

## ANALYSIS OF INCOME AND WELFARE OF OIL PALM FARMERS IN TANJUNG PASIR VILLAGE SOUTH KUALUH DISTRICT NORTH LABUHANBATU REGENCY

<sup>1</sup>**Yudi Prayoga**

<sup>1</sup> Faculty of Economics and Business, University of Labuhanbatu  
Email: prayogayudi03@gmail.com

<sup>2</sup>**Fitra Syawal Harahap**

<sup>2</sup> Fakultas Sains dan Teknologi, Universitas Labuhanbatu  
Email: <sup>2</sup>fitrasyawalharahap@gmail.com

Correspondence Author: prayogayudi03@gmail.com

**Abstract:** *This study aims to analyze: oil palm farming income, household income, household income allocation, the proportion of household food consumption expenditure, the proportion of household non-food consumption expenditure, and the level of welfare of households oil palm farmers. The research was carried out in May-June 2024 in Tanjung Pasir Village, South Kualuh District, North Labuhanbatu Regency. The population of this study was 62 people with a sample of 38 people using Slovin Formula taken at Simple Random. Data analysis used is qualitative and quantitative descriptive analysis. The results showed income from oil palm farming an average of Rp 5,779,825 / month. Household income comes from oil palm farming, other farming, non-farming, and income from household members. The average household income is Rp 8,607,017 / month. The allocation of household income to food needs per month amounted to Rp 1,324,421 or 15.35% and non-food needs amounted to Rp 7,282,596 or 84.61%. The proportion of household food consumption expenditure per month of 15.39% means that 15.39% of household expenditure is allocated to food. The proportion of non-food consumption expenditure of households per month is 84.61%, which means that 84.61% of household expenditure is allocated for non-food expenditure. Based on the proportion of food consumption (PKP) and the proportion of non-food consumption (PKNP) of oil palm farmer households, it is concluded that the level of welfare of oil palm farmer households in Tanjung Pasir Village, South Kualuh District, North Labuhanbatu Regency is classified as a prosperous household..*

**Keywords:** Consumption, Palm Oil, food, income, North Labuhanbatu

## INTRODUCTION

Agricultural development aims to increase farmers' income and welfare through increasing agricultural production. This increase in agricultural production is not only to meet the raw materials for domestic industries that continue to grow but also aims to increase foreign exchange from agricultural exports. One of the steps that can be taken to increase the contribution of this agricultural subsector is through plantation crop production (Arifin, 2006).

One type of plantation crop whose results are exported and currently contributes significantly to the country's foreign exchange earnings is palm oil commodities. Palm oil plantations are a type of long-term business. As an annual plant (Perennial Crop), palm oil is known for its immature plant period (TBM) which varies in length, ranging from 2-4 years depending on factors that affect the growth of palm oil.

Palm oil is one of the commodities of the North Labuhanbatu plantation sub-sector (North Labuhanbatu Central Statistics Agency, 2024). One type of plantation crop whose results are exported and currently contributes significantly to the country's foreign exchange earnings is palm oil. Palm oil plantations are a type of long-term business. As an annual

crop (Perennial Crop), palm oil is known for its immature plant period (TBM) which varies in length, ranging from 2-4 years depending on the factors that influence the growth of palm oil.

Palm oil has a high economic value because oil palm fruit can be made into several semi-finished products such as Crude Palm Oil (CPO) and Palm Kernel Oil (PKO) (Syafrianti et al., 2024). On the other hand, environmental problems are closely related to coconut plantations. Family welfare is a dynamic condition of a family with all physical, material, mental, spiritual and social needs met, which allows the family to live normally in accordance with their environment and allows children to grow and develop and obtain the protection needed to form a stable and mature mental attitude and personality as a quality human resource (Bapermaskb: 2010/2011). Meanwhile, from a different view, it is stated that a prosperous family is a family that is formed based on a legal marriage, is able to meet proper spiritual and material life needs, is devoted to God Almighty, has a harmonious, harmonious and balanced relationship between members and between families with society and the environment (Law No. 52/2009). The level of welfare is a concept used to express the quality of life of a society or individual in a region at a certain time period. The concept of welfare is relative depending on how each individual assesses welfare itself. Prosperous for someone with a certain income level cannot be said to be prosperous for others (Suyanto, 2014).

