THE IMPACT OF PALM OIL PRODUCTION AND ISLAMIC FINANCIAL BEHAVIOR ON FARMERS' WELFARE: THE MODERATING ROLE OF SHARIA FINANCE LITERACY

Imam Aldino
Faculty of Islamic Economics and Business, Universitas Islam Negeri Sumatera Utara, IAIN
street no.1, Gaharu, East Medan, Medan city, Indonesia
E-mail: imamaldino26@gmail.com

Nurlaila
Faculty of Islamic Economics and Business, Universitas Islam Negeri Sumatera Utara, IAIN
street no.1, Gaharu, East Medan, Medan city, Indonesia
E-mail: nurlaila@uinsu.ac.id

Nursantri Yanti
Faculty of Islamic Economics and Business, Universitas Islam Negeri Sumatera Utara, IAIN
street no.1, Gaharu, East Medan, Medan city, Indonesia
E-mail: nursantriyanti@uinsu.ac.id

ABSTRACT

This study investigates the impact of palm oil production and Islamic financial behavior on farmers' welfare in Rantau Utara District, Labuhan Batu Regency, with Islamic financial literacy as a moderating variable. The study aims to bridge the gap between rising palm oil production levels and the persistent welfare disparities experienced by smallholder farmers, emphasizing the crucial role of financial literacy in translating Islamic economic values into effective financial management. A quantitative approach with purposive sampling was used for 85 respondents, and the data were analyzed using multiple linear regression and moderated regression analysis (MRA) to examine the relationships among variables. This method was chosen because it allows for identifying the direct influence of independent variables (palm oil production and Islamic financial behavior) on the dependent variable (farmers' welfare), as well as testing the moderating role of Islamic financial literacy. The results show that palm oil production has a significant positive effect on farmers' welfare (t = 6.633; p < 0.05), while Islamic financial behavior alone does not significantly influence welfare (p > 0.05). However, Islamic financial literacy significantly moderates and strengthens this relationship (p = 0.018), increasing the model's explanatory power from 35.1% to 41.7%. These findings highlight the importance of integrating Islamic financial literacy into rural development policies to enhance farmers' economic resilience and promote inclusive, sharia-compliant growth in Indonesia's agricultural sector.

Keywords: Palm oil production; Islamic financial behavior; Islamic financial literacy; farmers' welfare.

ABSTRAK

Penelitian ini mengkaji dampak produksi kelapa sawit dan perilaku keuangan syariah terhadap kesejahteraan petani di Kecamatan Rantau Utara, Kabupaten Labuhan Batu, dengan literasi keuangan syariah sebagai variabel moderasi. Penelitian ini bertujuan untuk menjembatani kesenjangan antara peningkatan produksi kelapa sawit dan ketimpangan kesejahteraan yang masih dialami petani kecil, dengan menekankan peran penting literasi keuangan dalam menerjemahkan nilai-nilai ekonomi syariah ke dalam pengelolaan keuangan yang efektif. Pendekatan kuantitatif dengan teknik purposive sampling diterapkan pada 85 responden, dimana data dianalisis menggunakan regresi linier berganda dan analisis regresi tereduksi (MRA) untuk menguji hubungan antar variabel. Metode ini dipilih karena memungkinkan untuk mengidentifikasi pengaruh langsung antara variabel bebas (produksi kelapa

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sawit dan perilaku keuangan syariah) terhadap variabel terikat (kesejahteraan petani), serta menguji peran moderasi dari literasi keuangan syariah. Hasil penelitian menunjukkan bahwa produksi kelapa sawit berpengaruh positif signifikan terhadap kesejahteraan petani (t = 6,633; p < 0,05), sementara perilaku keuangan syariah tidak berpengaruh signifikan (p > 0,05). Namun, literasi keuangan syariah terbukti memperkuat hubungan tersebut (p = 0,018), meningkatkan kekuatan penjelasan model dari 35,1% menjadi 41,7%. Temuan ini menyoroti pentingnya integrasi literasi keuangan syariah dalam kebijakan pembangunan pedesaan untuk meningkatkan ketahanan ekonomi petani dan mendukung pertumbuhan yang inklusif dan sesuai syariah di sektor pertanian Indonesia.

