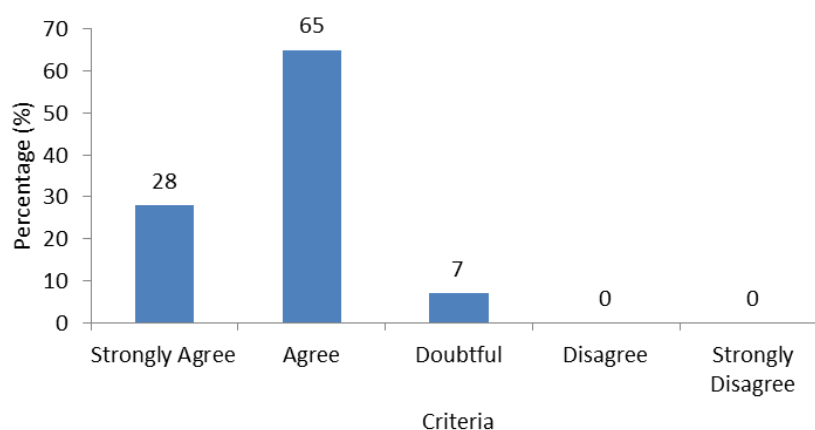


Figure 3 family food consumption

Consumption in a family can measure the welfare of the family. A family that is able to meet their consumption needs at least three times a day with standard of 4 healthy 5 perfect food is a family that is already at the first or most basic level of welfare, where the family does not lack in terms of daily consumption. Furthermore, the aspect of household welfare of oil palm farmers is the expenditure on farm maintenance and the health of family members (Mi et al., 2020); (Danso-Abbeam & Baiyegunhi, 2018). Healthy living indicates that the need for nutritious food is fulfilled and the family lives a clean life (Li et al., 2015). Adequacy in consumption has a protective effect on family health (Hassan et al., 2019). Based on the chart above, all oil palm farmers were able to meet the consumption needs of their family. One of the most important aspects of income growth is an increase in the amount of food consumed, the more variety of food consumed indicates an increase in income (Ren et al., 2019). This indicates that oil palm farmers in Pangkalan Banteng were quite prosperous in terms of meeting their daily family consumption needs.

2. Ownership of family savings in the future

The welfare measurement of "Family savings in the future" was based on the results of a questionnaire to 100 respondents using the Likert scale interval. The results of the questionnaire were in the forms of percentages, so we obtained the percentage of families that had savings and families that did not have savings. The percentages are presented in Figure 4.

The ownership of family savings for the future can also be used as a measure of the welfare of a family. Families who have savings are considered to be able to meet daily needs and have more income so that the extra income can be saved and can be used in the future. Figure 4 shows a graph that is quite different from Figure 1. In the second statement, the results of the analysis showed that 58% answered "Strongly Agree" that by farming oil palm "The family has savings that can be used for future collateral". Meanwhile, 32% answered "agree", 4% answered "doubt", 6% answered "disagree" and no one answered "strongly disagree". Based on the graph above, almost all farmers had savings to be used in the future, but there were still 6% who did not have savings. This shows that not all oil palm farmers had savings that can be used in the future.

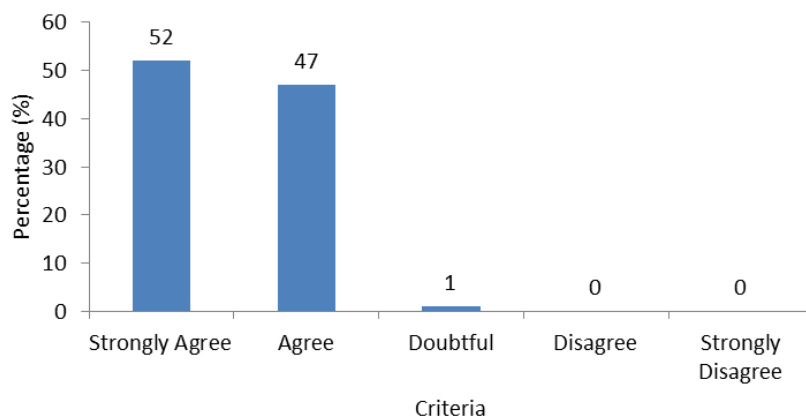


Figure 4 ownership of savings

Savings are an investment that indicates a family has more income. Saving can illustrate that the life needs is fulfilled (N'dri & Kakinaka, 2020). Savings are plans that are prepared for the future, can be used to pay for family needs both in the present and in the future (Raijas, 2011). Most of them argued that family, money, and health are life satisfaction, where health is important among the rich, while income is important for the middle and lower class (Margolis & Myrskylä, 2013). Savings are also useful for children's education costs in the future (Cheatham & Elliott, 2013). High income has a positive correlation to saving, while low income has a negative correlation (Jo, 2014). So it can be concluded that the oil palm farmers in Pangkalan Banteng who had an area of less than 2 ha on average did not have savings because their income was only enough for daily needs and buying primary goods.