Based on the problems above, the study aims to analyze the income of oil palm farming businesses, analyze the income of oil palm farmer households, identify the allocation of income of oil palm farmer households, analyze the proportion of food consumption expenditure of oil palm farmer households, analyze the proportion of non-food consumption expenditure of oil palm farmer households, analyze the level of welfare of oil palm farmer households.

## LITERATURE REVIEW

### Definition of Income

Revenue is generally defined as the result of a company. Revenue is the lifeblood of a company. It is so important that it is very difficult to define revenue as an accounting element in itself. Basically, revenue is an increase in profit, such as profit, revenue is a process of the flow of creation of goods and/or services by a company during a certain period of time. In general, revenue is expressed in monetary units (Theodurus: 2000) Revenue can also be interpreted as an increase in assets that can result in an increase in capital but not due to an increase in capital from the owner or not debt but rather through the sale of goods and/or services to other parties, because the revenue can be said to be a counter-performance obtained for services that have been provided to other parties (Kusnadi: 2000)

### Types of Income

According to Jaya (2011), income is broadly classified into three categories. a. Salary and wages, which are rewards received after the person has done work for others which are given within one day, one week or one month. b. Income from one's own business is the total value of production results minus the costs paid and this business is a business owned by oneself or one's own family, the rental value of one's own capital and all these costs are usually not taken into account. c. Income from other businesses, which are income obtained without devoting labor and this is additional income, including income from renting out assets owned, interest on money, donations from other

parties, pension income, and others. While the types of income according to their acquisition can be divided into two: a. Gross income is the result of selling merchandise or the amount of sales turnover obtained before deducting expenses and other costs. b. Net income is the receipt of sales results minus the purchase of materials, transportation costs, levies, and food costs or total income where the total of revenue is reduced by the total cost. b. In this study, the income that will be sought by the researcher is the type of income from the business itself (farmers) in the form of profit from selling the cabbage production itself. This income can also be classified into net income because, farmer income is obtained from the total income received from the total amount of income (sales turnover) obtained after deducting the purchase of seeds, labor costs, the price of fertilizer used by farmers, and other costs or total income where the total income (revenue) is reduced by the total cost (cost).

## RESEARCH METHODS

The research method uses a survey method. The survey method is a method in achieving the truth of the available phenomena and getting a real explanation, both regarding social institutions, trade, and the order of an organization or region [25]. The source of research data is in the form of primary data and secondary data. Primary data collection is carried out directly with field surveys and interviews with oil palm farmers in Tanjung Pasir District, while secondary data collection is obtained by accumulating data received from institutions related to the researcher's problems including literature studies by studying from books, journals, articles, and various official information such as Indonesian Plantation Statistics, BPS North Labuhanbatu Regency, and the local government.

The population of the study was oil palm farmers in Tanjung Pasir District, North Labuhanbatu Regency. The population of this study was 62 people with a sample of 38. The sampling technique was carried out by researchers intentionally (purposive sampling) which considered that respondents in the area were more homogeneous in terms of land ownership and application of facilities and infrastructure, and based on the age of oil palm plants. Determination of the sample in the study used the Slovin formula [26], so that a sample of 40 respondents was obtained which would be selected randomly. The analysis method used qualitative and quantitative descriptive. Qualitative descriptive analysis functions to interpret the results of the analysis by adding explanations and understanding, while quantitative descriptive analysis is an analysis in the form of numbers describing statistical calculations, and functions to determine the income and welfare level of oil palm farmers in Tanjung Pasir District, North Labuhanbatu Regency. The data processing method used the SPSS Statistical Product and Service Solutions tabulation method and the welfare level analysis tool according to

### 1. Income of Palm Oil Farmers

#### a. Total costs incurred

$$\text{Rumus: } TC = TFC + TVC$$

Description:

