



Household Expenditure Analysis of Hybrid Coconut Farmers in Tempuling District Indragiri Hilir Regency Riau Province

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ABSTRACT

The decline in coconut prices negatively affects farmers' income, thus impacting overall household expenditures. This study aims to analyze (1) the characteristics of hybrid coconut farmers, (2) the structure of household income of hybrid coconut farmers, (3) household expenditures of hybrid coconut farmers, and (4) the factors influencing household expenditures of hybrid coconut farmers. The research used a survey method with purposive sampling, resulting in a sample size of 53 farmers. Multiple linear Regression was the primary analytical tool. The results showed that: (1) Farmers had an average age of 44 years, 9.6 years of education, 21 years of farming experience, four family members, and an average land area of 3.31 hectares. (2) Household income was primarily derived from hybrid coconut farming (60.53%). (3) The most significant household expenditure was on non-food items (53.46%), including housing, education, health, clothing, and recreation. (4) Significant factors influencing household expenditures included household income (X1), number of family members (X2), and assets (X6). Conversely, the farmer's education level (X3), wife's education (X4), and savings (X5) did not significantly affect the household expenditures of hybrid coconut farmers. This study provides novel insights by revealing the role of assets as a buffer factor that can enhance household consumption through asset sales, which has not been widely explored in previous research on hybrid coconut farmers.

Keywords: Hybrid Coconut Farmer's; Household Expenditure; Income and Assets

INTRODUCTION

Coconut stands out as an essential commodity within the plantation subsector. Nor et al. (2020) highlight that coconut farming is vital in enhancing rural communities' economic and social well-being by supplying food, generating employment, and promoting sustainable agricultural practices. Riau Province is the largest producer of coconuts, with an output of 395,000 tons and a cultivated area covering 419,381 hectares (Central Bureau of Statistics, 2023). This success is attributed to its suitable topography and climate. However, fluctuations in coconut cultivation and production have been observed in Riau, with the highest yield of 417,172 tons in 2019 and the lowest at 377,807 tons in 2020, reflecting an average annual production growth rate of 0.23%. These figures are illustrated in Figure 1.

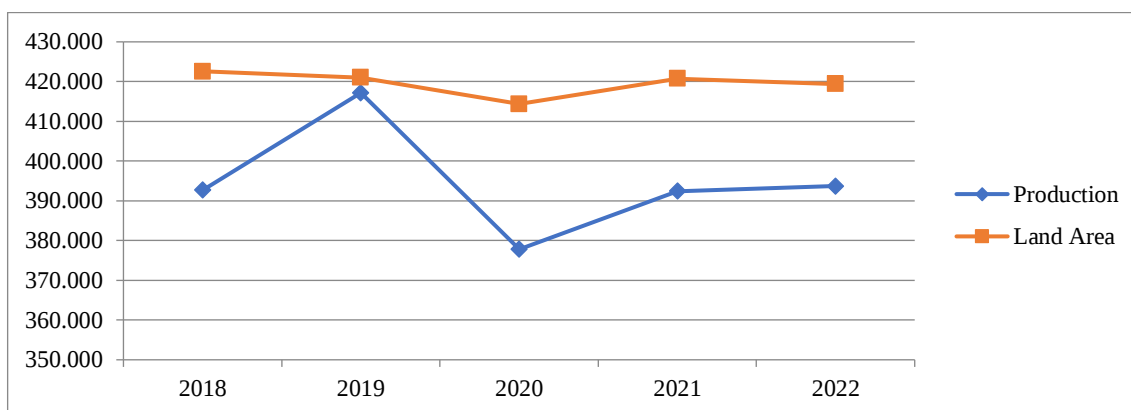


Figure 1. Trends in Coconut Plantation Area and Production in Riau Province, 2018–2022
Sources: Central Bureau of Statistics Riau Province, 2023

