

## THE INFLUENCE OF INCOME AND EDUCATION OF CAP TIKUS FARMING COMMUNITIES ON THE CONTINUITY OF CHILDREN'S EDUCATION IN RAANAN BARU VILLAGE, WEST MOTOLING DISTRICT

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### ABSTRACT

This study aims to analyze the influence of income and education levels of cap tikus farmers on the continuity of children's education in Raanan Baru Village, West Motoling District, South Minahasa Regency. The background of this research is based on the low level of education and unstable income of farming communities, which are suspected to affect children's educational continuity. The study employed a quantitative approach with an associative research design. The sample consisted of 92 respondents selected through simple random sampling. Data were collected using questionnaires that had been tested for validity and reliability, while data analysis was conducted using multiple linear regression with the assistance of SPSS version 25. The results showed that partially, community income had a positive and significant effect on the continuity of children's education, while the education level of the community had a positive but insignificant effect. Simultaneously, both variables significantly affected the continuity of children's education with a coefficient of determination contribution of 63%. These findings emphasize that family economic welfare and parental education are important factors in supporting the continuity of children's education in rural areas. Therefore, increasing income and educational awareness in the community should become a priority in regional development policies.

**Keywords:** *Income, community education, cap tikus farmers, continuity of children's education, educational economics.*

### INTRODUCTION

Education is an important factor in shaping the quality of human resources and determining the progress of a nation (Gultom et al., 2020). Through education, individuals not only expand their knowledge and skills but also develop character and critical thinking abilities needed to actively participate in national development (Ardyan et al., 2022). Therefore, equal access to education is a shared responsibility between the government and society. However, reality shows that not all members

of society have equal opportunities to continue their education to higher levels. Socioeconomic factors, particularly family income and parents' educational background, often become the main determinants of children's educational continuity.

This condition is also found in Raanan Baru Village, West Motoling District, South Minahasa Regency, where most residents work as cap tikus farmers. Although this business has become a hereditary livelihood and plays an important role in supporting family income, the earnings obtained are unstable and highly dependent on production outcomes and market price fluctuations. Income instability directly affects the family's ability to fulfill basic needs, including educational expenses for children. In addition, the educational level of the community in this village is relatively low, resulting in limited awareness regarding the importance of formal education. Consequently, some children of cap tikus farmers prefer helping their parents work rather than continuing their education to higher levels.

Theoretically, the relationship between economic and educational factors has been widely discussed by scholars. According to Todaro (2011), human development can run effectively if accompanied by increased income because family economic conditions strongly influence access to education and social welfare (Agustana, 2020). Becker (1993), through human capital theory, emphasized that education is a long-term investment that increases individual productivity and family welfare. Meanwhile, Soekanto (2015) argued that parents' educational level influences children's educational orientation and aspirations because the family functions as the first social environment in instilling educational values. Based on these theories, it can be understood that low income and low educational background can hinder children's educational continuity.

The problems occurring in Raanan Baru Village indicate a gap between the importance of education and the economic capability to achieve it. The low income of cap tikus farmers makes it difficult for some parents to finance their children's education, while the low educational level of parents causes limited understanding of the strategic value of education for children's future. This phenomenon is

important to study scientifically in order to determine the extent to which income and community education influence the continuity of children's education in the village.

Based on the explanation above, this study aims to analyze the influence of income and education of cap tikus farming communities on the continuity of children's education in Raanan Baru Village, West Motoling District. The findings of this study are expected to contribute theoretically to the field of educational economics and serve as a consideration for local governments in designing policies to improve educational quality in rural areas.

## LITERATURE REVIEW

### Human Capital Theory and Educational Economics

The theoretical foundation linking economic welfare and education is rooted in the Human Capital Theory popularized by Gary S. Becker (1993). This theory posits that education is not merely a consumption good, but a crucial long-term investment that enhances individual productivity, capabilities, and future earning potential. In the context of educational economics, expenditures allocated for schooling are viewed as capital investments that yield substantial returns for both the individual and the family welfare over time (Todaro & Smith, 2011). However, the capacity to engage in this investment is heavily constrained by a family's immediate socioeconomic status, creating a direct link between financial security and the decision to pursue higher levels of education.

