The Effect of Production and Capital on the Farmers' Welfare in Klambir V Kebun Village, North Sumatra

Ahmad Fadlan[1*]
[1]Development Economics Study Program, University of Pembangunan Panca Budi, Indonesia
[*] Corresponding author: ahmad_fadlan@dosen.pancabudi.ac.id

Rizal P. Lubis[2]
[2]Development Economics Study Program, University of Pembangunan Panca Budi, Indonesia

Muhammad Handoko Tarigan[3]
[3]Development Economics Study Program, University of Pembangunan Panca Budi, Indonesia

Abstract

The analysis of the welfare of rice farming in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency aims to analyze the factors that affect farm welfare, namely land area, production, price, education, labor, capital, government policy and technology. The population of the research were 470 rice farmers, while tha sample were 216 rice farmers as the respondents The data were processed using factor test analysis and then analyzed using multiple linear regression. Based on the data obtained from the distribution of questionnaires, the data were processed using SPSS software Version 23.0 for Windows. Based on the Confirmatory Factor Analysis (CFA), it was found that from the 8 variables analyzed with the factor analysis model consisted of 2 factors, namely production factors and capital factors. Based on the results of multiple linear regression analysis, it was found that production and capital have a significant effect on the welfare of farming in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency. Farmers need guidance from the public or private sectors regarding marketing their harvested crops and utilizing technology to enhance both the quantity and quality of their production. To become independent, farmers should also establish farmer groups or cooperatives that can assist in getting financing loans, marketing their produce, and sharing information amongst farmers.

Keywords: *Production, Capital, Farmers' Welfare*

Introduction

Discussing progress, especially in agrarian countries, cannot be separated from the agricultural sector. Most of the population in agrarian countries live in rural areas where most of them fulfill their daily needs from the agricultural sector (Rangkuty et al., 2020). Until now, Indonesia is really still considered a strong country in the agricultural sector, tending to be seen from the agricultural sector in Gross National Product (GNP) (Nasution & Yusuf, 2018). The development of the agricultural sector itself has long been a stimulus for economic development that has the ability to overcome poverty, associated with the cost of food prices, labor and the development of developed regions. However, one of the thorny problems in developing the agricultural sector is limited capital (Lumbanraja et al., 2023).

Given the possibility of a food crisis, the government—both local and national—must give careful consideration to the development of the agricultural sector. Indonesia is also reliant on rice imports from other nations, with India being its biggest supplier with 215,386.5 tons in 2021, followed by Thailand with 69,360 tons, Vietnam with 65,692.9 tons, and Pakistan with 52,479 tons. This information is based on BPS statistics from 2021. Furthermore, a great deal of agricultural land is turned into settlements as a result of the conversion of agricultural land functions, which happens frequently in tandem with population growth but does not correspond with the

number of settlements. According to estimates, the amount of land converted annually between 1993 and 2003 increased from 1983 to 1993, or between 80,000 and 100,000 hectares. Sumatra (38 percent) and Java Island (54 percent) have the biggest land conversion areas. The largest shift in land conversion was from agricultural to residential/village land (69%), followed by industrial sectors (20%). In order to maintain rice production, agricultural technology has not kept up with the decline in agricultural area, and farmers have not been able to effectively use agricultural information technology (Ernawatiningsih et al., 2023).

Limited capital causes farmers' activities not to run as expected, in fact without the rotation of economic policy, the course of capital collection also cannot occur. Capital is vital for farmers in increasing their agricultural yields, increasing production and meeting their daily needs. Capital is also expected to achieve normal results, with sufficient capital, the need for seeds, compost, and everything related to planting can be completed. Farmers also face many problems in producing food. Currently, most of the farmers are 60 years old or 70 years old and 30 years old and below, which is due to the lack of desire to be a farmer (Arum et al., 2023).

The amount of rice production can affect income factors. Land, capital, labor and management affect production factors. Land is the most important thing, can increase rice production compared to other factors. The thing that needs to be taken into account in the production process in sufficient quantities is the labor factor. The capital factor can be divided into two, namely fixed capital and non-fixed capital. Fixed capital includes land, buildings and machinery. Meanwhile, non-fixed capital includes costs incurred in the production process (Tong et al., 2024).

The fundamental problems faced by farmers are the lack of access to sources of capital, markets and technology, as well as weak farmer organizations. Participatory assessment of rural conditions is one of the stages in an effort to increase independence, yields and community welfare in their lives. The assessment of rural conditions is carried out to increase the ability and confidence of the community in identifying and analyzing their own situation, potential and problems (Hasanah et al., 2022).

The reality on the ground is that there are still many farming communities who are not well-off. This is measured by their low level of welfare. The inability of the farming community can also be seen from the income level, education level and health level, all of which are still not reaching the average, many of them fall into the poor category (Nasution, 2020).

The erratic harvest of farmers will cause a decline in economic levels. Most of the farmers who depend on the harvest sometimes make their income unstable. Poor harvests (crop failure) often cause new problems that have a major impact on the survival of farmers. Therefore, it is necessary to improve the welfare of farmers to deal with these problems. This research was made to analyze the factors that affect the welfare of farming business actors in Klambir V Kebun Village carried out by farmers of various commodities so that they are able to continue to survive and become more responsive to changes in the post-pandemic business climate.

Methods

This research approach was quantitative research which was a research that aimed to determine the relationship between two or more variables. In this research, a theory can be built that functions to explain, predict and control a symptom (Sugiyono, 2016; Rusiadi et al., 2024). This research was conducted in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency, North Sumatra. The population used in this study was rice farmers in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency, totaling 470 farmers.