Kata Kunci: Produksi Kelapa Sawit; Perilaku Keuangan Syariah; Literasi Keuangan Syariah; Kesejahteraan Petani.

INTRODUCTION

Palm oil is one of Indonesia's leading agricultural commodities, playing a pivotal role in supporting both local and national economic growth. In North Sumatra, which contributes significantly to national production with over 1.3 million hectares of plantations and more than five million tons of annual yield (BPS, 2023), the palm oil industry has become the primary livelihood for many rural households. Despite this strategic role, a disparity persists between production potential and the welfare of smallholder farmers. Many farmers in Rantau Utara District, Labuhan Batu Regency, remain economically vulnerable due to fluctuating market prices, unequal access to resources, and limited financial management capabilities (Kamilah et al., 2022). The production trend of palm oil in Rantau Utara District shows an upward trajectory over recent years, as illustrated in Table 1. Despite the quantitative growth in production, the benefits are not equally distributed among smallholders.

Palm oil production plays a crucial role in Indonesia's economy, particularly in rural regions such as Rantau Utara District, Labuhan Batu Regency, where smallholder farmers depend heavily on it for their livelihoods. However, despite the economic significance of palm oil, welfare disparities among farmers remain evident. While some households achieve financial stability, others struggle with inconsistent income, limited savings, and poor financial management. This highlights a persistent social issue: economic vulnerability driven not merely by production capacity, but by differences in financial behavior and literacy.

Previous studies have emphasized that agricultural productivity directly influences household income and welfare. Imsar et al. (2024) and Sukmawati (2024) found that higher palm oil production can improve living standards and economic stability. Yet, these outcomes are not uniform across farmers. Variations in financial decision-making and resource allocation often create welfare inequalities even among those with similar production levels. This suggests that welfare is influenced not only by physical productivity but also by how farmers manage income, assets, and expenditures.

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Table 1. Palm Oil Production Growth in Rantau Utara District

Year	Palm Oil Production
2024	9.86 tons
2023	9.23 tons
2022	8.50 tons

Source: BPS Labuhan Batu Regency (2022–2024)

Within the framework of Islamic economics, financial behavior is inseparable from ethical and moral dimensions. Islamic financial behavior promotes fairness, transparency, and prohibition of riba, maysir, and gharar (Ummah, 2019). These values encourage responsible consumption, productive investment, and social contributions through zakat and charity. When properly practiced, Islamic financial behavior is expected to enhance both material and spiritual welfare. However, empirical findings on this relationship remain inconclusive. While Buono et al. (2023) found that Islamic financial behavior fosters economic stability and inclusion, other studies including preliminary evidence from this research report insignificant effects on welfare outcomes.

This inconsistency raises a critical question: Do farmers possess sufficient understanding to translate Islamic financial values into effective financial practices? The answer likely lies in the level of Islamic financial literacy, the ability to comprehend, evaluate, and apply sharia-based financial knowledge (Setiawan et al., 2025; Lesmono et al., 2023). Farmers with higher literacy are more capable of making informed decisions about saving, investing, and managing risks in accordance with Islamic principles. Thus, financial literacy may determine how effectively Islamic financial behavior contributes to welfare.

Despite its importance, the moderating role of Islamic financial literacy in the link between financial behavior and welfare remains underexplored, particularly in rural agricultural contexts. Previous research often treats literacy and behavior as independent constructs, overlooking how knowledge strengthens behavioral outcomes. This study addresses that gap by proposing Islamic financial literacy as a moderating variable that enhances the effectiveness of Islamic financial behavior in improving welfare. Theoretically, this offers a deeper understanding of how Islamic financial knowledge transforms values into measurable socioeconomic outcomes. Practically, it provides insights for designing targeted financial inclusion programs and education initiatives that align with Islamic principles.