TC = Total cost (total cost)

TFC = Total fixed cost (total fixed cost)

TVC = Total variable cost (total variable cost).

b. Total revenue obtained

$$\text{Rumus: } TR = Y \cdot P_i$$

Description:

TR = Total Revenue (total income)

Y = Production obtained

P<sub>y</sub> = Product Selling Price.

c. Income

$$\text{Track: } TR - TC$$

Information:

$\pi$  = Total Income earned by the Company

TR = Total Income received by the Company

TC = Total Costs incurred by the Company

## 2. Total Income of Palm Oil Farmers

The total income of oil palm farmers is the sum of income from on-farm income, off-farm income, and non-farm income from oil palm farming and family income from outside farming.

with the following formula:

$$Prt = P_{usahatani} + P_{offfarm} + P_{nonfarm}$$

Description:

Prt = Farmer's household income per year

P<sub>usahatani</sub> = Farm business income

P<sub>off farm</sub> = Income from farming but outside of farming activities

P<sub>non farm</sub> = Income outside of farming

## 3. Level of Farmer Welfare

The level of farmer welfare from consumption or expenditure is measured using the criteria according to Gilarso (1994) as follows: (a) If the food spent is > 75% of the farmer's family income per year, then the level of welfare is low; (b) If the food spent is 40 - 75% of the farmer's family income per year, then the level of welfare is moderate; (c) If the food spent is < 40% of the farmer's family income per year, then the level of welfare is high.

## RESEARCH RESULT

Oil palm (*Elaeis guineensis* Jacq.) is one of several plants that produce oil for commercial purposes. The world's need for palm oil in 2012 was 52.1 million tons, and in 2020 it is estimated to increase to 68 million tons. In 2024, Indonesia will become the world's first producer with a production of 34 million tons from a total world production of approximately 62 million tons and exports of 25 million tons from total exports from various countries in the world, which is approximately 46 million tons with total domestic consumption of 9.47 million tons (USDA, 2017).



Farmer family income is often distinguished according to its sources, namely from the agricultural and non-agricultural sectors. Agricultural sector income is obtained from farming (on farm) and non-farming (off farm), while non-agricultural income is obtained by relying on the skills and energy of farmers. Sources of household income for oil palm farmers are obtained from oil palm farming, other farming, non-farming and income from household members. Where oil palm farming income is income derived from the farming itself. Other farming income is farming income derived from rice farming, wallet, pond business, hunting, fishermen and others.

Non-farm income is income derived from non-agricultural sources such as construction workers, parking attendants, entrepreneurs, teachers, officials, security guards and others. Household member income is income derived from children, wives and other members. Income from oil palm farming is greatly influenced by the amount of production. In certain months, oil palm production increases and there is also a decrease in the amount of FFB production. The following is the analysis data of income/year of oil palm farming in Tanjung Pasir Village, North Labuhanbatu District, presented in Table 1.

**Table 1. Average income/year of oil palm farmers from fresh fruit bunches in Tanjung Pasir Village, North Labuhanbatu District**

No.	Description	Rate-rate	Per hectare
1	Production (Kg)	48.965,13	22.256,88
2	Receipts (Rp)	82.516.941	37.507.000
3	Variable Cost (Rp) :		
	a. Workflow	10.848.948	4.931.340
	b. Production Costs	1.923.816	874.461
4	Fixed Cost (Rp) :		
	a. Land Tax	79.816	36.28
	b. Depreciation of Equipment	306.46	139.3
5	Total Cost (Rp) (3+4)	13.159.040	5.981.381
6	Income/year (Rp) (2-5)	69.357.901	31.526.318
7	Income/month (Rp)	5.779.825	2.627.193

Source: Primary Data After Processing, 2024

Based on Table 1, it shows that the average area of oil palm land owned by farmers is 2.2 hectares. The average production of fresh fruit bunches of oil palm is 48,965.13 kg with an average income per year of Rp 69,357,901 while the average income per month is Rp 5,779,825.

