

## **CONTRIBUTION OF CASHEW NUT FARMERS' BUSINESS INCOME TO HOUSEHOLD INCOME**

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### **Abstract**

This study aims to analyze the contribution of cashew farmers' income to household income. The background of this study is based on the strategic role of the agricultural sector, particularly cashew farming, in supporting the economy of farming families and as a source of funding for children's education. In the context of human resource development in rural areas, households' ability to finance education is greatly influenced by the stability and size of income obtained from farming activities. The research method used is a quantitative approach with a descriptive-analytical design. The research sample consists of 100 cashew farmer households selected through stratified random sampling. Data were collected through structured questionnaires and in-depth interviews, then analyzed using simple linear regression with SPSS software. The results of the study indicate that income from cashew farming significantly contributes to household income, with a regression coefficient of 0.723 and an R-squared value of 0.522. Meanwhile, the contribution to children's education expenditure is also significant, with a regression coefficient of 0.648 and an R-squared value of 0.471. In-depth interviews revealed that the majority of farmers prioritize children's education when income from farming increases. Thus, cashew farming not only serves as an economic support but also plays a crucial role in ensuring the sustainability of children's education in rural areas.

**Keywords:** Household Income, Cashew Nuts, Children's Education, Farmers

### **Abstrak**

*Penelitian ini bertujuan untuk menganalisis kontribusi pendapatan dari usaha petani kacang mete terhadap pendapatan rumah tangga. Latar belakang penelitian ini didasarkan pada peran strategis sektor pertanian, khususnya usaha kacang mete, dalam menopang ekonomi keluarga petani sekaligus sebagai sumber pembiayaan pendidikan anak. Dalam konteks pembangunan sumber daya manusia di desa, kemampuan rumah tangga dalam membiayai pendidikan sangat dipengaruhi oleh stabilitas dan besarnya pendapatan yang diperoleh dari usaha tani. Metode penelitian yang digunakan adalah pendekatan kuantitatif dengan desain deskriptif-analitik. Sampel penelitian terdiri atas 100 rumah tangga petani kacang mete yang dipilih melalui teknik stratified random sampling. Data dikumpulkan melalui kuesioner terstruktur dan wawancara mendalam, kemudian dianalisis dengan regresi linier sederhana menggunakan perangkat lunak SPSS. Hasil penelitian menunjukkan bahwa pendapatan dari usaha kacang mete memberikan kontribusi signifikan terhadap pendapatan rumah tangga dengan nilai koefisien regresi sebesar 0,723 dan R-squared sebesar 0,522. Sementara itu, kontribusi terhadap pengeluaran pendidikan anak juga signifikan dengan koefisien regresi sebesar 0,648 dan R-squared sebesar 0,471. Hasil wawancara mendalam menunjukkan bahwa mayoritas petani memprioritaskan pendidikan anak ketika pendapatan dari usaha tani*

*meningkat. Dengan demikian, usaha kacang mete tidak hanya berfungsi sebagai penopang ekonomi, tetapi juga menjadi instrumen penting dalam mendukung keberlanjutan pendidikan anak-anak petani di pedesaan.*

**Kata kunci:** Pendapatan Rumah Tangga, Kacang Mete, Pendidikan Anak, Petani

## INTRODUCTION

In the context of rural development in Indonesia, the agricultural sector still plays a central role as the backbone of the household economy. One of the promising commodities with significant potential but not yet fully developed is cashew nuts. Cashew nuts, which are processed from the cashew apple tree (*Anacardium occidentale*), not only have high economic value in both local and international markets but also have the potential to become a significant income source for farming households, particularly in rural areas where formal job opportunities are limited (Wells et al., 2021). In this context, the income contribution from cashew farming is not only important for meeting daily household consumption needs but also has the potential to support children's education financing in farming families. According Bandur et al., (2022) Education, which is one of the key indicators of human resource development, heavily relies on family financial support. Therefore, it is important to explore the extent to which the results of commodity-based economic activities, such as cashew nuts, can contribute to the financing of children's education.

In theoretical terms, this study is based on Becker's household economics theory, which views households as units of production and consumption (Muhajir et al., 2023). In this theory, household economic decisions, including the allocation of income to consumption, investment, and education, are based on long-term considerations. Education is considered an investment in human capital that will provide returns in the form of increased income in the future. This theory is relevant in examining how farmer households, through cashew farming, manage their income to create sustainable well-being, including in the aspect of children's education (Bagley, 1939). Additionally, the Sustainable Livelihoods Framework (SLF) approach is used to understand how the assets owned by households, such as natural, physical, social, human, and financial capital, interact in forming sustainable livelihood strategies.