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The novelty of this study lies in integrating Islamic financial literacy as a moderating variable in the relationship between Islamic financial behavior and farmers' welfare. While prior research often treated financial literacy and behavior as independent factors, this study argues that literacy enhances behavioral effectiveness. By positioning literacy as a moderator, this research contributes to a deeper theoretical understanding of how knowledge transforms values into measurable welfare outcomes.

By focusing on smallholder palm oil farmers in Rantau Utara District a community where Islamic values are deeply embedded but financial literacy remains low this study contributes novel empirical evidence to the field of Islamic economics and rural development. The findings are expected to guide policymakers, Islamic financial institutions, and educators in formulating strategies that not only promote financial literacy but also reduce welfare disparities and support sustainable economic growth. Therefore, the objective of this study is to examine the impact of palm oil production and Islamic financial behavior on farmers' welfare, with Islamic financial literacy as a moderating variable, to provide both theoretical advancement and actionable insights for rural financial empowerment.

RESEARCH METHOD

While the study employs a solid quantitative approach to examine the relationship between palm oil production, Islamic financial behavior, and farmers' welfare, several methodological limitations warrant consideration. The use of purposive sampling, although practical, introduces potential bias that limits the generalizability of findings beyond the sampled population. Restricting the research to a single district Rantau Utara may not capture the diverse socio-economic and cultural dynamics of palm oil farmers across Indonesia, thereby constraining external validity. Additionally, the analysis does not account for important confounding variables such as education, access to credit, market price fluctuations, and infrastructure, all of which could significantly affect farmers' welfare and financial decision-making. The reliance on self-reported data using a Likert scale also raises concerns regarding subjectivity and response bias, potentially influencing measurement accuracy. Although classical assumption tests were conducted to ensure model reliability, the multiple regression approach may not adequately capture complex or non-linear relationships among variables. Future research should employ more representative sampling techniques, expand the geographic scope, and incorporate

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additional contextual factors to strengthen the robustness, validity, and applicability of the findings to broader agricultural and financial contexts in Indonesia.

The study used primary data collected directly from respondents, palm oil farmers actively managing smallholder plantations. Secondary data were obtained from the Central Bureau of Statistics (BPS) of Labuhan Batu Regency (2022–2024) to describe production trends and provide contextual support for quantitative analysis.

Data were garnered through a structured questionnaire survey distributed to 85 respondents, determined using purposive sampling. The criteria for inclusion were: (1) ownership of a palm oil plantation ranging from 2 to 4 hectares, (2) active involvement in plantation management, and (3) engagement in household financial decision-making. The questionnaire employed a Likert scale (1–5) ranging from "strongly disagree" to "strongly agree," covering four main constructs: palm oil production, Islamic financial behavior, Islamic financial literacy, and farmers' welfare. Data were processed using SPSS version 26. The analytical procedures included:

- Validity and reliability testing to ensure instrument accuracy and internal consistency.
- Classical assumption testing, including normality, multicollinearity, and heteroscedasticity tests.
- Multiple linear regression analysis to determine direct relationships between independent and dependent variables.
- Moderated Regression Analysis (MRA) to evaluate the moderating role of Islamic financial literacy on the relationship between Islamic financial behavior and farmers' welfare.

The regression model is expressed as:

$$[Y = a + b_1X_1 + b_2X_2 + b_3Z + b_4(X_2 * Z) + e]$$

Description:

Y	= Farmers' Welfare
X1	= Palm Oil Production
X2	= Islamic Financial Behavior
Z	= Islamic Financial Literacy (Moderating Variable)
a	= Constant
b1–b4	= Regression Coefficients
e	= Error Term

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Through this method, the study provides a robust and replicable framework to test the hypothesized relationships and understand how Islamic financial literacy moderates the impact of financial behavior on farmers' welfare.