Indragiri Hilir Regency plays a central role in coconut production within Riau Province, with coconuts being a vital component of the local economy (Vaulina et al., 2024). Paulina (2019) states that coconut production in Indragiri Hilir is distributed across all districts, earning it the nickname "the world's coconut expanse." The regency produces coconuts (*Cocos nucifera* Linn) and hybrid coconut. Tempuling District ranks as the fourth-largest hybrid coconut plantation area, with a production volume of 5,909.40 kg, the highest average productivity of 2,010 kg/ha, and 1,277 farmers involved in 2022 (Department of Plantations, Indragiri Hilir Regency, 2023). Zainol et al. (2023) highlighted a correlation between population growth and rising demand for coconut production and consumption. This situation arises due to limited land being a production factor while food demand escalates. Abeysekara and Waidyarathne (2020) also noted a significant surge in demand for coconuts and their derivative products.

Research on household expenditure of coconut farmers is critical because coconut is a primary source of income for many rural communities, and fluctuations in coconut prices directly impact household spending patterns. The main issue in the area is the decline in coconut production. Susilawati and Afiza (2020) state that technological, knowledge, and farmer skills limitations have resulted in suboptimal hybrid coconut production. Yamin et al. (2023) revealed that farmers produce more high-value goods while lower-cost items produce less. Jin et al. (2022) added that farmers' income is closely related to labor, and they need more education and training on farming, plantation management, and fertilizer use. Additionally, inadequate agricultural infrastructure (Adrianto, 2023), limited market access, and the continuous drop in coconut prices affect hybrid coconut production (Wibowo et al., 2020).

This research is unique because it focuses on the household expenditures of hybrid coconut farmers in Indragiri Hilir Regency, the central coconut production area in Riau Province. Although coconut is an important commodity, there has been limited research that profoundly examines the household expenditures of farmers and the role of assets as an economic buffer. Coconut farmers are crucial in the rural economy (Panjaitan, 2024). A decline in coconut prices can impact farmers' income and household consumption. Income is a key factor that influences an individual's consumption patterns. Tetteh et al. (2019) categorized the roles of household farmers into three: producers, laborers, and consumers. Febrianti (2021) stated that household consumption aims to fulfill basic needs, with essential needs typically prioritized. Monthly expenditure management, including food and non-food consumption, depends on the income received.

Table 1. Average Percentage of Household Expenditure per Capita per Month by Food and Non-Food in Indragiri Hilir Regency, 2018–2022.

Year	Food		Non-Food	
	Total (%)	Growth (%)	Total (%)	Growth (%)
2018	56,27	-	44,00	-
2019	54,80	-0,026	45,00	0,022
2020	54,73	-0,001	45,00	0
2021	56,42	0,030	44,00	-0,022
2022	54,91	-0,026	45,00	0,022

Source: Central Bureau of Statistics, Indragiri Hilir Regency, 2023

Based on Table 1, the average growth in expenditure for food and non-food items shows a similar pattern. The highest food expenditure was recorded in 2021 at 56.42%, and the lowest in 2020 at 54.73%. Meanwhile, the highest non-food expenditure reached 45%, and the lowest was 44%. This data reflects the priority given by households to basic needs, particularly in the face of economic uncertainty. One interesting issue related to farmer households is the complex interaction between production and agricultural consumption decision-making (Viswanathan, 2021).

Most household income relies on coconut yield. Coconut productivity can be affected by weather and pests, leading to inconsistent harvests. This impacts income levels and household spending patterns. Additionally, unstable coconut prices directly affect farmers' earnings. Farmers' purchasing power decreases when prices drop, reducing overall household expenditure. Based on the description above, the research problems can be outlined as follows: (1) What are the characteristics of hybrid coconut farmers? (2) What is the income structure of hybrid coconut farmers' households? (3) What is the household expenditure of hybrid coconut farmers? (4) What factors influence the household expenditure of hybrid coconut farmers?