Previous studies have addressed the issue of agriculture's contribution to household income. Research conducted by Syahza et al., (2021) shows that the agricultural sector remains the backbone of the rural economy, particularly through smallholder plantation commodities. This study highlights how income from the agricultural sector is used for basic household needs, but it has not specifically addressed the aspect of education financing. Meanwhile, Aina, (2002) in her study on the impact of rubber farmers' income on children's education financing found that the higher the income obtained from rubber commodities, the greater the household's ability to finance education up to higher levels. On the other hand, Widayat et al., (2023) researched the contribution of rice farming to the welfare of farming families and concluded that although it plays an important role, income from rice farming is insufficient to optimally meet educational needs due to price

fluctuations and unstable harvests. Another study by Ayuningtyas et al., (2024) examined the contribution of income from coffee commodities to the continuity of education for farmers' children in North Sumatra and found a significant positive relationship between farmers' income and the number of children who were able to continue their education to upper secondary level. Meanwhile, Wisata, (2017) researched cocoa farmers in Central Sulawesi and demonstrated that increased productivity and cooperative management of harvests led to higher household income, which directly impacted children's participation in formal education. Unlike the previous five studies, which focused on agricultural commodities such as rice, rubber, coffee, and cocoa, this study specifically highlights cashews as the primary commodity that has not been extensively researched in the context of its contribution to household income and children's education financing. Additionally, the approach used not only focuses on the amount of income earned but also examines how this income is integrated into household decision-making regarding education, including funding for school fees, uniforms, books, and other educational needs.

The novelty of this study lies in its holistic approach that combines household economic analysis and sustainable livelihood strategies in the context of cashew farmer families. Furthermore, this study identifies social, cultural, and economic factors influencing household decisions in allocating income for education, which have not been extensively explored in previous research. The focus on cashew nuts as a case study also provides new empirical contributions to the literature on rural development and the economics of education. The urgency of this research is increasingly relevant in the context of sustainable development and improving the quality of human resources in rural areas. The government has designated education as one of the national development priorities, but challenges remain, especially among low-income communities that depend on the informal sector, such as agriculture, for their livelihoods.

By understanding the contribution of cashew farming to children's education financing, the results of this study are expected to provide input for policymakers, NGOs, and educational institutions in formulating more effective and contextual intervention strategies. The objectives of this study are to analyze the contribution of cashew farmers' income to household income and the extent to which this contribution supports children's education financing in rural areas. This study also aims to identify the factors influencing the level of contribution, as well as its implications for household welfare and increased children's education participation. Thus, this study is expected to provide a more comprehensive understanding of the economic dynamics of farmer households and the important role of the agricultural sector in supporting human resource development in rural areas.

## **METHOD**

This study uses a quantitative approach with descriptive analytical methods to analyze the contribution of cashew farmers' income to household income and children's education

financing in rural areas. This approach was chosen because it provides a systematic and measurable picture of the relationship between the variables studied (Budianto, 2024). The research location was determined purposively in rural areas that are the center of cashew production, considering that these areas have a significant population of cashew farmers who rely on this commodity as their main source of livelihood. The population in this study was all cashew farmer households with school-age children who are actively engaged in cashew cultivation and processing. The population size was determined based on data from the local agricultural office and village officials. The sampling technique used was stratified random sampling, taking into account the socioeconomic characteristics and educational levels of the farmer households. The sample size was set at 100 farmer households, which was considered representative enough to describe the general conditions of the cashew farmer community in the study area.

Data were collected through a structured questionnaire covering information on income from cashew farming, total household income, and expenditure allocation for children's education. In addition, in-depth interviews were conducted with selected respondents to enrich understanding of the socioeconomic context influencing household decisions regarding education. Data analysis was conducted using simple linear regression and multiple regression techniques to test the influence of cashew nut business income on household income and education expenditure. Pearson's correlation test was also used to assess the strength of the relationship between variables. All data were analyzed using the latest version of SPSS statistical software to ensure the accuracy and validity of the results.

**RESULT AND DISCUSSION**

This study aims to determine the extent to which income from cashew farming contributes to overall household income and spending on children's education. Descriptive results show that the average income from cashew farming (X1) is Rp3,250,000 per month, with a standard deviation of Rp750,000. Total household income (Y1), which includes income from cashew farming as well as other sources such as side businesses and social assistance, averages Rp4,850,000 per month with a standard deviation of Rp1,100,000. Meanwhile, the average household expenditure on children's education (Y2), which includes school fees, uniforms, books, and other supporting needs, is recorded at Rp850,000 per month with a standard deviation of Rp300,000.

