

The Effect of Production Costs on the Income of Tobacco Farmers in East Lombok Regency, Indonesia

Author:

M. Kholiq Hardiansyah¹, Hendrawati Hamid², Taufan Alwany³

Email:

mkholiqhardiansyah@gmail.com¹, hendrawati@ipdn.ac.id²,
taufan.alwany@umi.ac.id³

Affiliation:

¹West Nusa Tenggara Provincial Government, Jl. Pejangik No. 12, Mataram City, West Nusa Tenggara (83122), Indonesia

²Governance Institute of Home Affairs (IPDN), Jl. Ir. Soekarno KM 20 Sumedang, West Java (45363), Indonesia

³Universitas Muslim Indonesia, Jl. Urip Sumoharjo KM. 5, Panakkukang, Makassar (90231), Indonesia

Article Info

Article history:

Submitted: Nov 01, 2025

Accepted: Dec 30, 2025

Published: Dec 31, 2025

Keywords:

Production Cost;

Income;

Tobacco Farmers



ABSTRACT

Background. This study addresses the issue of high tobacco production costs that are not proportional to the income earned by tobacco farmers in East Lombok Regency. As a result, the welfare of tobacco farmers is presumed to be relatively low. This condition indicates a gap between production expenditures and farmers' income levels, which warrants further empirical investigation. **Purpose.** The purpose of this study is to analyze the effect of production costs on the income of tobacco farmers in East Lombok Regency. **Method.** This research employs a descriptive quantitative approach using a correlational method to examine the relationship and influence of production costs on farmers' income. The study is grounded in the theory of production costs proposed by Faisal (2022) and the income theory developed by Bramastuti (2009). Data were collected through questionnaires distributed to 100 respondents, complemented by observation and literature review. Respondents were selected using a Disproportionate Stratified Random Sampling technique due to the non-uniform and stratified characteristics of the population. **Results.** The findings indicate that the calculated t-value (9.887) is greater than the t-table value (2.365), demonstrating a significant effect of production costs (X) on the income of tobacco farmers (Y). The significance value (Sig.) of 0.000 is less than 0.05, leading to the rejection of H_0 and acceptance of H_1 . This result confirms that production costs significantly influence the income of tobacco farmers in East Lombok Regency. Furthermore, production costs account for 49.9% of the variation in farmers' income, as indicated by a coefficient value of 0.499. **Conclusion.** Based on the analysis, it can be concluded that production costs have a positive and significant effect on the income of tobacco farmers in East Lombok Regency.



*This work is licensed under the Creative Commons Attribution
Noncommercial Share Alike 4.0 International License*

Corresponding Author:

Email: mkholiqhardiansyah@gmail.com

Affiliation: West Nusa Tenggara Provincial Government, Jl. Pejanggik No. 12, Mataram City, West Nusa Tenggara (83122), **Indonesia**

I. INTRODUCTION

1.1 Background

Indonesia is widely recognized as a country rich in natural resources, with geographical and climatic conditions that strongly support the development of the agricultural sector. Located between two continents and two oceans and crossed by the equator, Indonesia has a tropical climate characterized by relatively balanced rainfall and dry seasons. In addition, the country lies along the global volcanic belt known as the *Ring of Fire*, which contributes to high soil fertility and makes much of its territory suitable for agricultural activities. Land serves as a fundamental component of agriculture and significantly influences the development of the agricultural sector (Tesi et al., 2025). Since the colonial era, agriculture has been a cornerstone of the Indonesian economy and a primary reason for European colonization, driven largely by the demand for spices. To this day, the agricultural sector remains the backbone of the national economy and the main source of livelihood for a large proportion of the Indonesian population.

According to data from Statistics Indonesia (BPS) in 2021, Indonesia's land area covers nearly two million square kilometers, making it one of the largest countries in the world in terms of landmass and highlighting its substantial agricultural potential. Agriculture is categorized as an optional governmental function, depending on land availability. In this context, the government must not neglect key factors that require attention when developing agricultural advantages (Hamid, 2018).

