

Contribution of Coffee Farming to Household Income

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Abstract

This study aims to analyze income and determinants of coffee farming and the contribution against household income in the Tunggimoncong. The location of this study was implemented in the District Tunggimoncong, especially in Parigi, Bontolung, and Malino, from February until March 2022. The total respondents in this research are 60 farmers. The data was processed using descriptive analysis, analysis percentage, and analysis multiple linear regression with help from the SPSS 22 application. The results of this study show coffee farming contributes to income farming, as well as influencing factors by simultaneous and partial income farming that is a total tree, productivity trees, age plant, cost fixed, cost variables, and output prices as well as in the coefficient test determination proven that no other variables affect income farming. From that result, the author recommends more notice enhancement of efficiency and effectiveness from the variables mentioned before.

Keywords: coffee; farming; income

INTRODUCTION

Coffee is one of the plantation commodities that has high economic value among other plantation crops. Coffee also plays an essential role in improving the national and regional economies and becomes an industrial raw material. One of the efforts to increase coffee productivity is regular and scheduled coffee maintenance, including pruning, fertilization, and pest and disease control.

Data from the Ministry of Industry in 2020 shows that coffee productivity in Indonesia is relatively low, with a range of 700 to 800 kg ha⁻¹ year⁻¹, compared to other coffee-producing countries, such as Brazil (1,000 kg ha⁻¹ year⁻¹), Columbia (1,220 kg ha⁻¹ year⁻¹), and Vietnam (1,540 kg ha⁻¹ year⁻¹). The low productivity of coffee in Indonesia is because 95% of coffee plantations in Indonesia, which are community-owned, generally do not use superior coffee seeds, relatively simple cultivation techniques, and late plant rejuvenation, as well as the lack of facilities and infrastructure to support the increase in coffee productivity.

Based on statistical data owned by the Gowa Regency Plantation Office, the area of coffee plantations has increased from 2019 to 2020, namely from 834 to 858 ha. However, there was

a decrease in production from 570.28 to 478.35 tons. Meanwhile, the number of coffee farmers is still the same from year to year, namely 913 farmers. A significant decrease in production will impact the household income of 913 coffee farmers in the Tunggimoncong District. The production level will affect the income earned, which means that the higher the production produced, the higher the income earned.

Farm income is the form of rewards from processing various things in agriculture, such as land, labor, and capital for farming. The level of life of farmers will increase in line with the increase in income. A farmer can reduce the costs used in running his farm and must compensate for the high amount of production and the appropriate price of factors that significantly affect coffee production, including land area, amount of labor, number of plants, use of fertilizers, and age of coffee plants and variables that will negatively affect the level of production produced by farmers (Saldiman, 2021).

Internal and external factors affect farm income (Suratiyah, 2015). Internal farming factors that affect farm income are land fertility, land tenure area, availability of labor, availability of capital in farming, use of technology inputs, cropping patterns, cropping locations, land

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Table 1. Land area data, total production, and quantity farmer 2020 coffee commodity in the District Tinggimoncong According to Village, 2019-2020

Village	Area (ha)		Production (tons)		Amount of farmer	
	2019	2020	2019	2020	2019	2020
Gantarang	120.11	81.15	120.11	81.15	138	138
Parigi	141.77	98.29	154.77	98.37	157	157
Malino	120.10	81.17	114.10	57.61	132	133
Bulutana	106.42	68.15	100.42	36.90	115	116
Pattapang	72.40	71.93	85.40	36.93	89	87
Bontolung	188.80	113.59	184.80	110.89	190	191
Garage	84.40	56.00	98.40	56.00	92	91
Total	834.00	858.00	570.28	478.35	913	913

Source: District Plantation Office Gowa (2021)

fragmentation, land tenure status, marketing methods, efficiency of input use and the level of knowledge and skills of farmers and labor. The external factors affecting farming include transportation, trading systems, new technology, irrigation facilities, output level and input prices, land availability, new technology, and irrigation facilities.