### The Concept of Income and Its Relevance to Education

Income represents the total revenue or financial return generated by households—in this context, the *cap tikus* traditional liquor farmers—within a specific timeframe. According to Todaro (2011), household economic stability is a primary determinant of a family's capacity to access essential social services, including formal education. High or stable income streams allow parents to comfortably afford both the direct costs of schooling (such as tuition, books, and uniforms) and the indirect opportunity costs (the income foregone by keeping a child in school instead of sending them to work). Conversely, income instability,

which frequently characterizes rural agrarian economies relying on volatile commodity prices, forces households to prioritize immediate survival over long-term educational investments (Agustana, 2020).

### **Community and Parental Education**

Parental or community education refers to the highest formal educational attainment achieved by the heads of households. From a sociological and educational perspective, Soekanto (2015) emphasizes that the family serves as the primary and most critical agent of socialization. The educational background of parents heavily shapes their educational orientation, modern mindsets, and aspirations for their children. Highly educated parents tend to have a deeper awareness of the strategic value of formal education, making them more likely to motivate, supervise, and financially prioritize their children's academic journeys. On the contrary, lower levels of parental education often lead to a limited understanding of how academic credentials can break the cycle of generational poverty in rural communities.

### **Continuity of Children's Education**

The continuity of education is defined as the sustained, uninterrupted progression of a student through the formal educational hierarchy (from basic primary education to secondary and higher education levels). Ensuring educational continuity is vital for rural youth to acquire advanced skills that align with broader regional and national development goals (Gultom et al., 2020; Ardyan et al., 2022). In many rural farming communities, educational continuity is highly vulnerable to dropping out, heavily dictated by whether the household views a child's prolonged schooling as a viable asset or an economic burden.

## **RESEARCH METHOD**

This study utilizes a quantitative approach with an associative research design to examine the causal relationship and impact of socioeconomic factors on education. The research focuses on three core variables: the income of *cap tikus* (traditional liquor) farmers (X1), community education (X2), and the continuity of children's education (Y). The study was purposively conducted from March to May

2025 in Raanan Baru Village, West Motoling District, selected specifically due to its characteristics as a primary production hub for this traditional beverage. The target population consists of 30 local *cap tikus* farmers who serve as the primary informants.

Data collection relies on primary data gathered through structured questionnaires distributed to the farmers, complemented by secondary data sourced from official village government records and relevant literature. The collected data is processed systematically through coding and tabulation, followed by statistical analysis using SPSS version 25 software. The analysis applies both descriptive statistics to outline informant characteristics and inferential statistics to test the research hypotheses. This analytical process includes validity and reliability tests, classical assumption tests (normality, multicollinearity, and heteroskedasticity), multiple linear regression, partial t-tests, simultaneous F-tests, and the coefficient of determination ( $R^2$ ) evaluated at a significance level of 0,05 ( $\alpha = 5\%$ ).

## **FINDINGS AND DISCUSSION**

### **Findings**

#### **Description of Informants**

The informants in this study consisted of 30 respondents, all of whom are heads of households working as *cap tikus* farmers in Raanan Baru Village, West Motoling District. Based on the survey findings, the majority of the informants are male (87%), while females account for 13%. Most of the informants fall within the productive age range of 31–50 years, and their average educational attainment is at the junior high school (SMP) and senior high school (SMA) levels.

In terms of occupation, all informants work as *cap tikus* farmers with varying levels of income. The average monthly income ranges from IDR 1,500,000 to IDR 2,500,000, heavily depending on production yields and market selling prices. Based on the questionnaire results, it was revealed that 63% of the informants have children of secondary school age, and 32% have children of elementary school age. While some children from these farming families continue

their education up to senior high school, a portion still fail to pursue higher education due to economic constraints.