RESEARCH METHODS

Research Design

The research was conducted using a survey method in Tempuling District, selected for its high hybrid coconut productivity and the absence of prior household expenditure surveys in the area. This study utilized both primary and secondary data. The population consisted of all hybrid coconut farmers in Tempuling District, Indragiri Hilir Regency. The research location was chosen through purposive sampling, ensuring the sample met the necessary standards for data collection. Sampling was evenly distributed across four villages and three sub-districts. The hybrid coconut farmer samples were drawn from (1) Karya Tunas Jaya Village, (2) Mumpa Village, (3) Teluk Kiambang Village, (4) Teluk Jira Village, (5) Harapan Jaya Village, (6) Pangkalan Tujuh Village, and (7) Tanjung Pidada Village. Five percent of the population in each village was selected as the sample, resulting in 53 hybrid coconut farmers participating in this research.

Data Analysis

A. Farmer Characteristics

Farmer characteristics are tabulated using Microsoft Excel and then analyzed using descriptive analysis. Farmer characteristics included age, farming experience, education, and land size.

B. Household Income Structure of Hybrid Coconut Farmers

The income structure of hybrid coconut farmers' households includes income from hybrid coconut farming, other agricultural activities, and non-farming income. The income structure of hybrid coconut farmers' households is analyzed using qualitative and quantitative descriptive analysis. This analysis applies the formula by Nizar et al. (2021):

$$Prt = P1 + P2 + P3 \dots\dots\dots (1)$$

Description:

Part = Household income (IDR/year)
P1 = Hybrid coconut farm income (IDR/year)
P2 = Other agricultural farm income (IDR/year)
P3 = non-farm income (IDR/year)

C. Household Expenditure of Hybrid Coconut Farmers

Household expenditure of hybrid coconut farmers includes food expenditure and non-food expenditure. Household expenditure of hybrid coconut farmers was analyzed using quantitative analysis, the formula Sajogyo (1997).

$$C = C1 + C2 + C3 \dots\dots\dots (2)$$

Description:

C = Total household expenditure (IDR/day)
C1 = Total Food Expenditure (IDR/day)
C1.1 = Rice - Grains, Tuber (IDR/day)

C1.2 = Side Dishes, Vegetables, and Fruit (IDR/day)
C1.3 = Beverage Ingredients (Coffee, Sugar, and Tea), Prepared Food (IDR/day)
C1.4 = Cooking Oil, Condiments (IDR/day)
C1.5 = Tobacco/Smoking (Pack of cigarettes/day)
C2 = Non-Food Expenditure (IDR/day)
C2.1 = Housing and Household Facilities (IDR/year)
C2.2 = Education Expenses (IDR/year)
C2.3 = Clothing Costs (IDR/year)
C2.4 = Health Costs (IDR/year)
C2.5 = Recreation Costs (IDR/year)
C3 = Other household expenses (Rp/year)

D. Factors Affecting Household Expenditure of Hybrid Coconut Farmers

In addition to descriptive analysis, this study applies econometric analysis using multiple Regression. This approach identifies factors that significantly influence the spending patterns of hybrid coconut farmers' households, providing a more comprehensive overview. The food consumption model, according to Elinur et al. (2024), is formulated as follows:

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + e \dots \dots \dots (3)$$

Description:

Y = Household expenditure (IDR/year)
A = Constant
X1 = Household income (IDR/year)
X2 = Number of family members (people)
X3 = Farmer education (years)
X4 = Wife's education (years)
X5 = Total savings (IDR/year)
X6 = Total assets (IDR/year)
 β_1, β_2 = Coefficient of Multiple Regression
e = Error

a. Coefficient of Determination

The Coefficient of determination (R^2) can range from 0 to 1. It is used to predict the extent to which the effects of the independent variables on the dependent variable are significant.

$$R^2 = \frac{b_1 \sum X_1 Y_1 + \dots + b_6 \sum X_6 Y_6}{\sum Y^2} \dots \dots \dots (4)$$

Description:

R^2 = Coefficient of determination
X1 = Household income (IDR/year)
X2 = Number of family members (people)
X3 = Farmer education (years)
X4 = Wife's education (years)
X5 = Total savings (IDR/year)
X6 = Total assets (IDR/year)
b1, b2, b3 = parameter estimation.