Based on statistical data owned by District Plantation Office Gowa, spacious land plant coffee plantations in the District Tinggimoncong right have experienced enhancement from 2019 to 2020, which started at 834 ha and went up to 858 ha. The contradiction with the drop in production since 2019 to 2020 starts from 570.28 to 478.35 tons. We need to note that the number of farmers who do farming coffee gardening in 2019 and 2020 is still the same: just as many as 913 coffee farmers. If you see, the decline that occurs is very significant in production. What is more, see condition income area until income house stairs 913 coffee farmers in the District Tinggimoncong. The production rate will influence the income earned.

Income farming results in rewards earned from service processing various things in agriculture, such as land, energy work, and internal capital to do farming. The life level of farmers will increase if the income from agriculture becomes bigger, and a farmer could push the cost used in operating farming, as well as must balance with amount high production and suitable price very factor affect coffee production, including large land, amount power work, amount plant, use fertilizers, as well age coffee plants and their future variables will negative effect on level production produced by farmers (Saldiman, 2021)

The amount of influencing factors in income farming and ability becomes an indicator so that we see the problem in the activity of coffee

farming. Influencing factors in income farming, according to Suratiah (2015), become two factors: *internal* and *external*. Farming internal factors that influence income farming that is fertility land, area land claim, availability of power work, the availability of capital in agriculture, use of technological inputs, patterns plant, location plant, fragmentation land, tenure status land, way output marketing, efficiency input usage and rate knowledge nor skills farmers and labor work. As for what affects external farming factors, transportation, system commerce, invention technology, new facility irrigation, rate output, input prices, availability of land, discovery technology, and further facility irrigation.

District Tinggimoncong alone is one district in Gowa that has much activity in the form of inclined coffee farms. Regarding acquisition income, it is expected to fulfill needs, at least for live families. The average coffee farmer who makes a professional in the coffee farming industry will experience a drop, especially for or even an increase in income. Coffee prices in the District Tinggimoncong vary according to request. In 2019 and 2020, the price of rice coffee (green coffee) was 15.000 to 70.000 IDR per kilogram, depending on the type of coffee sold.

The income house ladder is seen from the whole member family's earned income and after it is reduced with production costs. Significant until low total income house ladder significantly influenced by the effort and results obtained whole member family. The importance of the income house ladder could seen from the side expenditure for rate growth consumption dominated economy house ladder until consumption government. Encouraging consumption toward change is always compared to straight with total income house stairs; then

enhancement income house ladder tends to follow the increase consumption house ladder. The only society with professional farmers with one commodity, coffee, must be able to maintain activity every day to get income permanently, so farmers only must endure with condition drop amount of production in the form of income experienced farming until the impact on income house farmer's ladder. Inequality is a mismatch. The expansion of the coffee plantation area is increasing, but not followed by an increase in income, reviewed farmers from the decline in coffee farming to the year 2019-2020.

Quantity income coffee farming as well his contribution becomes thing tree in the farming house must have stairs attention because the farming process should capably fulfill needs house ladder in side economical. To know the quantity of coffee farming income and his contribution to income house stairs, we then studied the contribution of coffee farming to income house stairs in District Tinggimoncong.

RESEARCH METHODS

The location of this research was conducted on purpose without an element of coercion and so on (purposive methods). The place selected for study research is District Tinggimoncong, Regency Gowa, with consideration for results study in the form of recommendation policy for enhancement expansion land and production coffee plants as well price sell what becomes point heavy in results farming—research time held for 1 (one) month on February 2022.

In the study, the population is whole owner coffee farmer land at a time cultivators on the land they own in the District Tinggimoncong, Regency Gowa, in 2022. The total population in research is as many as 481 people. The sample study covering 60 respondents is 12.4%. It consists of 20 people in each village in 3 villages that is Bontolerung, Malino, and Parigi, with retrieval techniques sample purposive random sampling that sees target research (respondents) from the status as head house stairs, have land farming more of 1 ha, and has coffee, cocoa, and rice farming. This thing by opinion Thamrin (2013) that the withdrawal respondents could conduct consideration not enough than 100, a better whole population sample, but if more than 100, then 10 to 15% or 20 to 25%

Of the 481 population souls, because of limitations in source power, researchers only took three villages with large farmers in the

District Tinggimoncong, Regency Gowa that is Bontolerung, and Malino, as well as Parigi village.