### Household Income

Oil Palm Farmers Household income of oil palm farmers is obtained based on farmer income derived from oil palm farming. While those derived from other farming businesses such as wallets, ponds, hunters and fishermen. As for those derived from and non-farming businesses such as builders, parking attendants, entrepreneurs, teachers/civil servants and security guards. As well as income derived from household members, be it wives, children or other household members such as income derived from entrepreneurship, PT employees or employees. The following is the analysis data of income/month of oil palm farmer households in Tanjung Pasir Village, Kualuh Selatan District, North Labuhanbatu Regency, as seen in Table 2.

**Table 2. Average monthly income of oil palm farmer households in Tanjung Pasir Village, South Kualuh District, North Labuhanbatu**

No	Type of Income	Average (Rp/Month)	Percentage (%)
1	Palm oil	5.779.825	67.15
2	Other Farming Businesses	861.403	10.01
3	Non Usahatani	523.684	6.08
4	Household Members	1.442.105	16.76
	Amount	8.607.017	100

Source: Primary Data After Processing, 2024

Based on Table 2, it shows that the household income of oil palm farmers comes from income from oil palm farming, other farming businesses, non-farming businesses and income from household members with an average income of Rp 8,607,017/month. The largest income comes from oil palm farming which is then followed by income from household members, other farming businesses and non-farming businesses.

#### Allocation of Household Income of Oil Palm Farmers

Household income allocation is defined as household income allocated for food and non-food needs. Expenditures for consumption made by households include expenditures for consumption of food such as basic necessities, side dishes, vegetables, fruits, drinks and others. While expenditures for non-food consumption such as fuel, electricity, credit, savings, health costs and others. The following data on household income allocation of oil palm farmers in Tanjung Pasir Village, Kualuh Selatan District, North Labuhanbatu Regency are shown in Table 3.

**Table 3. Average monthly income allocation of oil palm farmers' households in Tanjung Pasir Village, Kualuh Selatan District, North Labuhanbatu Regency, 2024.**

No.	Production Type	Rate-rate (Rp)	Percentage (%)
<b>A</b>	<b>Food :</b>		
1	Basic Materials	323.894,74	3,76
2	side dish	308.328,95	3,58
3	Vegetables	53.684,21	0,62
4	Fruit	42.342,11	0,49
5	Spice	233.513,16	2,71
6	Drink	87.236,85	1,01
7	Snacks	54.184,21	0,63
8	Cigarette	217.631,21	2,53
	<b>Amount</b>	<b>1.324.421</b>	<b>15,39</b>
<b>B</b>	<b>Nope. Food</b>		
1	Electricity	101.736,82	1,18
2	Gas	105.815,79	1,23
3	fuel	224.736,84	2,61
4	Health Costs	108.157,89	1,26
5	Cost of education	985.131,58	11,45

6	Clothes	93.421,05	1,08
7	Bath and Washing Supplies	87.315,79	1,01
8	Credit	408.815,79	4,75
9	Recreation	37.105,26	0,43
10	Home Improvement	20.131,58	0,23
11	Savings	5.110.254,58	59,37
<b>Amount</b>		<b>Amount 7.282.596</b>	<b>84,61</b>

Source: Primary Data After Processing, 2024

Based on Table 3, it shows that the allocation of household income of oil palm farmers for food per month is Rp 1,324,421 or 15.39%. While the allocation of income used for non-food is Rp 7,282,596 or 84.61%.

### Welfare Level of Oil Palm Farmer Households

The level of welfare is a concept used to express the quality of life of a society or individual in a region at a certain time period. The concept of welfare is relative, depending on how each individual assesses welfare itself. Prosperous for someone with a certain income level cannot be said to be prosperous for others.

Welfare is a measuring point for society which means that it has been in a prosperous condition. The definition of welfare itself is a human condition where people are prosperous, healthy, and peaceful, so that to achieve that condition the person needs an effort according to their abilities. Economists see welfare as an indication of individual income (flow of income) and purchasing power of society. Based on this understanding, the concept of welfare has a narrow meaning because by only seeing income as an indicator of economic prosperity, welfare is seen as the opposite of poverty (Widyastuti, 2012).