RESULT AND DISCUSSION

RESULT

The study involved 85 respondents consisting of palm oil farmers in Rantau Utara District. Table 2 presents the demographic characteristics of the respondents, including age and income distribution. The majority of farmers are in the productive age group (26–45 years), with most earning more than Rp 4,000,000 per month, suggesting moderate to high productivity levels within the sample.

Validity and Reliability Tests

All questionnaire items were tested using Pearson's correlation. The results showed that each item's correlation coefficient (r) exceeded the critical value of 0.211, indicating valid measurement items. Table 3 shows the Validity Test Results, while table 4 presents the Reliability Test Results. These findings confirm that the questionnaire items used in this study are both valid and reliable, ensuring the accuracy and internal consistency of the measurement instruments.

Normality Test

The Kolmogorov–Smirnov test was used to determine whether the data were normally distributed. The test results are presented in Table 5. The test result indicates that the Asymp. Sig. (2-tailed) value is 0.200, which is greater than 0.05, meaning that the data are normally distributed. Hence, the normality assumption for regression analysis is fulfilled.

Multicollinearity Test

The Variance Inflation Factor (VIF) and tolerance values were analyzed to detect possible multicollinearity among the independent variables. The results are displayed in Table 6. The Tolerance values (> 0.10) and VIF values (< 10) indicate that there is no multicollinearity among the independent variables in the regression model.

Heteroscedasticity Test

Figure 1 shows the Heteroscedasticity Test Results. The scatterplot pattern displayed a random distribution of residuals, confirming that heteroscedasticity was not detected, and the model met homoscedasticity assumptions.

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Multiple Linear Regression Analysis

The initial regression model was constructed as follows:

$$[Y = 5.180 + 0.054X1 - 0.059X2 + e]$$

The results indicate that palm oil production (X1) significantly affects farmers' welfare ($p < 0.05$), while Islamic financial behavior (X2) does not ($p > 0.05$).

Coefficient of Determination (R^2)

Table 8 presents the Coefficient of Determination (R^2) Test Results. The model produced an Adjusted R^2 of 0.351, implying that 35.1% of farmers' welfare variation is explained by palm oil production and Islamic financial behavior, while 64.9% is influenced by other factors not included in the model.

t-Test Results

The t-test result is presented in table 9. The partial hypothesis test (t-test) revealed the following:

- H1 accepted: Palm oil production has a positive and significant effect on farmers' welfare ($t = 6.633$; $p = 0.000 < 0.05$).

- H2 rejected: Islamic financial behavior has no significant effect on farmers' welfare ($t = -1.512$; $p = 0.134 > 0.05$).

F-Test Results

The overall model significance test yielded $F = 22.209$; $p = 0.000 < 0.05$, confirming that palm oil production and Islamic financial behavior jointly influence farmers' welfare. The F-test result is presented in table 10.

Moderated Regression Analysis (MRA)

To test the moderating role of Islamic Financial Literacy (Z), an interaction term (X2Z) was included in the model:

$$[Y = 4.985 + 0.051X1 - 0.043X2 + 0.072Z + 0.096(X2Z) + e]$$

The results showed that the interaction term was significant ($p = 0.018 < 0.05$), confirming that Islamic financial literacy moderates and strengthens the effect of Islamic financial behavior on farmers' welfare. The inclusion of the moderator increased the Adjusted R^2 to 0.417, demonstrating better model explanatory power.