Data used in a study is quantitative and qualitative data. Quantitative data, namely data that includes numbers or numbers based on the results questionnaire, covers expenses, revenues, coffee crops, and total income from farming family farmers in the District of Tinggimoncong, Regency Gowa. For the qualitative data, namely the data obtained from birth information from results. Interviews were oral and written as statements from an experienced coffee farmer operating his business in Tinggimoncong, Gowa.

RESULTS AND DISCUSSION

Contribution income coffee farming against income house ladder

Quantity income is the result of production obtained in the form of material used to fulfill needs for somebody and return in fulfilling needs facilities and infrastructure production. Income farming is obtained by looking for differences among reception with the total cost used in activity farming during one year. Contribution to agriculture could seen from the quantity of income earned from farming and then compared with income farming other, so that capable get scale percentage in see quantity contribution something you to farming other in see income farmer in effort to do farming.

The contribution of coffee farming income is the proportion of income from coffee farming to the total income of family farming. The contribution of income from one type of activity to a family farm's overall income depends on the activity's productivity. The contribution of coffee farming income to family income per hectare and family can be seen in Table 2.

One indicator of farmers' welfare is to look at their income level. This condition can be obtained from the diversification of farming. The results showed that the income received by farmers in Tinggimoncong District was obtained not only from coffee farming but also from other farms, namely cocoa and rice.

Coffee plants, with a percentage per family of 69.99% and per hectare of 58.12%, contributed the most to income farming house stairs, compared to quantity contribution farming others in income house stairs. Several factors influence that, for example, large land and quantity of distant trees compared to farming cocoa and rice, which causes the amount of remote coffee

Table 2. Quantity revenue and farmer's contribution in the District Tinggimoncong, Regency Gowa

Type farming	Amount income (IDR per family)	Contribution revenue (%)	Amount income (IDR per ha)	Contribution revenue (%)
Coffee	38,509,291	69.99	38,509,291	58.12
Cocoa	3,326,639	7.05	6,296,479	9.5
Paddy	10,724,743	22.96	21,449,486	32.37

production to be higher, and the price of selling coffee tends up to 17,000 IDR kg⁻¹, which impacts the income. This condition includes several influential variables to income coffee farming: the number of trees, productivity of trees, plant age, cost fixed, cost variable, and output price. The size of coffee income given to needs a house ladder, so. that said, contribute more. This is because coffee farms contribute the most between farming and other income houses in the District Tinggimoncong. That is in line with a study by Gultom and Putra (2019), which states that coffee plants will grow more fertile on the plains tall and capable of reaching an income average business per hectare from up to 38,000,000 IDR ha⁻¹.

Furthermore, the total income of rice farming provides the most enormous contribution, and the second is from the income of farmer families, which is 22.96%, with an average income per family of 10,724,743 IDR, and if viewed from the average income per hectare of 21,449,486 IDR, which means that in percentage terms, it is 32.37%. This is enough if compared with the contribution of farming plants existing cocoa. Income farming rice is obtained in a year with three harvests, including small ones, because it is conducted in 3 production times. However, on the whole, if totaled, it will take effect on income house stairs. So from that period, one year could conclude that farming paddy is enough to contribute to the income ladder compared to farming cocoa. That is in line with a study by Sari (2015), who stated that income farming paddy with a sizeable average area of 0.5 ha starts from 20,000,000 to 30,000,000 IDR in a year.