The following descriptive statistical summary table illustrates these findings:

**Table 1.** Descriptive Statistics of Research Variables

VARIABLE	AVERAGE (RP)	STANDARD DEVIATION (RP)	MINIMUM (IDR)	MAXIMUM (RP)
CASHEW NUT BUSINESS REVENUE (X1)	3.250.000	750.000	1.500.000	5.800.000
HOUSEHOLD INCOME (Y1)	4.850.000	1.100.000	2.000.000	7.500.000
CHILDREN'S EDUCATION EXPENDITURES (Y2)	850.000	300.000	300.000	1.500.000

A simple regression analysis was conducted to determine the relationship between cashew nut business income and two dependent variables, namely household income (Y1) and children's education expenditure (Y2). The regression test results indicate that income from cashew nut farming (X1) has a positive and significant effect on household income (Y1), with a regression coefficient of 0.723 and an R-squared value of 0.522. This means that approximately 52.2% of the variation in household income can be explained by income from cashew nut farming. The statistical significance of 0.000 indicates that this relationship is highly statistically significant. Meanwhile, for the second model, the effect of cashew nut business income (X1) on children's education expenditure (Y2) yielded a regression coefficient of 0.648 and an R-squared value of 0.471. This means that 47.1% of the variation in children's education expenditure can be explained by cashew nut business income. The p-value of 0.000 also indicates a highly significant relationship.

**Table 2.** Results of Simple Linear Regression Analysis

MODEL	REGRESSION COEFFICIENT (B)	R- SQUARED	SIG. (P- VALUE)
X1 → Y1	0.723	0.522	0.000
X1 → Y2	0.648	0.471	0.000

Based on these results, it can be concluded that the contribution of cashew farming to household income is very significant. The majority of farmers rely on this business as their main source of livelihood. Those with higher crop yields and the ability to sell their products directly to markets or middlemen at better prices tend to have higher household incomes. This provides them with greater financial flexibility to meet basic needs and also make long-term investments such as children's education.

**Table 3.** Summary of Selected Qualitative Interview Results

DESCRIPTION	FREQUENCY (RESPONDENTS)	PERCENTAGE (%)
DECLARING CHILDREN'S EDUCATION A PRIORITY	78	78%

<b>RELYING ON THE METE AS THEIR SOLE SOURCE OF INCOME</b>	64	64%
<b>CAN PAY EDUCATION COSTS AFTER HARVEST</b>	83	83%
<b>DECLARING A POOR HARVEST HAS AN IMPACT ON CHILDREN'S SCHOOLING</b>	71	71%

From qualitative interviews with several respondents, it was found that the main priority of household spending is the fulfillment of basic needs such as food, electricity, and health costs, but spending on education is no less important. Many respondents stated that the success of the cashew harvest is the main determinant of whether their children can continue their education to a higher level or not. Some families even mentioned that during a good harvest season, they can pay school fees or buy school supplies in sufficient quantities. In addition, there is a strong correlation between household income and the number of children attending school. Households with higher incomes tend to have children who receive longer education and attend school up to secondary or even tertiary levels. On the other hand, households with low incomes often face difficulties in financing their children's education on an ongoing basis. Overall, these findings reinforce the argument that cashew farming plays a strategic role in increasing farmers' household income and expanding access to education for children. Therefore, policy interventions aimed at improving cashew productivity and price stability are crucial for supporting household economic resilience and expanding educational opportunities in rural areas.

## CONCLUSION

Based on the results of the study, it can be concluded that cashew farming contributes significantly to the household income of farmers in rural areas. This activity is the main source of income for most farming families, with the proceeds used not only to meet daily consumption needs but also to finance their children's education. Regression analysis shows that income from cashew farming has a positive effect on total household income, with a fairly strong level of determination. This means that the higher the income from cashew farming, the greater the overall household income. Additionally, there is a significant relationship between cashew farming income and spending on children's education. These results confirm that the success of cashew farming contributes to households' ability to finance education, from primary to secondary levels.

This finding is also supported by qualitative data showing that the majority of respondents consider children's education a top priority in the use of their income. A good harvest allows families to pay school fees, purchase educational supplies, and even save for further education. Conversely, when harvests are poor or cashew prices decline, education expenditure becomes one of the sectors most affected. Therefore, cashew farming not only impacts family microeconomics but also directly affects the sustainability of education for the younger generation in rural areas. This conclusion reinforces the



importance of supporting the development of local commodities like cashews, through training, agricultural technology, and market price stabilization, to ensure farmers' incomes remain stable and can be used to improve the quality of life, particularly in terms of children's education.

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