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Table 2. Respondent Demographics

Description	Category	Frequency	Percentage
Age	20–25 years	5	5%
	26–30 years	32	32%
	31–45 years	35	35%
	>45 years	13	13%
Income	Rp 2,500,000–3,000,000	4	4%
	Rp 3,000,000–3,500,000	10	10%
	Rp 3,500,000–4,000,000	17	17%
	>Rp 4,000,000	54	54%

Source: SPSS Output, 2025

Table 3. Validity Test Results

Variable	Item	Pearson Correlation	Conclusion
Production (X1)	1	0.776	Valid
	2	0.689	Valid
	3	0.698	Valid
	4	0.748	Valid
Islamic Financial Behavior (X2)	1	0.880	Valid
	2	0.928	Valid
	3	0.902	Valid
	4	0.739	Valid
	5	0.782	Valid
Farmers' Welfare (Y)	1	0.777	Valid
	2	0.727	Valid
	3	0.861	Valid
	4	0.710	Valid
	5	0.729	Valid
	6	0.718	Valid
	7	0.698	Valid
	8	0.680	Valid

Source: SPSS Output, 2025

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Table 4. Reliability Test Results

No	Variable	Cronbach's Alpha	Conclusion
1	Production (X1)	0.689	Reliable
2	Islamic Financial Behavior (X2)	0.902	Reliable
3	Farmers' Welfare (Y)	0.880	Reliable

Source: SPSS Output, 2025

Table 5. Normality Test Results

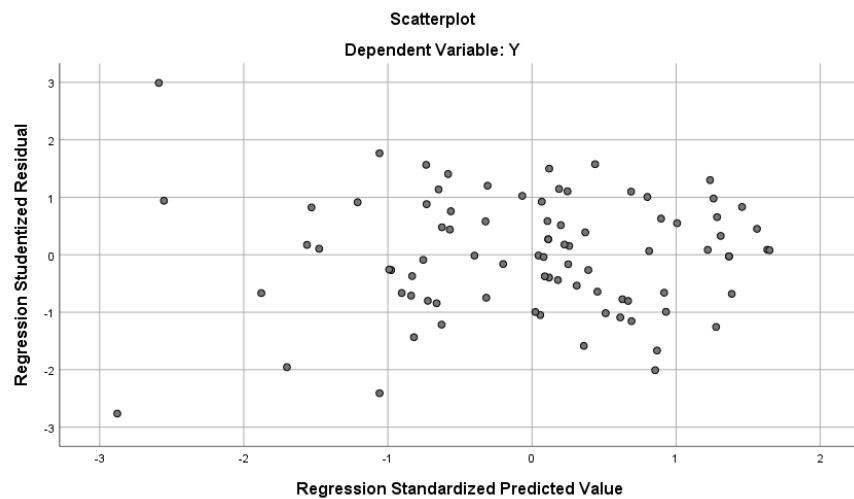| One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		85
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.26638355
Most Extreme Differences	Absolute	.049
	Positive	.046
	Negative	-.049
Test Statistic		.049
Asymp. Sig. (2-tailed)		.200[c,d]

Source: SPSS Output, 2025

Table 6. Multicollinearity Test Results

		Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	Model	B	Std.Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	5.180	.167		30.979	.000		
	X_1	.054	.008	.623	6.633	.000	.897	1.115
	X_2	-.059	.039	-.142	-1.512	.134	.897	1.115
a. Dependent Variable: Y								

Source: SPSS Output, 2025

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Figure 1. Heteroscedasticity Test Results

Source: SPSS Output, 2025

Table 7. Multiple Linear Regression Results

Variable	B	Std. Error	Beta	t-value	Sig.
Constant	5.180	0.167	—	30.979	0.000
Palm Oil Production (X1)	0.054	0.008	0.623	6.633	0.000
Islamic Financial Behavior (X2)	-0.059	0.039	-0.142	-1.512	0.134

Source: SPSS Output, 2025

Table 8. Coefficient of Determination (R²) Test Results

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.593[a]	.351	.336	.26961
a. Predictors: (Constant), X_2, X_1				

Source: SPSS Output, 2025

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Table 9. t-Test Results

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.180	.167		30.979	.000
	X_1	.054	.008	.623	6.633	.000
	X_2	-.059	.039	-.142	-1.512	.134

Coefficients[a]

Table 10. F-Test Results

ANOVA[a]