Cocoa is a farm that contributes less to farming. The total income of rice farming makes the most significant contribution from the income of farmer families, which is 7.05%, with an average income per family of 3,326,639 IDR, and if viewed from the average income per hectare of 6,296,479 IDR, which means that in percentage terms, it is 9.5%. This is because several years ago, cocoa plants were attacked by fruit rot disease, and at several points in the Tinggimoncong District, landslides occurred,

so many plants died and were buried in the soil. Moreover, cocoa plant care was much more complex, so farmers did not set aside more land for cultivation cocoa plant. That is in line with the results of a study by Defitri (2019), who discovered the same trend in diseases that occur in plants cocoa is disease rotten the most dominating fruit in cultivation plant cacao, as well as disuse by disease cancer stems and disease Vascular Streak Dieback (VSD). VSD was one of the factors that caused a decline in cocoa production in Indonesia.

Analysis independent to dependent variables

Farming, in its process, constantly strives to make a profit, as is the case with farmers in the Tinggimoncong District who pursue coffee plants as their main livelihood because the climate in the region supports it. The profit comes from the reduction between revenue per hectare and the costs incurred. The revenue obtained is the result of multiplying the amount of coffee production by the selling price of coffee. Data analysis with analysis of multiple linear regression. Independent variables are X_1 as total tree (amount of tree), X_2 as productivity of each tree (kg), X_3 as age plants (years), X_4 as fixed cost (IDR), X_5 as variable cost (IDR), and X_6 as product price (IDR), while the dependent variable is Y as income (IDR).

Based on Figure 1, the equation model structural function income coffee farming can be written as follows:

$$Y = 234 + 1.026X_1 + 1.036X_2 + 0.010X_3 + 0.007X_4 + 0.024X_5 + 1.075X_6$$

Using the SPSS 22 application, the obtained coefficient test results determination (R^2), T-test, and F-test.

Coefficient determination R^2 is used to determine how many percent of the variation variable dependent can be explained by the independent variation variable. R -value² is located between 0 and 1. If R -value² approaches number 0, it means a tiny variation in the variable explained by the independent variable. However, if the R^2 value is close to 1, the enormous

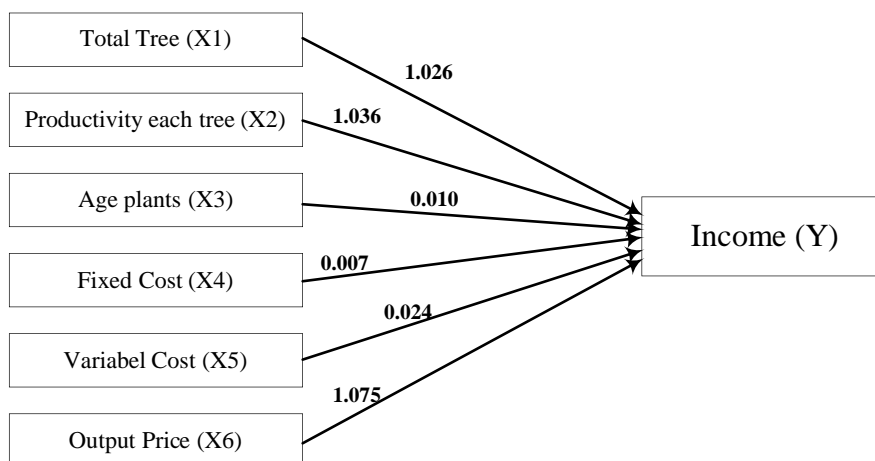


Figure 1. Structural diagram of multiple linear regression contribution of respondents coffee farming income per hectare in Tinggimoncong District, Gowa Regency

Table 3. Coefficient determination of independent variables (X) against dependent variable (Y)

Model summary ^b					
Model	R	R Square	Adjusted R square	Std. Error of the Estimate	Durbin Watson
1	.994 ^a	.989	.988	.11140	2.136

Note: a = Predictors: (constant), output price, cost fixed, cost variable, age plants, productivity per tree, quantity tree; b = Dependent variable: income coffee plant

variation variable dependent can be defined by the independent variable. That is in line with Putro and Kamal (2013) who say that coefficient determination (R^2) measures how much a significant ability variation variable is independent of the variation variable existing dependent.