Farmer welfare is explained from several aspects of household welfare that depend on the level of farmer income. Farmer income that is not in accordance with household expenses will result in the status of the household's standard of living. According to Sunarti (2012), welfare is a social, material, and spiritual way of life and livelihood that is filled with a sense of safety, morality and inner and outer peace that allows every citizen to make efforts to fulfill physical, spiritual and social needs as well as possible for themselves, their household and the community. To determine the level of welfare of oil palm farmer households based on the proportion of food consumption (PKP) and the proportion of non-food consumption (PKNP). Households are classified as prosperous households if they meet the criteria for the welfare of oil palm farmer households, namely:

1. If food production is <50% of total production, then the household is categorized as prosperous.
2. If food expenditure is between 50% - 60% of total expenditure, then the household is categorized as pre-prosperous.
3. If food expenditure is >60% of total expenditure, then the household is categorized as not prosperous. For more clarity on the welfare of oil palm farmer households, see Table 4.

**Table 4. Percentage of welfare levels of oil palm farmers' households in Tanjung Pasir Village, North Labuhanbatu Regency, 2024.**

Production Type	Value (Rp)	Percentage (%)
A. Food	1.324.421	15,39
B. Non food	7.282.596	84,61
<b>Amount</b>	<b>8.607.0117</b>	<b>100</b>

Source: Primary Data After Processing, 2024.

Based on Table 4, it shows that non-food expenditure is IDR 7,282,596 or 84.61% while for food it is IDR 1,324,421 or 15.39. This shows that non-food expenditure is greater than food expenditure. Based on the data above, the average household of oil palm farmers is at a prosperous level. Welfare is a measuring point for society which means that it has been in a prosperous condition. The definition of welfare itself is a human condition where people are prosperous, healthy, and peaceful, so that to achieve that condition the person needs an effort according to their abilities. Economists see welfare as an indication of individual income (flow of income) and purchasing power of society. Based on this understanding, the concept of welfare has a narrow meaning because by only looking at income as an indicator of economic prosperity, welfare is seen as the opposite of poverty (Widyastuti, 2012).

## CONCLUSIONS

The income received by households of oil palm farmers from oil palm farming in Tanjung Pasir Village, Kualuh Selatan District, North Labuhanbatu Regency is an average of Rp 69,357,901 per year. While the average per month is Rp 5,779,825. The amount of income of oil palm farmer households received from oil palm farming is Rp 5,779,825/month, other farming is Rp 861,403/month, while from non-farming is Rp 523,684/month and income from household members is Rp 1,442,105/month. So, the income of oil palm farmer households in Tanjung Pasir Village, Kualuh Selatan District, North Labuhanbatu Regency is an average received by farmers of Rp 8,607,017/month. The allocation of household income of oil palm farmers to monthly food needs is IDR 1,324,421 or 15.35% and non-food needs is IDR 7,282,596 or 84.61%. The proportion of household food consumption expenditure of oil palm farmers per month is 15.39%, indicating that 15.39% of household expenditure is allocated for food. The proportion of household non-food consumption expenditure of oil palm farmers per month is 84.61%, indicating that 84.61% of household expenditure is allocated for non-food. Based on the proportion of food consumption (PKP) and the proportion of non-food consumption (PKNP), oil palm farmer households in Tanjung Pasir Village, North Labuhanbatu Regency are classified as prosperous households. The author's suggestions are as follows: 1) Oil palm farmer households in Tanjung Pasir Village, North Labuhanbatu Regency should increase their income, both from oil palm farming, other farming and non-farming businesses. So that when there is a shortage of food and non-food needs, oil palm farmer households can still meet their food and non-food needs even at higher prices, 2) It is better for oil palm farmers in Tanjung Pasir Village, North Labuhanbatu Regency to increase their production results by using superior seeds and regular fertilizers in improving oil palm farming. And stocking fertilizers so that there is no shortage that



results in expensive fertilizer prices. So that in the future there will be no problems either in the production process or the marketing process of oil palm.

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