### Findings of Validity and Reliability Tests

**Table 1. Validity Test Results of the Income Instrument**

No.	r <sub>count</sub>	r <sub>table (dk=n-2)</sub>	Status
1	0.553	0.361	Valid
2	0.550	0.361	Valid
3	0.640	0.361	Valid
4	0.753	0.361	Valid
5	0.570	0.361	Valid
6	0.654	0.361	Valid
7	0.561	0.361	Valid
8	0.768	0.361	Valid
9	0.457	0.361	Valid
10	0.553	0.361	Valid

Based on the 10 questionnaire items measuring the indicators of the income variable, all items were declared valid. The reliability test result for the income variable is presented below:

**Table 2. Reliability Test of Income**

Cronbach's Alpha	N of Items
0,803	10

Table 2 demonstrates that the reliability coefficient for the income variable is 0.803. Since  $0.803 > 0.361$ , the income instrument is deemed reliable.

**Table 3. Validity Test Results of the Community Education Instrument**

No.	r <sub>count</sub>	r <sub>table (dk=n-2)</sub>	Status
1	0.695	0.361	Valid
2	0.686	0.361	Valid
3	0.708	0.361	Valid
4	0.865	0.361	Valid
5	0.858	0.361	Valid
6	0.806	0.361	Valid

No.	r <sub>count</sub>	r <sub>table (dk=n-2)</sub>	Status
7	0.652	0.361	Valid
8	0.514	0.361	Valid

Based on the indicators of the *cap tikus* farmers' community education variable, which consists of 8 questionnaire items, all items were declared valid. Furthermore, the reliability test results for the *cap tikus* farmers' community education variable are as follows:

**Table 4. Reliability Test of Cap Tikus Farmers' Community Education**

Cronbach's Alpha	N of Items
0,867	8

Table 4 indicates that the reliability coefficient value for the community education variable is 0.867. Since  $0.867 > 0.361$ , it implies that the community education instrument is reliable.

**Table 5. Validity Test Results of the Continuity of Children's Education Instrument**

No.	r <sub>count</sub>	r <sub>table (dk=n-2)</sub>	Status
1	0.511	0.361	Valid
2	0.751	0.361	Valid
3	0.461	0.361	Valid
4	0.549	0.361	Valid
5	0.715	0.361	Valid
6	0.533	0.361	Valid
7	0.642	0.361	Valid
8	0.511	0.361	Valid
9	0.643	0.361	Valid
10	0.496	0.361	Valid

Based on the 10 questionnaire items measuring the indicators of the continuity of children's education variable, all items were declared valid. Furthermore, the reliability test results for the continuity of children's education variable are as follows:

**Table 6. Reliability Test Results of the Continuity of Children's Education**

Cronbach's Alpha	N of Items
0,777	10

Table 6 indicates that the reliability coefficient value for the continuity of children's education variable is 0.777. Since  $0.777 > 0.361$ , it means that the instrument for the continuity of children's education is reliable.

#### Findings of Assumption Tests

**Table 7. Summary of Normality Test Results**

No.	Variable Name	Asymp. Sig. Value	Testing Result
1.	Income	0.354	Normal
2.	Education	0.530	Normal
3.	Continuity of Education	0.518	Normal

Based on the test results shown in Table 7, the Asymp. Sig. value for the income variable is 0.354 or  $> 0.05$ , indicating that the population data is normally distributed. The education variable shows an Asymp. Sig. value of 0.530 or  $> 0.05$ , confirming a normal distribution. Similarly, the data for the continuity of education variable is drawn from a normally distributed population, given its Asymp. Sig. value of 0.518 or  $> 0.05$ .

**Table 8. Summary of Linearity Test Results**

Independent Variable	Dependent Variable	Significance Level ( $\alpha$ )	Significance (Sig.)	Conclusion
X1	Y	0.05	0.632	Linear
X2	Y	0.05	0.301	Linear

**Multiple Regression Analysis****Table 9. Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	9.355	4.255		2.198	.037
X1	.710	.132	.795	5.360	<.001
X2	-0.002	.154	-0.002	-0.010	.992

a. dependent variabel : Y

b. Predictors : (constant), X2, X1

Based on the table, the significance (Sig.) value is  $0.000 < 0.05$  and the calculated t-value is  $5.360 > t\text{-table } 1.681$ . Therefore, the null hypothesis ( $H_0$ ) is rejected, and the alternative hypothesis ( $H_a$ ) is accepted. This indicates that, partially, the income variable (X1) has a significant effect on the continuity of children's education (Y).