	Model	Sumof Squares	df	Mean Square	F	Sig.
1	Regression	3.229	2	1.614	22.209	.000[b]
	Residual	5.961	82	.073		
	Total	9.190	84			

Source: SPSS Output, 2025

DISCUSSION

The results of this study provide an in-depth view of how both production and behavioral factors influence farmers' welfare. The first significant finding demonstrates that palm oil production is the strongest determinant of welfare among smallholder farmers in Rantau Utara District. This supports the theory of production economics, which posits that productivity directly contributes to income growth and living standard improvement. The finding aligns with Feninda (2023) and Sukmawati (2024), who concluded that increased palm oil yields significantly improve household financial stability and the capacity to invest in education and health. In the context of this study, greater output per hectare translates into higher income and overall welfare for farmers, confirming H1.

The second finding reveals that Islamic financial behavior does not have a significant direct effect on farmers' welfare. This may be attributed to the fact that behavioral intentions rooted in ethical or religious values do not always lead to practical financial outcomes if they are not

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supported by sufficient financial understanding. Many farmers may follow basic Islamic financial principles, such as avoiding riba and engaging in charitable acts, but lack strategic knowledge about managing savings, investments, and productive expenditure. This partially contradicts Buono et al. (2023), who found a positive relationship between Islamic financial behavior and economic well-being. The difference suggests that context matters: while urban respondents may have more access to financial education, rural farmers may face limitations in understanding and applying Islamic financial principles effectively.

The third major outcome concerns the moderating role of Islamic financial literacy. The Moderated Regression Analysis (MRA) confirmed that Islamic financial literacy significantly strengthens the relationship between Islamic financial behavior and farmers' welfare. This means that farmers with higher levels of literacy are more capable of transforming their Islamic financial values into tangible welfare outcomes. The moderating effect demonstrates that literacy acts as a bridge between ethical intentions and effective financial management. This finding validates the argument of Lesmono et al. (2023) and Setiawan et al. (2025), who emphasized that financial literacy serves as a catalyst connecting behavior, decision-making, and outcomes in financial well-being.

The improved Adjusted R^2 value from 0.351 to 0.417 after including the moderating variable further highlights the strengthening of the model's explanatory power. This improvement signifies that Islamic financial literacy not only modifies the behavioral effect but also contributes directly to welfare through better decision-making capacity. The result also provides empirical support for Islamic economic theory, which integrates knowledge ('ilm) and action ('amal) as inseparable components in achieving prosperity (falāh). Thus, financial literacy in an Islamic framework does not merely involve technical understanding but also spiritual awareness that guides ethical and sustainable economic practices.

Additionally, this study illustrates that improving welfare among farmers cannot rely solely on increasing production. While production generates income, the management of that income determines its sustainability and impact on welfare. Without proper literacy and behavior aligned with Islamic values, increased production may lead to higher consumption rather than productive reinvestment. Therefore, literacy-based financial empowerment is essential to ensure that additional income contributes to long-term prosperity.

From a policy perspective, the findings underline the importance of integrating Islamic financial education into agricultural development programs. Local governments and Islamic

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financial institutions can collaborate to design targeted literacy initiatives that focus on budgeting, saving, and investment within the framework of sharia compliance. Strengthening farmers' access to Islamic financial services such as Baitul Maal wat Tamwil (BMT) and sharia cooperatives can enhance financial inclusion and support ethical financial management.

In addition, this study suggests that universities and community organizations play a key role in delivering continuous education about Islamic financial principles and their practical application in daily farming activities. Through training, workshops, and mentoring programs, farmers can acquire the skills needed to apply literacy to real-world financial decisions. Such efforts will help reduce rural poverty, strengthen ethical economic behavior, and promote inclusive growth in line with the Sustainable Development Goals (SDGs).

In conclusion, the discussion emphasizes that Islamic financial literacy serves as a transformative factor linking Islamic values to material welfare. While palm oil production remains a key driver of income, literacy empowers farmers to manage their finances more effectively, ensuring that ethical behavior translates into real economic resilience. The synergy between production performance and literacy-based financial behavior can ultimately promote sustainable welfare and equitable development within the Islamic economic framework.