One of Indonesia's leading agricultural commodities is tobacco. Tobacco has high economic value and serves as a primary raw material for the cigarette and cigar industries, many of which are export-oriented. Indonesia is recorded as one of the world's largest tobacco producers, with production reaching 220,120 tons in 2022, ranking sixth globally. The vast majority of tobacco plantations—approximately 99.96% of the total 188,940 hectares are managed by smallholder farmers. One of the main tobacco-producing provinces is West Nusa Tenggara (NTB), which benefits from favorable geographical conditions, including the eastern monsoon winds that bring prolonged dry seasons and fertile volcanic soils originating from Mount Rinjani. These factors make NTB, particularly East Lombok Regency, a highly potential and productive region for tobacco cultivation, with production reaching 59,786 tons in 2022, ranking third nationally after East Java and Central Java.

East Lombok Regency serves as the primary center of tobacco production in NTB, contributing nearly 50% of the province's total output. Its geographical location on the southern slopes of Mount Rinjani and proximity to coastal areas results in hot climatic conditions and dry soils, which are ideal for tobacco cultivation. Tobacco farming constitutes the main source of income for local communities and contributes significantly to the Gross Regional Domestic Product (GRDP) of East Lombok, where the agricultural sector accounts for approximately 27%. However, despite its strategic role, tobacco farmers face numerous challenges, including high production costs driven by fertilizer scarcity and the high prices of seeds and agricultural inputs. Furthermore, non-transparent marketing systems and dependence on middlemen lead to unstable selling prices that often fail to cover production costs, resulting in income instability for farmers.

Ironically, despite tobacco being a flagship commodity in the region, the welfare level of tobacco farmers in East Lombok remains low. The regency records the highest number of people living in poverty in NTB, with 197,630 individuals out of a total population of approximately 1.39 million. Poverty remains a major issue faced by many countries worldwide, particularly in rural areas where livelihoods are dominated by primary-sector occupations (Seco-Hidalgo et al., 2025). This condition indicates that a substantial proportion of the poor population consists of farmers, including tobacco farmers. The main challenges include the absence of minimum price policies for tobacco and strong dependence on volatile market mechanisms. Tobacco quality

also plays a crucial role in price determination; however, post-harvest standards and management at the farmer level remain suboptimal.

These conditions demonstrate that although tobacco has significant potential as a driver of regional economic growth, the lack of adequate protection for farmers has prevented production outcomes from translating into meaningful income improvements. Farmers' income is closely related to their ability to meet basic needs and support household welfare (Mostafa & Hussein, 2025). Income growth that aligns with the fulfillment of farmers' needs can ultimately lead to improved welfare and poverty reduction among tobacco farmers. Therefore, it is essential to re-evaluate tobacco production and distribution systems to ensure that they genuinely support farmer welfare.

1.2 Problem

Although the agricultural sector particularly tobacco commodities—has long served as the backbone of the economy in East Lombok Regency and has generally contributed significantly to the Gross Regional Domestic Product (GRDP), empirical conditions indicate that the welfare of tobacco farmers has not experienced substantial improvement. This situation highlights a clear gap between the high economic potential of tobacco as a leading commodity and the socio-economic realities faced by farmers as the primary actors within the production system. Such a disparity reflects that the presence of a flagship commodity does not automatically translate into optimal improvements in farmers' living standards.

Many previous studies have predominantly focused on macro-level analyses, such as production volumes, land area, and tobacco exports, while relatively few have examined in depth the direct relationship between tobacco commodities and the welfare conditions of farmers in major producing regions such as East Lombok Regency. This gap suggests a lack of comprehensive understanding regarding how economic benefits from tobacco cultivation are distributed at the local level. Another notable research gap lies in the limited number of studies that explicitly link the high poverty rates in tobacco-producing regions to the structural conditions of tobacco farming itself. The majority of the population in East Lombok relies on tobacco farming as their primary source of livelihood; however, a considerable proportion of these farmers remain classified as living in poverty. This condition indicates the existence of systemic issues within the governance and management of tobacco farming that have not been sufficiently identified in previous research. Key challenges such as price uncertainty, dependence on middlemen, high production costs, and fluctuations in crop quality and yield have rarely been positioned as central themes in localized and context-specific academic studies. Yet, understanding these factors is crucial for designing targeted empowerment strategies aimed at improving farmers' welfare.