b. Statistical Test t

The t-statistic test is used to explain the dependent variable partially. This t-test measures the extent to which the effects of the independent variables used in this study are individual (Ghozali, 2016). Decision-making is based on the t-test: if the significance probability value is more significant than 0.05, the hypothesis is rejected, while it cannot be rejected if the value is < 0.05 .

$$\text{Formula: } t \text{ count} = \frac{b_i - \beta}{se(b_i)} \dots \dots \dots (5)$$

Description:

T = Magnitude of t Count
Bi = Regression Coefficient
 β = Null Hypothesis Value
se (bi) = Standard Deviation of the 1st Independent Variable

c. Simultaneous Test (F Test)

The simultaneous test or F test is a tool used to determine the effect of all independent variables on the dependent variable called the model significance test. The F test is explained using analysis of variance (ANOVA) (Sugiyono, 2018).

$$F = \frac{R^2/(k-1)}{1-R^2/(n-k)} \dots\dots\dots (6)$$

Description:

R^2 = Coefficient of determination

K = NumberNumber of variables

n = NumberNumber of samples

d. Classical Assumptions

- Normality Test

The normality test determines whether the linear regression model's confounding or residual variables have a normal distribution (Ghozali, 2017). The graph analysis can be used to determine whether the residuals are normally distributed or not. The histogram diagram shows a normal distribution if the data spreads around the diagonal and follows the direction of the diagonal if it spreads far away from the diagonal and/or does not follow the direction of the diagonal, or if the histogram diagram does not show a typical distribution pattern.

- Multicollinearity Test

According to Ghozali (2017), The multicollinearity test is used to determine whether there is a high or perfect correlation between the independent variables of the regression model. The regression model's tolerance value and the variance inflation factor (VIF) can be used to check multicollinearity. It is known that there is no multicollinearity if the VIF value is below 10 or the tolerance value is above 0.01. If the VIF value is above 10 or the tolerance value is above 0.01, it is known that there is multicollinearity.

- Heteroscedasticity Test

The heteroscedasticity test aims to check whether there is an inequality between the residual value of one observation and the residual value of another observation in the variation of the regression model (Ghozali, 2018). If the p-value is above 0.05, H_0 is rejected, and there is no heteroscedasticity problem. If, on the other hand, the p-value is below 0.05, this indicates that H_0 is rejected, and a heteroscedasticity problem occurs.

RESULTS AND DISCUSSION

Characteristics of Farmers

The characteristics of farmers play an important role in determining changes in farming practices. Farmers with strong characteristics in developing their farms can quickly solve problems and take advantage of opportunities to increase their income (Arita et al., 2022). Retnaningsih (2016) stated that various internal and external factors, such as age, education, environment, experience, mass media, and socio-cultural and economic aspects, can influence a person's level of knowledge. Dewi (2019) revealed that socio-cultural characteristics are part of farmers' traits. Farmers' characteristics can be observed through several variables, including age, education level, number of family members, farming experience, and land size.

Hybrid coconut farmers in Tempuling District are between 22 and 65 years old, with an average age of 44.98. According to Managanta et al. (2020), age is closely related to farmers' productivity. A relatively productive age is an important asset for adopting new agricultural technologies. Most farmers have 10 to 12 years of education (high school), with 20 people (37.74%), while the lowest education level, more than 12 years (bachelor's degree), is represented by only four people (7.55%). Isyanto et al. (2020) stated that the higher the education level, the more open farmers are to accepting agricultural technology innovations, contributing to their welfare and enhancing social relations.

The farming experience of hybrid coconut farmers in Tempuling District ranges from 2 to 40 years, with an average of 21 years. Sujaya et al. (2018) say increased farming experience enhances farm productivity. The more experience farmers gain, their technical skills improve in managing rice farming, leading to higher productivity. The number of family members per household ranges from 1 to 6, with an average of 5 members per family. The cultivated land area for hybrid coconut farming varies between 1 to 10 hectares, with an average land ownership of 3.31 hectares per farmer. Wijaya and Lusia (2023) found a significant positive relationship between land area and the adoption of cultivation innovations. This means that the larger the cultivated land, the higher the level of innovation adoption.