CONCLUSION

This study concludes that palm oil production and Islamic financial behavior jointly influence farmers' welfare in Rantau Utara District, with Islamic financial literacy serving as a key moderating factor that strengthens this relationship. The findings clearly answer the research question by demonstrating that while increased production directly enhances farmers' income and living standards, the translation of Islamic financial values into tangible welfare outcomes depends heavily on the farmers' level of literacy. Islamic financial literacy bridges the gap between ethical intentions and effective financial practices, enabling farmers to manage income productively, invest sustainably, and uphold Islamic economic principles. Theoretically, this study contributes to the integration of behavioral and literacy perspectives within Islamic economics, emphasizing the unity of knowledge and practice (ʿilm and ʿamal) as pathways to welfare (falāh). Practically, it highlights the urgency for policymakers and Islamic financial institutions to strengthen literacy-based empowerment programs in rural areas through education, mentoring, and access to sharia-compliant financial services. However, the study's limited sample size and geographic scope constrain generalizability, suggesting the need for future

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research across different regions and agricultural sectors. Addressing these limitations through broader, longitudinal studies can deepen understanding and guide the development of inclusive, literacy-driven financial policies to enhance rural welfare sustainably.

REFERENCES

Andini, W. S., Karyus, A., Pramudho, K., & Budiati, E. (2023). Determinan penggunaan alat kontrasepsi dalam rahim (AKDR) oleh akseptor metode kontrasepsi jangka panjang (MKJP). Jurnal Ilmiah Permas: Jurnal Ilmiah Stikes Kendal, 13(4), 1209–1232. https://doi.org/10.32583/pskm.v13i4.1284

Atika, S., Siregar, S., & Sugianto. (2023). Performance analysis of sharia banking using the educatian prism method: Case study PT. Bank Muammalat Sumatera Utara. Edukasi Islami: Jurnal Pendidikan Islam, 12, 773–784. https://doi.org/10.30868/ei.v12i01.4264

Badan Pusat Statistik. (2023). No title. Retrieved from https://sumut.bps.go.id/id/statistics-table/2/mjqyizi=/luas-areal-tanaman-perkebunan-menurut-kabupaten-kota-dan-jenis-tanaman-ribu-ha-.html

Banowati, L., Supriatin, S., & Apriadi, P. (2021). Pengaruh pendidikan kesehatan terhadap peran orang tua dalam menjaga kesehatan gigi dan mulut siswa kelas I. Jurnal Kesehatan, 12(1), 17–25. https://doi.org/10.38165/jk.v12i1.233

Berlianti, D. F., Al Abid, A., & Ruby, A. C. (2024). Metode penelitian kuantitatif pendekatan ilmiah untuk analisis data. Jurnal Review Pendidikan dan Pengajaran, 7(3), 1861–1864.

Buono, K. B., Noviarita, H., & Iqbal, M. (2023). Pengaruh literasi keuangan syariah dan inklusi keuangan syariah digital pada sektor pertanian. Jurnal Ilmiah Ekonomi Islam, 9(3), 3949–3961. https://doi.org/10.29040/jiei.v9i3.11355

Chen, S. (2022). Pengaruh influencer kecantikan dan citra merek terhadap minat membeli. Jurnal Keuangan dan Bisnis, 20(2), 18–32. https://doi.org/10.32524/jkb.v20i2.582

Erwan, E. S., & Setiawan, E. (2023). Pengaruh kemudahan penggunaan dan promosi penjualan terhadap keputusan penggunaan e-wallet DANA pada mahasiswa di Kota Yogyakarta. Jurnal Manajemen Dirgantara, 16(1), 129–140. https://doi.org/10.56521/manajemen-dirgantara.v16i1.822

Feninda, T. (2023). Analisis pengaruh perkebunan kelapa sawit terhadap perekonomian masyarakat di Provinsi Sumatera Selatan tahun 2011–2020. Co-Value Jurnal Ekonomi

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Koperasi dan Kewirausahaan, 14(3), 238–254. https://doi.org/10.59188/covalue.v14i3.3659

Fildza, A. S. (2022). Analisis efisiensi teknis usahatani kelapa sawit: Analisis stochastic frontier. Jurnal Ekonomi Pertanian dan Agribisnis (JEPA), 6, 249–255.