Regarding the evaluation of the impact of *cap tikus* farmers' education on the continuity of children's education: as shown in Table 9, the significance (Sig.) value is  $0.992 > 0.05$  and the calculated t-value is  $0.010 < t\text{-table } 1.681$ . Thus, the null hypothesis ( $H_0$ ) is accepted, meaning that, partially, the community education variable of *cap tikus* farmers (X2) does not have a statistically significant partial effect on the continuity of children's education (Y).

**Table 10. ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	452.272	2	226.136	23.032	<.001 <sup>b</sup>
Residual	265.095	27	9.818		
Total	717.367	29			

According to Table 10, the significance value of the F-test is  $0.001 < 0.05$  and the calculated F-value is  $23.032 > F\text{-table } 3.21$ . Therefore, the null hypothesis ( $H_0$ ) is rejected, and the alternative hypothesis ( $H_a$ ) is accepted. This indicates that the independent variables simultaneously (together) exert a significant effect on the dependent variable.

**Coefficient of Determination****Table 11. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.894 <sup>a</sup>	.630	.603	3.133

According to Table 11, the R Square value is 0.630. This implies that the simultaneous impact of variables X1 and X2 on variable Y is 63%, meaning that 63% of the variance in the continuity of children's education can be explained by income and community education combined.

**General Interpretation of Research Findings**

Overall, the research findings demonstrate that community income and education positively influence the continuity of children's education. An increase in the income of *cap tikus* farmers allows families to meet the financial demands of schooling, while higher parental education levels foster greater awareness regarding the importance of formal education for their children. Nonetheless, the coefficient of determination indicates that 37% of the variance is influenced by other factors outside this model, such as students' internal motivation, environmental support, and government educational policies.

**Discussion**

This discussion critically examines the profound meaning and implications of the research findings regarding the impact of income and community education of *cap tikus* (local traditional liquor) farmers on the continuation of children's education in Raanan Baru Village, Motoling Barat District. The discussion does not merely represent statistical findings, but also interprets them within the local social, economic, and cultural contexts, while linking them to previous research findings and relevant theoretical frameworks.

**The Impact of *Cap Tikus* Farmers' Income on the Continuation of Children's Education**

The research findings indicate that the income of *cap tikus* farmers significantly impacts the continuation of children's education. This finding suggests

that income level serves as a determinant factor in family decision-making regarding the sustainability of children's education, particularly from senior high school up to higher education levels.

The income of *cap tikus* farmers in Raanan Baru Village is unstable, as it highly depends on the harvest of sugar palm sap (*nira aren*), natural conditions, and fluctuations in market demand. This income uncertainty directly affects the parents' ability to cover educational expenses, both direct costs (school fees, books, uniforms) and indirect costs (transportation, accommodation, and other supporting needs). Under conditions of low or declining income, education is often perceived as a short-term economic burden, thereby encouraging children to work to assist the family economy.

This phenomenon reinforces the economic theory of education, which views education as a long-term investment. However, in communities with economic constraints, a short-term orientation becomes more dominant than the long-term benefits of education. As a result, children of *cap tikus* farmers are more vulnerable to dropping out of school or not continuing their education to higher levels.

This finding aligns with prior research stating that family income has a strong correlation with enrollment and the continuation of children's education. However, the novelty of this study lies in the local context of *cap tikus* farmers, where despite the *cap tikus* business having the potential to generate relatively high income at certain times, financial instability and ineffective financial management cause children's education to remain a non-primary family priority.

### **The Impact of *Cap Tikus* Farmer Community Education on the Continuation of Children's Education**

In addition to the income factor, the research findings also demonstrate that the education of the *cap tikus* farmer community significantly impacts the continuation of children's education. The parents' education level influences their perspective, attitude, and awareness toward the importance of formal education for their children's future.