Based on Table 3, it can be seen that the results of the coefficient of determination (R^2) in the R Square column are 0.989, which means that simultaneously, 98.9% of income coffee farming (Y) is influenced by the independent variables (X), while influenced by other factors outside the model. The R Square of 0.988 shows that the independent variable could explain a 98.8% variation in income from coffee farming. This means that other factors that cause or affect the income of the coffee business are not covered in this research.

Based on Table 4, it can be seen that the result of the calculated F test is 272735.756. After knowing the estimated F value, the next step is to find the F table value with a significant level of 0.05 and db = 53, so the F table is 2.28. Situation F count > F table (272735.756 > 2.28), which means that independent variables simultaneously (together) affect coffee farming income. That is the same with the sixth variable.

This co-occurs with income coffee farming in the Tinggimoncong District, Gowa Regency. This is in line with a study owned by Kurniati (2019), which also stated that if H2 is accepted, it could be concluded that existing independent variables are influenced by simultaneous (together) against existing dependent.

Table 5 shows that the partial variable influential free-to-income coffee farming is variable amount tree (X_1), productivity (X_2), age crops (X_3), cost fixed (X_4), cost variable (X_5), and output price (X_6). To know the influence connection between each independent variable by destination study for fingerprint test results variance (F Test) needs to continue on the partial test (T-Test) as presented in the explanation as follows:

Amount tree (X_1)

The amount tree is a whole cultivated coffee tree in the stated coffee farming process in the unit stem. The results of the later data analysis get a score coefficient regression variable amount tree worth cheerful of 1.026. With the assumption of constant variables, if every farmer adds an amount of tree with one stick, then income coffee farming will experience an enhancement of 1.026. The results of the data analysis obtain

a score significant for the amount tree (X_1) against income coffee plants (Y) by 0 in the sig column.

We could see the results of the T-test is 1059.582. The next step is to find the T table value with a significant level of 0.05 and $df = 53$, so an F table of 2.00575 is obtained. The state of T count > T table (1059.582 > 2.00575), which rejects H_0 , means there is a significant relationship by statistics among the amount of tree to income coffee farming. The number of trees has a natural effect on the income from coffee farming. Information found that increasing the number of trees in an area can automatically increase the total production and income of the coffee farm. That is in line with a study by Istianah et al. (2015), who said that the larger the trees they have at age productive coffee plants, the higher the production and income increase.

Productivity per tree (X_2)

The productivity of each tree is the result of the production of every coffee tree growing and growing in the farming process. The results of the later data analysis get a score coefficient regression for the variable productivity tree worth a positive of 1.036. With the assumption of constant variables, if every tree experiences enhanced productivity, then income coffee farming will experience an enhancement of 1.036. The results of the later data analysis show a score significant for the productivity tree (X_2) against income coffee plants (Y) by 0 in the sig column.

I could see the results of the T-test of 295.255. After knowing the calculated T value, the next step is to find the T table value with a significant level of 0.05 and $df = 53$, so an F table of 2.00575 is obtained. The state of T count > T table (1059.582 > 2,00575) then the conclusion reject H_0 means there is a significant relationship by statistics among productivity trees to income coffee farming, which means that productivity trees have a natural effect on income coffee farming. The research found that productivity

per takes effect on total production, which results in harvest that can impact the total revenue of coffee farming. This is also in line with a study owned by Karyani (2020), which says that many influential things to productivity per tree, for example just, pattern planting used like polyculture and monoculture, affect the productivity of the coffee produced at each tree and partial will take effect to income coffee farming.