Imsar, N., & Harahap, I. (2023). Analysis of digital education interactions, education openness, Islamic human development index (I-HDI) and Indonesia's GDP growth. Edukasi Islami: Jurnal Pendidikan Islam, 12. https://doi.org/10.30868/ei.v12i01.4265

Imsar, N., Harahap, I., & Silalahi, P. R. (2024). The impact of the halal industry and Islamic financial assets on Indonesia's economic growth using the vector autoregression (VAR) approach. Ekuitas (Jurnal Ekonomi dan Keuangan), 8(2), 274–287. https://doi.org/10.24034/j25485024.y2024.v8.i2.6299

Kamilah, K., Syarbaini, A. M. B., & Yafiz, M. (2022). Jula-jula: Economic and accounting practices in the Muslim community of North Sumatra. Share: Jurnal Ekonomi dan Keuangan Islam, 11(2), 251–275. https://doi.org/10.22373/share.v11i2.13213

Lesmono, B., Saparuddin, S., & Nurlaila, N. (2023). Determination of public service agency financial management budget absorption with religiosity as moderation. JPPI (Jurnal Penelitian Pendidikan Indonesia), 9(3), 1339–1354. https://doi.org/10.29210/020232725

Muhammad, K. A. (2023). Tugas Akhir Analisis Faktor–Faktor Produktivitas Pada Tanaman Kelapa Sawit (Elaeis guineensis Jacq.) Di Pt. Dinamika Multi Prakarsa Kalimantan Barat (Doctoral dissertation, Politeknik LPP Yogyakarta).

Rochmi, A., Maulidiyah, N. N., Alkaf, U., Awaludin, D. T., Prastiwi, I. E., Hardiati, N., Nurarifah, R., Wulaningsih, R. W., Halim, H., Chandra, A., & Oktasari, E. (2024). Manajemen keuangan syariah (Konseptual, landasan dan mekanisme) (Vol. 4). Bandung: Widina Media Utama.

Sastrawan, B., Samsi, A., & Seran, G. G. (2024). Pelayanan pemerintah bidang kesejahteraan masyarakat. Karimah Tauhid, 3(1), 473–479. https://doi.org/10.30997/karimahtauhid.v3i1.11642

Setiawan, M. R., Rahayu, S., & Mansur, F. (2025). Auditor switching: An empirical study on property and real estate sector companies listed on the Indonesia Stock Exchange in 2020–2023. Management Studies and Entrepreneurship Journal, 6(5), 1–13.

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Sibarani, H., & Alhazami, L. (2022). Analisis pengaruh kualitas bahan baku dan proses produksi terhadap kualitas produk pada perusahaan PT. XYZ. Jurnal Riset Rumpun Ilmu Ekonomi, 1(2), 94–113. https://doi.org/10.55606/jurrie.v1i2.372

Sukmawati. (2024). Pengaruh harga dan produktivitas terhadap pendapatan petani kelapa sawit di Kecamatan Tommo Kabupaten Mamuju. Makassar: Universitas Muhammadiyah Makassar.

Syahputri, N. M., & Marliyah, M. (2023). Faktor-faktor yang mempengaruhi minat beli terhadap thrift shopping di kalangan mahasiswa UINSU. JESYA, 6(1), 282–296. https://doi.org/10.36778/jesya.v6i1.922

Ummah, M. S. (2019). Literasi keuangan syariah (Vol. 11). Depok: PT Raja Grafindo Persada.

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