Household Income Structure of Hybrid Coconut Farmers

Income is one of the indicators used to observe household consumption patterns. Communities with different income levels also have different consumption patterns (Vaulina et al., 2019). On average, hybrid coconut farming contributes 60.53% of total income. Other agricultural activities account for 29.38%, followed by non-agricultural income at 10.09%. Similarly, Karolina et al. (2016) found that coconut farming contributes 42.92% to household income, income from other farming activities accounts for 22.50%, other sources contribute 12.10%, and non-work income represents 22.48%. This indicates that coconut farmers' households still rely heavily on income from coconut farming. Details can be seen in Figure 2.

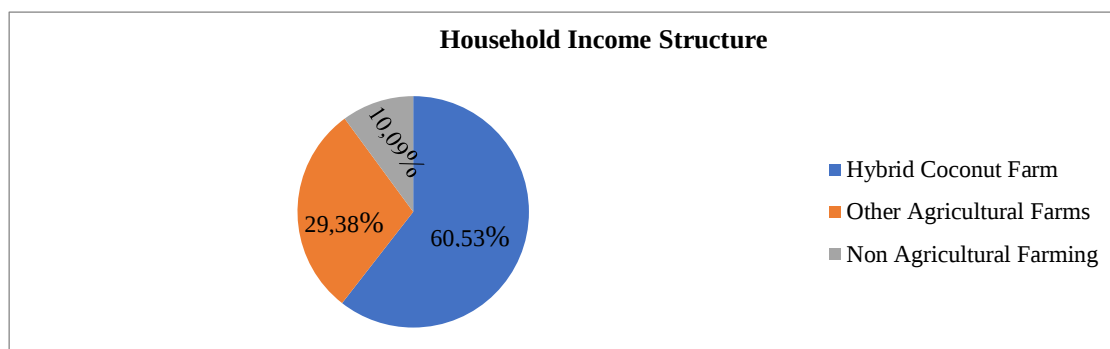


Figure 2. Household Income Structure of Hybrid Coconut Farmers

Unlike studies on the household income of coconut farmers in other regions, the highest contribution comes from non-agricultural activities. Kusairi et al. (2024) reported a 53.38% contribution from non-agricultural activities; Safitri et al. (2021) found 49.5% from non-farming activities; and Mamentiwalo et al. (2019) recorded 71.35% from non-agricultural businesses. Non-agricultural income tends to be unaffected by seasons and can be earned throughout the year (Safitri et al., 2021). Farmers utilize their free time before harvest for other jobs, while individual land ownership encourages them to develop businesses in other commodity sectors.

In the Tempuling Subdistrict, hybrid coconut farmers earn IDR 55,510,188.68 annually, or IDR 4,625,849 monthly. Income from other agricultural activities, such as oil palm, coconut, and areca nut farming, amounted to IDR 26,938,679 per year or IDR 2,244,890 per month. Operating small stores, producing palm sugar, and working as collectors and laborers generate non-agricultural income of IDR 9,252,358 per year or IDR 771,030 per month. The detailed breakdown of household income for hybrid coconut farmers in the Tempuling Subdistrict is presented in Table 2.

Table 2. Average Household Income Structure of Hybrid Coconut Farmers in Tempuling Subdistrict, 2024

No	Source of Income	IDR/month	IDR/year
1	Hybrid Coconut Farming	4,625,849	55,510,189
2	Other Agricultural Farming	2,244,890	26,938,679
3	Non-Agricultural Farming	771,030	9,252,358
Total		7,641,769	91,701,226

Source: Processed Research Data

In the Tempuling district, the average income of hybrid coconut farmers is above the minimum wage in the Indragiri Hilir regency (IDR 3,294,626). Khaswarina et al. (2024) found that the income of coconut farmers in Keritang District, Indragiri Hilir Regency, is higher than the district minimum wage, leading to the conclusion that the average farmer's income is considered decent. Heriyanto et al. (2019) emphasize the importance of increasing farmer households' focus on coconut cultivation by giving them more time to tend their coconut plantations. Rusdi et al. (2021), in addition to on-farm farming, coconut farmers involve family members in off-farm and non-farm activities. Income from these activities is used for daily consumption.