Age plants (X_3)

Age plant is the age or period from the beginning of the plant until time. Study every reliable coffee plant in farming. The results of the later data analysis get score coefficient regression variable age plant, which is worth a negative of 0.010; this means if every tree experiences a drop age plant is 1 unit, then income coffee farming will experience a drop of 0.010. That is in line with the opinion of Janie (2017) in the book, which states that coefficient valuable regression negative means that when the independent variable experiences an increase, the dependent variable tends to experience a decline. It is known that the average age of a coffee plant study is ten years, so in certain conditions, the coffee plant is productive in producing coffee. However, when it reaches the age of 20 years old, the plant is on, so the coffee plant must replaced because production has decreased. The results of the later data analysis show a score significant for age plants (X_3) against income coffee plants (Y) of 0.027 in the sig column.

I could see the results of the T-test of 2.275. After knowing the calculated T value, the next step is to find the T table value with a significant level of 0.05 and $df = 53$, so an F table of 2.00575 is obtained state T count < T table (2.275 < 2.00575). Then, the conclusion accepts H_0 means no significant relationship by statistics among productivity trees to income coffee farming, which means that age plants have no

Table 4. The results of the joint influence test of independent variables (X) against dependent variable (Y) (F Test)

		ANOVA ^a				
	Model	Sum of squares	df	Mean square	F	Sig.
1	Regression	3.427	6	.571	2727355.756	.000 ^b
	Residual	.000	53	.000		
	Total	3.427	59			

Note: a = Dependent variable: income coffee plant; b = Predictors: (constant), output price, cost fixed, cost variable, age plants, productivity per tree, quantity tree

Table 5. Effect of test results of each independent variable (X) against variable Y (T-Test)

Model		Coefficients ^a			t	Sig.
		Unstandardized coefficients		Standardized coefficients		
		B	Std. Error	Beta		
1	(Constant)	.234	.164		1.429	.159
	Amount tree	1.026	.001	.946	1059,582	.000
	Productivity Per tree	1.036	.004	.235	295.255	.000
	Age plant	.010	.005	.002	2.275	.027
	Cost permanent	.007	.002	.002	3.025	.004
	Cost variable	.024	.002	.012	13,207	.000
	Output price	1.075	.039	.022	27,824	.000

Note: a = Dependent variable: income coffee plant

natural effect on income coffee farming. Because the research process found that several trees are more than ten years old, the productivity of plants decreases slightly at 20 years old. That is in line with a study by Rakasiwi et al. (2018), who discovered that age-productive coffee plants keep increasing by 1 to 10 and decreasing when 10 to 20 years are influential to income farming. Coffee plants are already too old, so the coffee production fruit will decrease much more.

Cost fixed (X₄)

Cost permanent is costs that cannot forever be used when the production process is carried out, and the nature of the cost permanent is not influenced by a big or small score of the resulting production from farming even though production experiences enhancement or descent. The results of the later data analysis get score coefficient regression variable amount tree worth negative of 0.007; this means that with assumption constant variables, if cost permanent experience drops by 1 unit so variable dependent, that is, income farming, also decreased by 0.007. It is known that the permanent cost consists of the tool depreciation value of horses, machetes, crowbars, sacks, sprayers, and land farming taxes. The results of the later data analysis get a score significant for cost fixed (X₄) against income coffee plants (Y) of 0.004 in the sig column.

This condition could seen in the results of the T-test of 3.025. After knowing the calculated T value, the next step is to find the T table value with a significant level of 0.05 and df = 53, so an F table of 2.00575 is obtained state T count > T table (3.025 > 2.00575). Then, the conclusion accepts that H₀ means no significant relationship by statistics among cost permanent to income coffee farming, which means that cost has no natural effect on income coffee farming. That

is obtained assuming that every type of cost keeps going down, affected by the tool depreciation value after finished use, resulting in insufficient maximum-use tools and increased productivity decrease until income-supported farming with procurement tool farming new. That is in line with a study by Supriyadi et al. (2014), who said that if the score depreciation tool increases and the cost permanently decreases, it will affect productivity farming consequences lack of tools, as well as acquisition farming and impact income coffee farming.