Furthermore, there is a lack of research exploring the role of local governments and supporting institutions in bridging the gap between the economic potential of tobacco commodities and the welfare of farmers. Existing development programs tend to be general in nature and are not fully based on the specific needs of tobacco farmers. This condition further reinforces the knowledge gap regarding how governance mechanisms, pricing policies, and social protection measures for farmers can contribute to poverty reduction. Therefore, this study is essential to fill these gaps by providing a comprehensive depiction of the realities faced by tobacco farmers at the village level and by identifying structural barriers that hinder improvements in their welfare, despite residing in regions that are economically advantaged in tobacco-based agriculture.

1.3 Previous Studies

This study is inspired by several previous studies, particularly those examining the effect of production costs on farmers' income. One such study was conducted by Reskiyan in 2022 entitled "*The Effect of Production Costs on the Income of Corn Farmers in Benteng Paremba Village, Pinrang (An Islamic Economic Analysis)*". The results of this study indicate that production expenditures have an impact on the income of corn farmers in Benteng Paremba Village, Pinrang. Production costs were found to have a positive and significant effect on farmers' income, although the magnitude of the effect was relatively low. This was evidenced by a calculated t-value of 3.759, which exceeded the critical t-value of 1.987, and a significance level of 0.000, which is lower than 0.05, leading to the rejection of H_0 and acceptance of H_1 . Furthermore, the coefficient of determination analysis revealed that production costs accounted for 13.6% of the variation in

farmers' income, which is considered weak, while the remaining 86.4% was influenced by other factors not examined in the study (Reskiyan, 2022).

Another relevant study was conducted by Aprilia in 2019, entitled "*The Effect of Production Costs and Selling Prices on Farmers' Income from an Islamic Economic Perspective (A Study of Corn Farmers in Komerang Putih Village, Gunung Sugih District, Central Lampung Regency)*". The findings show that, based on partial testing, the production cost variable (X_1) had a negative and significant effect on income (Y). This implies that an increase in production costs leads to a decrease in farmers' income. Meanwhile, the selling price variable (X_2) was found to have a positive and significant effect on income (Y), indicating that higher selling prices contribute to increased farmers' income (Aprilia, 2019).

Rahayu (2020), in her study entitled "*The Effect of Production Costs and Selling Prices on the Income of Clove Farmers in Wonokarto Village, Ngadirojo District, Pacitan Regency*", found that based on simultaneous analysis (F-test), the calculated F-value was 16.528, which exceeded the F-table value of 3.09. With a significance value of 0.000, the results indicate a significant influence of production costs (X_1) and land area (X_2) on income (Y). The coefficient of determination (R^2) was 0.262, meaning that 26.2% of the variation in farmers' income was explained by the independent variables, while the remaining 73.8% was influenced by other factors outside the scope of the study.

Similarly, Lestari in a study entitled "*The Effect of Production Costs and Selling Prices on the Income of Coffee Farmers in Dusun Sawah Village, North Curup District*", reported that based on the F-test statistical analysis, both production costs (X_1) and selling prices (X_2) had a significant effect on coffee farmers' income. These two variables simultaneously influenced income, indicating that higher production costs combined with lower selling prices significantly affect the income of coffee farmers in Dusun Sawah Village, North Curup District (Lestari, 2022).

Another study by Dewi Lestari and Winahyu, entitled "*The Effect of Land Area, Labor Input, and Production Costs on the Income of Shallot Farming in Bojonegoro Regency*", found that labor input and production costs had a significant impact on farmers' income in shallot farming. The study concluded that increases in labor input and production costs would lead to higher income levels, provided that other factors remained constant (Lestari & Winahyu, 2021).

1.4 State of the Art

Based on the previous studies reviewed by the researcher, there are several differences that form the foundation of the present study, particularly in terms of the theoretical framework and the main research focus. Regarding the theoretical approach, this study employs two theories: the theory of production costs proposed by Faisal and Astuti (2022) and the income theory developed by Bramastuti (2009), as cited in Marwiyah et al. (2023), both of which are adapted to the specific context of tobacco farming (Faisal & Astuti, 2022; Bramastuti, 2009; Marwiyah et al., 2023). In terms of research focus, this study concentrates on the tobacco agricultural sector, which has not been specifically examined in the previous studies reviewed. This distinction constitutes the novelty of the present research.

1.5 Purpose

This study aims to analyze the effect of production costs on the income of tobacco farmers in East Lombok Regency, West Nusa Tenggara Province.