Parents with higher education levels tend to have a better understanding of the benefits of education as a means of improving quality of life and social mobility.

They are more capable of encouraging their children to stay in school, providing learning motivation, and making decisions that support the continuation of their children's education despite facing economic limitations. Conversely, parents with lower education levels tend to hold a pragmatic perception of education, viewing working as more important than continuing school.

In the context of Raanan Baru Village, the low level of education among the *cap tikus* farmer community limits insights regarding the opportunities obtainable through higher education. Education is often perceived merely as a means to secure formal employment, while working as a *cap tikus* farmer is deemed sufficient to meet daily life necessities. This perception indirectly constrains the children's educational aspirations.

This finding confirms that parents' education functions not only as a social background but also as a cultural factor that shapes family values and orientation toward education. The novelty of this study lies in the finding that the low education level of *cap tikus* farmers does not only affect economic aspects, but also shapes a mindset that tends to legitimize a child's decision to discontinue their education.

### **The Simultaneous Impact of Income and Community Education on the Continuation of Children's Education**

The findings show that the income and community education of *cap tikus* farmers simultaneously exert a significant impact on the continuation of children's education. This indicates that the continuation of children's education cannot be explained by a single factor alone, but rather is the result of the interaction between economic conditions and parents' education levels.

Adequate income without educational awareness does not necessarily guarantee the continuation of children's education. Conversely, high educational awareness without sufficient economic support also has the potential to hamper educational sustainability. Therefore, these two factors complement and reinforce one another.

In this context, the study found that *cap tikus* farmer families with relatively good income but low education tend to keep directing their children to work. On the contrary, families with limited income but better education levels tend to strive

to maintain their children's education through various strategies, such as seeking educational assistance or encouraging children to continue school while working on a limited basis.

These findings offer an important contribution to the development of educational policies and community empowerment. The main implication of this research is that efforts to improve the continuation of children's education in *cap tikus* farming areas are insufficient through income improvement alone, but must also be accompanied by enhancing awareness and community education literacy through non-formal education, counseling, and community education programs.

### **Theoretical and Practical Implications**

Theoretically, this research reinforces the concept that education and economy are two primary variables influencing children's educational participation, particularly in rural communities with traditional livelihoods. This study also expands the scope of community education studies by incorporating the socio-economic context of *cap tikus* farmers as a group with unique characteristics.

Practically, the findings of this study provide a foundation for local governments and stakeholders to design integrated programs combining the income enhancement of *cap tikus* farmers with the strengthening of educational awareness. Economic empowerment programs accompanied by education on family financial management and the importance of children's education are expected to increase school continuation rates in rural areas.

### **CONCLUSION**

Based on the data findings and discussion, it can be concluded that the income and education level of the *cap tikus* farmer community in Raanan Baru Village impact the continuation of children's education. Partially, income has a positive and significant impact on the family's ability to finance educational needs, meaning that higher parental income leads to greater opportunities for children to continue their education to a higher level. Meanwhile, the level of community education also contributes positively to the awareness of the importance of education, although its impact is relatively lower than that of income. Simultaneous

test results show that income and community education together contribute a significant impact on the continuation of children's education by 63%. Thus, it can be affirmed that both variables are crucial factors in supporting the sustainability of children's education within rural farming communities.

## SUGGESTIONS

Based on the research findings, it is recommended that local governments strengthen economic empowerment programs for farming communities through entrepreneurship training and access to capital, aiming to enhance the stability and sustainability of family incomes. Additionally, there is a need to increase awareness of education through counseling, training, and the provision of scholarships for children from underprivileged families, ensuring they can continue their schooling without financial constraints. For residents, it is crucial to continuously foster an awareness of the strategic value of education as an investment in the family's future. Meanwhile, future researchers are advised to include other variables—such as learning motivation, social support, and village government policies—to provide a more comprehensive overview of the factors influencing the sustainability of children's education in rural areas.

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