Cost variable (X₅)

The cost variable is the cost of nature, which is not fixed (changed) depending on the big production. The results of the later data analysis get a score coefficient regression for the cost variable worth negative of 0.024; this means that with assumption constant variables, if the cost variable experiences a drop of 1 unit, then income coffee farming will experience a drop of 0.024. The results of the later data analysis get a score significant for cost variable (X₅) against income coffee plants (Y) by 0 in the sig column. We could see the results of the T-test of 13.207. After knowing the calculated T value, the next step is to find the T table value with a significant level of 0.05 and df = 53, so an F table of 2.00575 is obtained. State T count > T table (13,207 > 2,00575), and the conclusion accepts H₀ means no. There is a significant relationship between statistics among cost variables and income coffee farming, which means that cost variables do not have a natural effect on income coffee farming.

That is a fact from the results of the study that price needs variables like case fertilizers and pesticides that are not steady and steady, good in one region or a period certain that results in prices that are not consistent and impactful

use cost increasing variable or decreased. The intended variable is the cost of the production company covering seeds, ZA, KCL, Urea, and Regent pesticides. If the cost variable is lowered, it will affect the productivity of plants produced and automatically lower income coffee farming. That is in line with a study by Tarmaza and Gunawan (2019), which states that the drop cost variable is the reaction. The total cost could increase and decrease because it will impact the resulting production. That occurs because production as one supports increases farming productivity besides using existing farming tools.

The results of the later data analysis get a score significant for cost variable (X_5) to income coffee plants (Y) by 0 in the sig. column. The considerable value is smaller than the level significant 0.05 ($0 < 0.05$), so the conclusion does not accept H_0 , which means there is a significant relationship by statistics among cost variables to income coffee farming. As for the amount of influence cost variable to income coffee farming is 0.012.

Output price (X_6)

Output price is the score sale coffee farming after production with the amount of results production certain. The results of the later data analysis get a score coefficient regression variable value of output price negative of 1.075; this means that with the assumption of constant variables, if the output price experienced enhancement is 1 unit, then income coffee farming will experience an enhancement of 1.075. The results of the later data analysis show a significant output price (X_6) score against income coffee plants (Y) by 0 in the sig column.

We could see the results of the T-test of 27.824. After knowing the calculated T value, the next step is to find the T table value with a significant level of 0.05 and $df = 53$, so an F table of 2.00575 is obtained. The state of $T \text{ arithmetic} > T \text{ table}$ ($27.824 > 2.00575$) then the conclusion reject H_0 means there is a significant relationship by statistics among output price against income coffee farming, which means that output price has a natural effect on income coffee farming. That found the truth in the research process, where the output price is an essential part of the acquisition income because it is score sell farming and very take effect to income farming. In line with this opinion, Rofik (2015) says that the output price is the level of selling people's coffee applied at the farmer's level on a time-specific basis measured in rupiah per kilogram.

The conclusion is that the three independent variables in the model, productivity per tree, variable costs, and output prices, are statistically significant in influencing coffee farming income. In contrast, the three independent variables, plant age, cost variable, and fixed cost, have no effect, or it can be said that the impact is relatively small, as indicated by the t-test results of each variable. Three variables, namely the number of trees, productivity per tree, and the price of output, have a positive effect, while the age of the plant and the fixed and variable costs have a negative impact. Therefore, as the age of the plant increases, the productivity of trees is reduced, resulting in reduced income farming, and the higher the variable costs, the lower the income of coffee farming. In contrast, when permanent in-use costs must increase, so will the total revenue obtained after the reception.

CONCLUSION

Conclusions obtained as follows: (1) income coffee farming provides the most significant contribution to household income farmer's ladder in the District Tinggimoncong; (2) quantity trees, productivity tree, age plants, cost fixed, cost variables, and output prices together (F test) gives influence to income coffee farming (Y) $F \text{ count} > F \text{ table}$ ($2727355.756 > 2.28$). By partial (t-test), the number of trees, productivity per tree, and the price of each output are significant by statistics to income coffee farming. In contrast, others do not have significant influence.

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