II. METHOD

This study employs a descriptive quantitative approach using a correlational method. Quantitative research is deductive in nature, meaning it moves from the specific to the general or aims to generalize field data into a general conclusion, progressing from concepts or theories to actual conditions (Simangunsong, 2017). Quantitative research begins with a preliminary study of the object being examined to identify the real problems (Nurdin & Hartati, 2019). The correlational method used in this study seeks to determine whether there is an influence of the independent variable on the dependent variable. This approach is applied to obtain accurate analytical results and to simplify complex realities into a research model.

Data were collected through questionnaires, observation, and literature review. In the data collection process, questionnaires were distributed to 100 respondents who had previously been determined as the research sample. The selection of respondents was carried out using the Disproportionate Stratified Random Sampling technique due to the non-uniform, stratified, and uneven distribution of the population. Respondents were selected randomly with the criterion that they are tobacco farmers in representative areas. In addition, direct field observations were conducted to examine actual conditions on site.

The analysis is based on the production cost theory proposed by Faisal (2022), which includes three variables: raw material costs, labor costs, and factory overhead costs, as well as the income theory proposed by Bramastuti (2009), which consists of four indicators: income received, family burden, fulfillment of needs, and fulfillment of production costs. These theories were adapted to the research context with a primary focus on tobacco farming. The study was conducted in January 2025, from January 6 to January 25, over a period of 18 days, in Selong District and East Sakra District, East Lombok Regency, West Nusa Tenggara Province.

III. RESULTS AND DISCUSSION

In this study, the researcher conducted data analysis tests to examine the effect of production costs on the income of tobacco farmers in East Lombok Regency. The analytical procedures consisted of instrument testing, classical assumption tests, and hypothesis testing, with the ultimate objective of determining the magnitude of influence and the nature of the relationship between the independent variable (X) and the dependent variable (Y). The results of the data analysis conducted are presented as follows.

3.1 Instrument Testing

1. Validity Test

The validity test was conducted by comparing the calculated r value (r count) with the critical r value (r table). If the calculated r value exceeds the r table value at a significance level of 10%, the statement item is considered valid. The results of the validity test are presented as follows.

Table 1.
Validity Text Result

Item	r-table	r-calculated	Remarks
Production Cost Variable (X)			
1	0.2324	0.678	Valid
2	0.2324	0.759	Valid
3	0.2324	0.693	Valid
4	0.2324	0.782	Valid
5	0.2324	0.804	Valid
6	0.2324	0.873	Valid
7	0.2324	0.708	Valid
8	0.2324	0.790	Valid
9	0.2324	0.783	Valid
10	0.2324	0.780	Valid
11	0.2324	0.807	Valid
12	0.2324	0.534	Valid
13	0.2324	0.594	Valid
14	0.2324	0.616	Valid
Farmer Income Variable (Y)			
1	0.2324	0.831	Valid
2	0.2324	0.865	Valid
3	0.2324	0.717	Valid
4	0.2324	0.769	Valid
5	0.2324	0.847	Valid

6	0.2324	0.860	Valid
7	0.2324	0.835	Valid
8	0.2324	0.882	Valid

Source: Primary data processed using SPSS 25, 2025

Based on the table above, it can be concluded that all statement items for the production cost variable and the farmers' income variable are considered valid. This is indicated by the item-total correlation values (r count) for each statement, which are greater than the critical correlation value (r table) of 0.2324.

2. Reliability Test

The reliability test indicates whether an instrument is suitable for data collection, as it reflects the consistency and stability of the measurement. A variable is considered reliable if it has a Cronbach's alpha value greater than 0.6. The results of the reliability test for the statement items that have been declared valid are presented as follows.

Table 2.
Reliability Test Result

No	Variable	Number of Items	Cronbach's Alpha	Critical Value	Remarks
1	Production Cost (X)	14	0.926	0.60	Valid
2	Farmer Income (Y)	8	0.926	0.60	Valid

Source: Primary data processed using SPSS 25, 2025

Based on the table above, it can be observed that the Cronbach's alpha values for both variables exceed 0.6. Therefore, it can be concluded that all statement items used in this study have a good level of reliability.