Expenditure of Hybrid Coconut Farming Households

Food consumption is often used to measure household and consumer wealth (Suryanty & Toshinobu, 2022). The study results show that non-food expenditure accounts for 53.46% of hybrid coconut farming expenses in Tempuling Regency, while food expenditure contributes 46.54% (Table 3). This indicates that hybrid coconut

farming households prioritize spending on non-food items such as clothing, recreation, education, healthcare, and housing. Similar studies on plantation commodities, such as by Vaulina et al. (2019), found that household consumption patterns of oil palm farmers show lower food expenses than non-food expenses. Yanti et al. (2022) reported that household food consumption expenditure accounted for 15.39%, while non-food consumption expenditure comprised 84.61%.

Table 3. Average Expenditure of Hybrid Coconut Farming Households in Tempuling District, 2024.

No	Expenditure Households	IDR/Month	IDR/Year	Percentage (%)
1	Food Expenditure	1.346.927	16.163.125	46,54
2	Non-Food Expenditure	1.547.465	18.569.585	53,46
	Average	2.894.393	34.732.710	100,00

Source: Processed Research Data

Food Expenditure

Household income from agriculture, off-farm income, remittances, total household income, and non-food expenditures significantly correlate with total food expenditure (Marwanti et al., 2024). The food expenditure of hybrid coconut farmers in Tempuling District is dominated by carbohydrate consumption, with rice/cereals and tubers contributing the most (31.93%). This consumption pattern aligns with previous research by Sitorus et al. (2014), which shows that rice is the staple food consumed thrice daily.

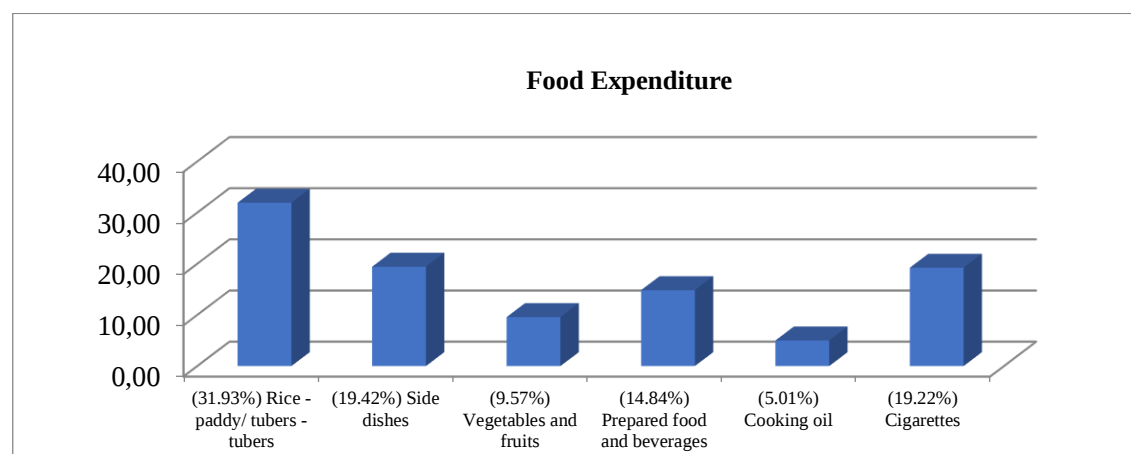


Figure 3. Food Expenditure

Non-Food Expenditure

Non-food expenditure is higher than food expenditure. This study's non-food category includes housing, household facilities, education, health, clothing, and recreation. Education is the most significant component, contributing 37.47% of total non-food expenditure in hybrid coconut farming households (Figure 4). These findings align with the study by Habibi et al. (2019) on plantation commodities, which also showed that non-food expenditure exceeds food expenditure, with spending on durable goods reaching 22.75%. This result indicates that hybrid coconut farmers prioritize investment in education and long-term needs, potentially improving their quality of life and family welfare. For further details, refer to Figure 4.