3. Ownership of durable goods

The welfare measurement of "Ownership of durable goods" was based on the results of a questionnaire to 100 respondents using the Likert scale interval. The results of the questionnaire were in the form of the percentage, so we obtained the percentage of families who had durable goods and families who did not have durable goods. The percentages are presented in Figure 5.

The ownership of durable goods can be used as a measure of the welfare of the family of oil palm smallholder farmers because the ownership of durable goods cannot be separated from sufficient income. A family who is able to buy durable goods means that they already have more income so that it does not have an impact on sufficient consumption for family members.

Figure 5 shows a graph that is quite dominant on the criteria of "strongly agree" and "agree", the results of the analysis showed that 52% answered "Strongly Agree", 47% answered "agreed", while 1% answered "doubt", and no one answered "disagree" or "strongly disagree". Based on the graph above, it shows that the ownership of durable goods to be proud of (TV, cellphone, motorcycle, refrigerator, fan) are the primary need of society today. People prioritize ownership of durable goods that they can be proud of compared to having savings for the future.

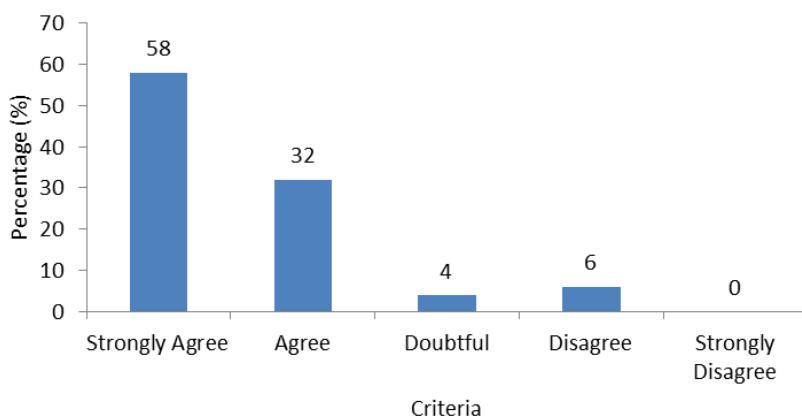


Figure 5 ownership of durable goods

The ownership of durable goods supports activities in social life, a small example of ownership of televisions and cellphones provides a picture of the outside world to families and children (Toros et al., 2018). Parents still have to provide supervision to children regarding what should be accessed through television or cellphone programs, because children will actively use these items (Tung et al., 2019). The head of the household has a significant role in the health of his family so that the head of the household must also get income from other than oil palm farming (Abdullah et al., 2019). However, most farmers only relied on their farming business and did not do other work to increase the household income.

4. Providing social assistance

The welfare measurement of "Providing social assistance" was based on the results of a questionnaire to 100 respondents using the Likert scale interval. The results of the questionnaire were in the form of percentage so that the percentage of families who were able to provide social assistance and those who cannot afford it can be obtained. The percentages are presented in Figure 6.

Providing social assistance can be a measure of the welfare of a family because a family that is able to provide assistance to others is a family whose all needs of their family members are met (not lacking) so that they can provide assistance to others, be it for orphans, building mosques, and others.

Figure 6 shows a graph that is very dominant in the "agree" criteria. The analysis showed that 11% answered "Strongly agree", 74% answered "Agree", 14% answered "doubt", and no one answered "strongly disagree". Based on this graph, it shows that the people who cultivated oil palm in the Pangkalan Banteng Sub-District had a very high social life. Most of the oil palm farmers in Pangkalan Banteng did not have savings for the future, but the farmers voluntarily provided social assistance to orphanages, nursing homes, or mosque construction. Providing social assistance gets short and long term benefits by gaining inner satisfaction and providing great social benefits, providing social assistance is also not detrimental because it has a positive impact on common interests (Lemieux & Milligan, 2004).

Providing social assistance is also an effort to prevent social exclusion because a good environment will have a good impact (Zhang, 2016); (Sanjeevi et al., 2018). Orphans who receive social assistance show better future prospects and more enthusiasm for learning to achieve their goals (Weitoff et al., 2008). In addition to orphaned children, social assistance is also beneficial for the elderly in nursing homes and providing other social assistance (Spagnoletti et al., 2015); (Pellizzari,

2006). So that providing social assistance is a success and inner satisfaction for the oil palm farmers in the Pangkalan Banteng.