3.2 Classical Assumption Test

1. Normality Test

The normality test is used to examine whether the data are normally distributed. Its purpose is to determine whether, in the regression model, the residuals or error terms are normally distributed. The results of the normality test conducted in this study are presented as follows:

Table 3.
Normality Test Result

Description	Category	Value
N		100
Normal Parameters ^{ab}	Mean	,0000000
	Std. Deviation	13,38779780
Most Extreme Differences	Absolute	,071
	Positive	,071
	Negative	-,067
Test Statistic		,071
Asymp. Sig. (2-tailed)		,200 ^{cd}

Source: Primary data processed using SPSS 25, 2025

The normality test applied in this study is the Kolmogorov-Smirnov test, which produced an Asymp. Sig value of 0.200, greater than 0.05. Therefore, it can be concluded that the data used in this study are normally distributed.

2. Linearity Test

The linearity test is used to determine whether there is a linear relationship between the independent variable (X) and the dependent variable (Y). In this study, the test aims to examine whether a linear relationship exists between production costs and the income of tobacco farmers. The results of the linearity test for variables X and Y are presented as follows:

Table 4.
Linearity Test Result

Variable	Source	Sum of Squares	df	Mean Square	F	Sig.
income * Cost	Between Groups (Combined)	3996,029	30	133,201	,668	,888
	Linearity	1,880	1	1,880	,009	,923
	Deviation from Linearity	3994,149	29	137,729	,691	,864
	Within Groups	13749,931	69	199,274		
	Total	17745,960	99			

Source: Primary data processed using SPSS 25, 2025

Based on the table above, the linear relationship between variable X and variable Y can be assessed through the Deviation from Linearity value. Since the Deviation from Linearity value is greater than 0.05, namely 0.864, this indicates that there is a linear relationship between variable X (production costs) and variable Y (the income of tobacco farmers).

3. Correlation Test

The correlation test is conducted to determine whether there is a relationship between variable X and variable Y. This test focuses on the total summation of sample scores for both variables. The results of the correlation test between variable X (production costs) and variable Y (farmers' income) are presented as follows:

Table 5.
Correlation Test Result

Variable	Statistic	Cost	Income
Cost	Pearson Correlation	1	,434**
	Sig. (2-tailed)		,000
	N	100	100
Income	Pearson Correlation	,434**	1
	Sig. (2-tailed)	,000	
	N	100	100

--Correlation is significant at the 0.01 level (2-tailed)--

Source: Primary data processed using SPSS 25, 2025

The relationship between variable X and variable Y can be considered correlated when the significance value (2-tailed) is less than 0.05. As shown in the table above, the significance (2-tailed) value is less than 0.05, namely 0.00. Therefore, it can be concluded that there is a positive and significant correlation between production costs and the income of tobacco farmers in East Lombok Regency.

3.3 Hypothesis Test

1. Simple Linear Regression Test

The Simple Linear Regression Test is conducted to examine the effect between two quantitative variables. In this study, a simple linear regression analysis was performed to determine the influence of production costs on the income of tobacco farmers. The results of the simple linear regression analysis were obtained using the SPSS 25 program, as presented below:

Table 6.

Correlation Test Result

Model	Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
1	(Constant)	54,420	,585		93,070	,000
	Cost	,116	,012	,707	9,887	,000

--Dependent Variable: **Income--**

Source: Primary data processed using SPSS 25, 2025

The regression equation above indicates that there is a partial relationship between the independent variable and the dependent variable. Therefore, the following conclusions can be drawn: a. The constant value is 54.420, which means that the consistent value of the income variable is 54.420.; b. The regression coefficient of production costs is 0.116, indicating that for every 1% increase in production costs, income increases by 0.116 units. The regression coefficient is positive, which implies that the direction of the effect of production costs (X) on tobacco farmers' income (Y) is positive.

Based on these conclusions, decision-making in the simple linear regression test is as follows: a. Based on the significance value in the coefficients table of 0.00, which is smaller than 0.05 ($0.00 < 0.05$), it can be concluded that the production cost variable (X) has a significant effect on farmers' income (Y); b. Based on the calculated t-value of 9.887, which is greater than the t-table value of 2.364 ($t_{\text{calculated}} = 9.887 > t_{\text{table}} = 2.364$), it can be concluded that the production cost variable (X) has a significant effect on farmers' income (Y).

2. T-Test

According to Ghazali (2018:99), the t-test is used to show how strong the influence of an independent variable individually is in explaining the dependent variable partially. The basis for decision-making in this test is that if the calculated t-value (t_{count}) is greater than the t-table value (t_{table}), then the hypothesis is accepted, which means that the independent variable has an effect on the dependent variable, and vice versa. The following are the results of the calculations that have been carried out:

Table 7.