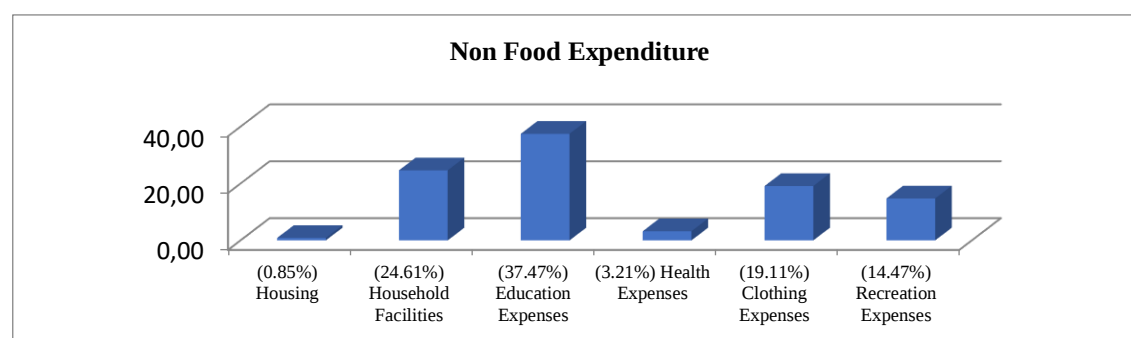


Figure 4. Non-Food Expenditure

Dominant Factors Affecting Household Expenditure of Hybrid Coconut Farmers

Independent variables such as income, family size, farmer's education, wife's education, savings, and assets were used to identify the factors influencing household expenditure of hybrid coconut farmers. The Coefficient of determination (R^2) for household expenditure of hybrid coconut farmers is 0.57. This indicates that household income (X1), family size (X2), farmer's education (X3), wife's education (X4), savings (X5), and total assets (X6) explain 57% of the dependent variable, which is household expenditure. The remaining 43% represents other variables not included in the model. Table 4 presents factors affecting household expenditures of hybrid coconut farmers in Tempuling District in 2024.

Table 4. Estimation Results of Significant Factors Affecting Household Expenditures of Hybrid Coconut Farmers in Tempuling District in 2024.

Variable	Parameter Estimation	t-test	t-sign
Constanta	-2364654.706	-.218	.829
Household Income (X1)	.092	1.093	* .028
Number Of Family Members (X2)	8516108.739	4.117	* .000
Farmer Education (X3)	1290239.337	1.569	.124
Wife Education (X4)	960858.402	1.920	.370
Saving (X5)	-.082	-.969	.338
Total Asset (X6)	.056	3.211	* .002
R^2			0,57
F test			10,11
F sign			0,000 ^b
Durbin-Watson			2,15

Notes: * Significant at = 5%

Source: Processed Research Data

For this model, the F-test result is 0.00, which is smaller than 0.05 (< 0.05), indicating that the independent variables collectively influence the household expenditure of hybrid coconut farmers. The T-test results show that household income (X1), family size (X2), and total assets (X6) have a significant effect on household expenditure. However, the household expenditure of hybrid coconut farmers is not significantly affected by the variables of farmer's education (X3), wife's education (X4), and savings (X5). This aligns with the study by Elinur et al. (2024), which shows that household income, family size, and women's education among vegetable farmers significantly determine household food consumption.

1. The Effect of Household Income on Household Expenditure of Hybrid Coconut Farmers

The T-test value of $0.028 < 0.05$ indicates that the income of hybrid coconut farmer households (X1) significantly influences their household expenditures. This reflects the real impact of household income on household spending, with an estimated parameter of 0.092. If household income increases by IDR 1 million, household expenditure will rise by IDR 92,000. Therefore, sufficient income can meet the needs of farmer households, including adequate education costs for family members. This finding aligns with the research by Munsiarum (2021), which states that household income significantly affects farmers' household consumption, as higher income leads to increased household consumption.