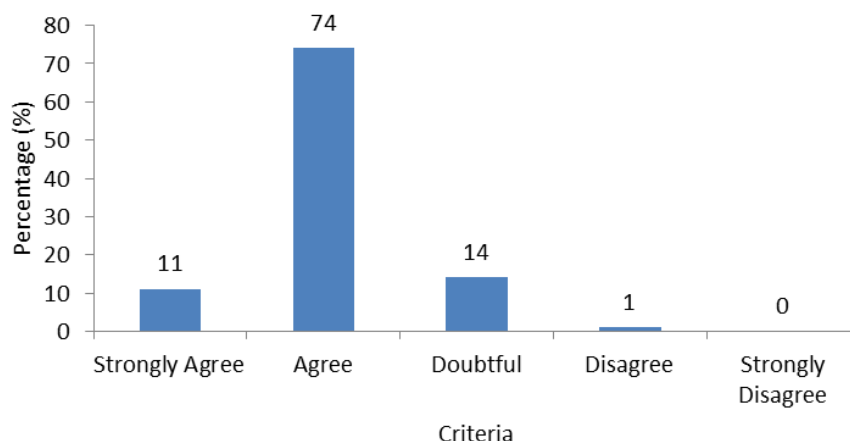


Figure 6 provides social assistance

5. Permanent House Ownership (the Wall)

The welfare measurement of "permanent house ownership (wall)" was based on the results of a questionnaire to 100 respondents using the Likert scale interval. The results of the questionnaire were in the form of percentages, so we obtained the percentage of families who had permanent houses and families who did not have permanent houses. The percentages are presented in Figure 7.

The ownership of a permanent home is the most obvious measure to determine family welfare. A family that is able to build a permanent house is a family that is able to fulfill all the necessities of life of its family, such as sufficient consumption, ownership of motorized vehicles, ownership of other durable goods, ownership of savings and able to help others.

Figure 7 shows a graph that is quite dominant in the "agree" criteria. The analysis showed that 39% answered "strongly agree", 58% answered "agree", 1% answered "doubt", 2% answered "disagree" and no one answered "strongly disagree". Based on the graph above, it shows that permanent housing is one of the top priorities for oil palm farmers in Pangkalan Banteng. The ownership of a permanent house is the most obvious illustration that an oil palm farmer has a decent and prosperous life, but there were still some farmers who did not have a permanent house. This is because the price of houses or materials to build houses is currently very expensive (Dudek et al., 2019).

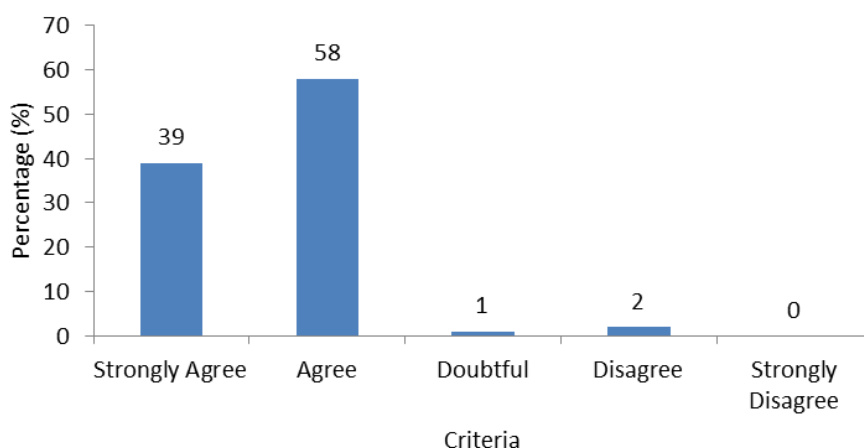


Figure 7 has a permanent house (wall)

The price of houses or increasingly expensive materials has an effect on a family to delay building a house (Liu et al., 2020). Some farming families prioritize their income to buy items that are considered primary needs, such as the latest clothes, television, motorbikes, and cellphones. Even though having a permanent home for the family is an application of every income earned and having a permanent house is the main thing for a family (Beimer & Maennig, 2020). Household welfare is generally measured using three indicators, namely income, education, and health, having a

permanent house indicates that a family has more income for their daily needs (Diallo & Moussa, 2020).

CONCLUSIONS

Most of the oil palm farmers in Pangkalan Banteng are already at a prosperous level of life, as evidenced by the average percentage results of five measurement categories; "the fulfillment of consumption needs of all family members, ownership of savings, ownership of durable valuables, able to provide social assistance and permanent housing ownership" which are in the class of "strongly agree" and "agree" with a percentage value of more than 50%.

ACKNOWLEDGMENTS

Gratitude are conveyed to the Head of Yogyakarta Plantation Community Academy, Fellow Researchers, and Authors, as well as all lecturers and staffs at the Yogyakarta Plantation Community Academy.

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