T-Test Result

Model	Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig.
1	(Constant)	54,420	,585		93,070	,000
	Cost	,116	,012	,707	9,887	,000

--Dependent Variable: **Income--**

Source: Primary data processed using SPSS 25, 2025

It can be observed that the significance (Sig.) value for the production cost variable is 0.00, which is lower than the probability value of 0.05 ($0.00 < 0.05$). Therefore, H_1 is accepted, indicating that production costs have an effect on the income of tobacco farmers. In addition, the calculated t-value ($t_{\text{count}} = 9.887$) is greater than the t-table value ($t_{\text{table}} = 2.365$), or $9.887 > 2.365$, which confirms that the production cost variable (X) contributes to the income of tobacco farmers (Y). Based on these results, it can be concluded that production costs have a significant effect on the income of tobacco farmers.

3. Coefficient of Determination

The calculation of the coefficient of determination is carried out to determine the extent of the contribution of production costs to the income of tobacco farmers. The result of this test is presented in the form of the R Square value, which represents the coefficient of determination. This coefficient also indicates the percentage level of contribution of the production cost variable (X) to the tobacco farmers' income variable (Y). The results of the coefficient of determination calculation are presented as follows:

Table 8.
Coefficient of Determination Result

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.707 ^a	0.499	0.494	1.450

--Predictors: (Constant), cost--

Source: Primary data processed using SPSS 25, 2025

Based on the table above, the R Square value is 0.499 or 49.9%, which indicates that 49.9% of the tobacco farmers' income (Y) is influenced by production costs (X), while the remaining 50.1% is influenced by other variables or factors that were not examined in this study.

3.3 Discussion of Main Research Findings

This study reveals that production costs have a positive and significant effect on the income of tobacco farmers in East Lombok Regency. The results of the regression analysis show that the calculated t-value is 9.887, which is greater than the t-table value of 2.365, with a significance level of $0.000 < 0.05$. This indicates that the production cost variable (X) has a statistically significant influence on farmers' income (Y), with a contribution of 49.9% based on the coefficient of determination. This means that nearly half of the variation in farmers' income can be explained by the magnitude of production costs incurred, such as expenditures on seeds, fertilizers, pesticides, labor wages, and agricultural tools. Meanwhile, the remaining 50.1% is influenced by other factors not examined in this study, including selling prices, land size, weather conditions, and crop quality. When compared with previous studies, such as that conducted by Winda Reskiyan Putri (2022) on corn farmers in Pinrang, similar results were found, where production costs had a positive effect on farmers' income, consistent with the findings of Suprayitno et al. (2020). However, the magnitude of the effect in those studies was much smaller, amounting to only 13.6% and 21.4%, respectively. This suggests that the tobacco sector in East Lombok has an economic structure that is more dependent on production costs than the corn sector in Pinrang. In this context, tobacco farmers appear to be more sensitive to changes in input prices. In contrast, the study by Mia Aprilia (2019) on corn farmers in Central Lampung found that production costs had a negative effect on income. This differs from the findings of the present study, which indicate a positive relationship, suggesting that when production costs are managed efficiently, increases in production costs can lead to higher farmers' income.

This study also highlights the importance of specific local contexts. Unlike the studies by Sri Rahayu (2020) and Fuji Setia Lestari (2022), which examined the coffee and clove sectors, tobacco farming in East Lombok not only affects individual farmers' income but also contributes significantly to the region's Gross Regional Domestic Product (GRDP). Nevertheless, despite tobacco being a leading commodity and contributing approximately 27% to East Lombok's GRDP, poverty levels in the region remain high. This