2. The Effect of Number of Family Members on Household Expenditure of Hybrid Coconut Farmers

The number of hybrid coconut farmers' family members (X2) significantly influences farmers' expenditure. The T-test value of $0.00 < 0.05$ indicates that farmers' household expenditure is directly influenced by the number of family members, with an estimated parameter of 8516108.739. Household expenditure increases by IDR 8,516,108.739 when the number of family members increases by one. Jannah et al. (2021) found that the increasing demand for households and the increasing number of family members impact household consumption. According to Sudrajat and Vaulina (2023), productive family members contribute to fulfilling the family's needs, particularly for farmers, as they are the primary labor force that supports the enhancement of farming activities.

3. The Effect of Farmer Education on Household Expenditure of Hybrid Coconut Farmers

The estimation results show that the length of farmers' education is 0.124, more significant than 0.05. This indicates that the length of farmers' education does not significantly affect the household expenditure of hybrid coconut farmers. However, the farmers' education level positively influences household expenditure, with an estimated parameter of IDR 1,290,239.34. This suggests that for each additional year of education, household

expenditure increases by IDR 1,290,239.34 per year. Rosiana and Saskara (2018) state that education level does not significantly affect household expenditure, as families strive to provide their children with the best education. Household spending on education increases along with the children's level of education.

4. The Effect of Wife's Education on Household Expenditure of Hybrid Coconut Farmers

The wife's education level is more significant than 0.05, indicating that it does not significantly affect the household expenditures of hybrid coconut farmers. However, the wife's education positively affects household spending, with an estimated parameter of 960,858.40. This means that if the wife's education increases by one year, the household expenses of hybrid coconut farmers will rise by IDR 960,858.40. This occurs because the wife's education and knowledge make her more aware of the importance of her children's future than her education. As a result, the household prioritizes spending on children's education over that of the head of the family or the wife. This finding is in line with the research by Suwarni et al. (2024), which states that family education does not significantly affect the consumption level of farmer households.

5. The Effect of Savings on Household Expenditure of Hybrid Coconut Farmers

The estimated result shows that savings do not significantly affect household expenditures, as indicated by a t-value greater than 0.05. Savings also hurt household spending, with an estimated parameter of -0.082. This means that household expenditures decrease by IDR -82,000 per year for every one rupiah increase in savings. In line with the research by Tilome and Arwin (2022), savings do not affect consumption expenditures. According to Sukirno (2012), people reduce their consumption as savings increase. Conversely, the lower the head of the household's income, the more likely all their income is used for consumption, resulting in zero savings.

6. Effect of Total Assets on Household Expenditure of Hybrid Coconut Farmers

The amount of assets (X6) positively affects farmers' household expenditure. The T-test value of $0.002 < 0.05$ indicates that the amount of assets significantly influences household expenditure, with an estimation parameter of 0.056. This means household expenditure increases by IDR 56,000 for every IDR 1 million asset increase. Thus, the surplus income can be used to acquire assets that can be stored for the long term. Elinur et al. (2024) found that assets can enhance food consumption by selling them when needed. This suggests that farmers may rely on their assets as a safety net to maintain household food security and quality of life in times of financial difficulty.

CONCLUSION

The hybrid coconut farmers in Tempuling District are characterized by a relatively mature age, a high level of education, and extensive farming experience. On average, they live in households with several family members and manage substantial agricultural land. Their primary source of income comes from hybrid coconut farming, supplemented by other agrarian activities like areca nut, palm oil, and coconut farming, reflecting a firm reliance on agricultural earnings rather than non-agricultural sources. Household expenses are primarily split into food and non-food categories, with non-food costs making up the more significant portion, covering necessities such as housing, education, health, and recreation. The key factors influencing household spending are income, family size, and total assets. At the same time, variables like the education level of the farmer and his spouse and savings do not have a significant impact.

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