constitutes one of the most important findings of this study: a high contribution of tobacco to the regional macroeconomic level does not necessarily guarantee improved welfare for farmers at the micro level. These findings underscore the need for policy approaches that are not solely oriented toward increasing production, but also toward improving cost efficiency, stabilizing selling prices, and enhancing farmers' access to affordable production inputs and markets. From a theoretical perspective, this study reinforces the concept of production costs as a key variable in determining farm income, as proposed by Faisal and Astuti (2022) and Bramastuti (2009). However, the novelty of this research lies in its specific focus on tobacco farming as the main object of analysis, which has rarely been examined quantitatively in local contexts such as East Lombok. Another contribution of this study is the identification of production costs not merely as financial expenditures, but as factors closely related to farmers' access to production inputs and market structures that dominate price formation, such as the role of middlemen who purchase tobacco at unstable prices. These conditions are closely linked to the future income prospects of tobacco farmers. Income, both directly and indirectly, has a substantial impact on individuals' quality of life (Castilho & Fuinhas, 2025). In conclusion, the main findings of this study contribute to a deeper understanding of how the dynamics of production costs directly affect the income of tobacco farmers in regions with a high dependence on the agricultural sector, while simultaneously highlighting the disparity between macroeconomic contributions and the welfare of primary producers at the village level. These findings are important as a basis for formulating more targeted policies for farmer empowerment and protection.

The researcher identified additional factors or variables, apart from production costs, that also have a significant influence on the income of tobacco farmers in East Lombok Regency, namely selling price and land area. The selling price directly affects the revenue obtained by farmers from the sale of their tobacco farming products. This selling price is influenced by the type, quality, and specific parts of the tobacco leaves being sold, as each has particular criteria that affect the taste and aroma of the tobacco. At present, tobacco does not have a fixed or minimum selling price; instead, prices fluctuate according to market conditions and are largely determined by middlemen who act as processors or buyers of tobacco products. The absence of a fixed or base price contributes to the instability of tobacco farmers' income from year to year. In addition, land area also plays a crucial role in determining the quantity of tobacco production. Larger land holdings enable farmers to cultivate more tobacco plants, which in turn leads to higher production yields. Conversely, limited land area restricts the number of tobacco plants that can be cultivated, thereby constraining total output. Ultimately, the volume of harvested tobacco determines the level of income earned, as it is directly related to the quantity of production. This finding is consistent with the study by Fatmawati and Nasrul (2023), which reported that selling price and land area have a significant effect on farmers' income, both partially and simultaneously. These results indicate that, beyond production costs, several other factors play an essential role in influencing farmers' income, particularly in the context of tobacco farming.

IV. CONCLUSION

The researcher concludes that there is a significant and positive relationship between production costs and the income of tobacco farmers in East Lombok Regency. This is evidenced by the results of the data analysis, which show that the calculated t^* value (9.887) is greater than the t^* table value (2.365). These results indicate a statistically significant effect of production costs (X) on the income of tobacco farmers (Y). Furthermore, the probability significance value obtained is 0.00, which is less than 0.05; therefore, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. The R Square value of 0.499 indicates that production costs account for 49.9% of the variation in the income of tobacco farmers in East Lombok Regency.

This study has several limitations, primarily related to time and research funding constraints. In addition, the analysis focuses only on the relationship between two variables, even though there are other factors that may also influence the income of tobacco farmers. Given the strong relationship between production costs and income as both the starting point and the final outcome of farming activities, the researcher expects that these findings can serve as a scientific reference for policymakers to formulate policies that are more closely aligned with actual field conditions. Furthermore, this study is expected to provide a foundation for future researchers

to further examine and develop more comprehensive analyses related to tobacco farming income and its determining factors.

V. ACKNOWLEDGMENTS

The author would like to express sincere gratitude to the Government of East Lombok Regency for providing the opportunity to conduct this research on tobacco farming. Special appreciation is extended to the Department of Agriculture of East Lombok Regency, particularly the UPPT of Sakra Timur District and the UPPT of Selong District, for their extensive support in assisting the researcher with data collection and for providing the necessary information required for this study.

VI. REFERENCES

- Aprilia, M. (2019). *Pengaruh biaya produksi dan harga jual terhadap pendapatan petani menurut perspektif ekonomi Islam (Studi pada petani jagung Desa Komerling Putih Kecamatan Gunung Sugih Kabupaten Lampung Tengah)* [Skripsi, Universitas Islam Negeri Raden Intan Lampung]. <https://repository.radenintan.ac.id/5666/1/SKRIPSI%20MIA%20APRILIA.pdf>
- Castilho, D., & Fuinhas, J. A. (2025). Exploring the effects of tourism capital investment on income inequality and poverty in the European Union countries. *Journal of Economic Structures*, 14(1), Article 7. <https://doi.org/10.1186/s40008-025-00349-2>
- Dewi Lestari, R., & Winahyu, N. (2021). Pengaruh luas lahan, curahan tenaga kerja, dan biaya produksi terhadap pendapatan usahatani bawang merah di Kabupaten Bojonegoro. *Journal Science Innovation and Technology (SINTECH)*, 2(1), 28–34. <https://doi.org/10.47701/sintech.v2i1.1578>
- Faisal, A., & Astuti, R. T. (2022). *Akuntansi manajemen: Teori dan aplikasi* (Cet. ke-). Nusantara Press.
- Fatmawati, F., & Nasrul, M. (2023). Pengaruh luas lahan dan harga jual terhadap pendapatan petani jagung (*Zea mays* L.) di Desa Dulomo Kecamatan Patilanggio Kabupaten Pohuwato. *Agricultural Review*, 2(1), 18–27. <https://doi.org/10.37195/arview.v2i1.362>
- Hamid, H. (2018). Peran pemerintah daerah dalam pemberdayaan petani padi di Kecamatan Pallangga, Kabupaten Gowa, Provinsi Sulawesi Selatan. *Khazanah Ilmu Berazam*, 1(3), 32–48. <http://eprints2.ipdn.ac.id/id/eprint/646/>
- Lestari, F. S. (2022). *Pengaruh biaya produksi dan harga jual terhadap pendapatan petani kopi Desa Dusun Sawah Kecamatan Curup Utara* [Skripsi]. <https://e-theses.iaincurup.ac.id/3191/>
- Marwiyah, S. L., Ainulyaqin, M., & Edy, S. (2023). Analisis pengaruh perilaku konsumtif dan tingkat pendapatan terhadap online shopping pada e-commerce Shopee dalam perspektif ekonomi Islam. *Jurnal Ilmiah Ekonomi Islam*, 9(3), Article 4279. <https://doi.org/10.29040/jiei.v9i3.10783>
- Mostafa, A., & Hussein, R. S. (2025). Tobacco and household expenditure in Egypt: Insights into socioeconomic inequalities and spending profiles from the Household Income, Expenditure and Consumption Survey. *BMC Public Health*, 25(1), Article 21676. <https://doi.org/10.1186/s12889-025-21676-w>
- Nisa, A. M. R., & Suprayitno, H. (2020). The effect of selling price and production costs on corn farmers income in semanding, kawedusan village, ponggok sub-district. *JOSAR (Journal of Students Academic Research)*, 5(2), 8-16. <https://ejournal.unisbablitar.ac.id/index.php/josar/article/view/1141>
- Nurdin, I., & Hartati, S. (2019). *Metodologi penelitian sosial*. Media Sahabat Cendekia.

- Rahayu, S. (2020). *Pengaruh biaya produksi dan harga jual terhadap pendapatan petani cengkeh Desa Wonokarto Kecamatan Ngadirojo Kabupaten Pacitan* [Skripsi, Institut Agama Islam Negeri Ponorogo]. <https://etheses.iainponorogo.ac.id/11587/>
- Reskiyan P, W. (2022). *Pengaruh biaya produksi terhadap pendapatan petani jagung Desa Benteng Paremba Pinrang (Analisis ekonomi Islam)* [Skripsi, Institut Agama Islam Negeri Parepare]. <https://repository.iainpare.ac.id/id/eprint/3358/1/18.2400.022.pdf>
- Seco-Hidalgo, V., Witney, A. A., Chico, M. E., Vaca, M., Arevalo, A., Schuyler, A. J., Platts-Mills, T. A. E., Ster, I. C., & Cooper, P. J. (2025). Rurality and relative poverty drive acquisition of a stable and diverse gut microbiome in early childhood in a non-industrialized setting. *Scientific Reports*, 15(1), Article 5601. <https://doi.org/10.1038/s41598-025-89224-5>
- Simangunsong, F. (2017). *Metode penelitian pemerintahan: Teoritik-legalistik-empirik-inovatif*. Alfabeta.
- Tesi, G. O., Okpara, K. E., Tesi, J. N., Agbozu, I. E., & Techato, K. (2025). Assessment of organophosphate pesticides in soils and vegetables from agricultural areas of Delta Central District, Nigeria. *Scientific Reports*, 15(1), 1–19. <https://doi.org/10.1038/s41598-024-83518-w>