The sampling technique in this study was Non-probability Sampling technique. Non-probability Sampling is a sampling technique that does not give equal chances or opportunities for every element or member of the population to be selected as a sample. Within Non-probability Sampling, there are various methods of sampling, one of which is Accidental Sampling. Accidental Sampling involves selecting samples from anyone who happens to be present or encountered by the researcher at the research location, in this case, the farmers in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency. Individuals chosen as sample members are those who happen to be found or are easily met or reached without any specific considerations. Then, the sample size was determined by using the Slovin's formula and it was found that there were 216 respondents.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{470}{1 + 470\ (0{,}05)^2}$$

$$n = \frac{470}{2{,}175} \quad n = 216{,}09$$

$$n = 216$$

Description:

n : Sample size

N : Population size

Data were collected by administering interviews and filling out questionnaires. Data were analyzed using Factor Analysis (Confirmatory Factor Analysis or CFA) and Multiple Linear Regression using the SPSS 23 program. Factor analysis is a model in which there are no independent and dependent variables. Factor analysis does not classify variables into independent and dependent categories; instead, it seeks interdependence relationships among variables to identify the dimensions or factors that compose them. Factor analysis was first conducted by Charles Spearman, with the primary goal of explaining the relationships among many variables in the form of a few factors. These factors are random quantities that can be observed or measured directly. Meanwhile, multiple linear regression is a measurement tool used to determine whether there is a correlation among several variables with the regression equation as follows (Tarigan & Fadlan, 2024):

$$Y = \alpha + \beta 1\ X1 + \beta 2\ X2$$

Where:

Y = Welfare

α = Value Y if $^{X}1$ and $^{X}2 = 0$ (constant value)

β = Regression coefficient

X_1 = Production

X_2 = Price

Results and Discussion

Result

1. Confirmatory Factor Analysis

To analyze the research data, the researcher conducts and applies descriptive analysis techniques, namely by analyzing and grouping, then interpreting so that a true picture of the problem under study will be obtained. Furthermore, factor analysis is carried out which aims to find a way to summarize the information contained in the original (initial) variables into a new set of dimensions or variables (factors). The first thing to do in factor analysis is to assess which variables are suitable for inclusion in further analysis. Factor analysis requires that the data matrix must have sufficient correlation for factor analysis to be carried out, for which the following tests are carried out:

a. Barlett's test of Sphericity which is used to test that the variables in the sample are correlated.
b. Kaiser-Meyer-Olkin (KMO) test to determine sample adequacy or sample feasibility measurement. Factor analysis is considered feasible if the KMO value is> 0.5.
c. Measure of Sampling Adequency (MSA) test which is used to measure the degree of correlation between variables with MSA criteria > 0.5.

The results of Barlett's test of Sphericity and Kaiser- Meyer-Olkin (KMO) with the help of SPSS 23 software are shown in the table below.

Table 1. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.695
Bartlett's Test of Sphericity	Approx. Chi-Square	293.366
	Df	28
	Sig.	.000

The table above showed that the value obtained from the Barlett'stest of Sphericity test is 293,365 with a significance of 0.000, this means that there is a correlation between variables (significant <0.050). The Kaiser-Meyer-Olkin (KMO) test results obtained a value of 0.695 where this figure is above 0.5. Thus the variables in this study can be processed further.

The next step is Measure of Sampling Adequency (MSA) testing, where each variable is analyzed to determine which variables can be processed further and which ones must be removed. To be processed further, each variable must have an MSA value> 0.5. The MSA value is contained in the Anti-Image Matrice table in the Anti-Image Correlation section, namely the correlation number marked "a" with a diagonal direction from top left to bottom right. The MSA test results for this research variable are shown in the following table.

Table 2. Anti-image Matrices

		Land Area	Production	Price	Education	Labor	Capital	Government Policy	Technology
Antiimage Covariance	Land Area	.931	-.032	.040	-.090	-.053	-.064	.009	.142
	Production	-.032	.761	.141	-.183	-.149	.179	.022	.014
	Price	.040	.141	.589	-.233	-.055	.025	-.179	-.171
	Education	-.090	-.183	-.233	.537	-.167	-.001	-.058	.013
	Labor	-.053	-.149	-.055	-.167	.647	.022	-.142	-.080
	Capital	-.064	.179	.025	-.001	.022	.921	-.006	.080
	Government Policy	.009	.022	-.179	-.058	-.142	-.006	.765	.065
	Technology	.142	.014	-.171	.013	-.080	.080	.065	.867
Antiimage Correlation	Land Area	.583[a]	-.038	.054	-.127	-.069	-.069	.010	.158
	Production	-.038	.587[a]	.211	-.286	-.212	.214	.029	.018
	Price	.054	.211	.653[a]	-.414	-.088	.034	-.267	-.240
	Education	-.127	-.286	-.414	.703[a]	-.283	-.002	-.090	.019
	Labor	-.069	-.212	-.088	-.283	.787[a]	.029	-.201	-.107
	Capital	-.069	.214	.034	-.002	.029	.659[a]	-.007	.090
	Government Policy	.010	.029	-.267	-.090	-.201	-.007	.778[a]	.079
	Technology	.158	.018	-.240	.019	-.107	.090	.079	.626[a]

Based on the results of the total variance explained in the initial Eigenvalues table, it is known that there are only 2 variable components that are factors influencing welfare. Eigenvalues show the relative importance of each factor in calculating the variance of the 8 variables analyzed. The table above shows that only three factors were formed. This is because the three factors have total eigenvalues above 1, namely 2.530 for factor 1 and 1.274 for factor 2. Therefore, the factoring process stops at two factors that will be included in the next analysis. The result can be seen in the following table.

Table 3. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.530	31.629	31.629	2.530	31.629	31.629	2.308	28.856	28.856
2	1.274	15.931	47.560	1.274	15.931	47.560	1.401	17.515	46.370
3	1.163	14.538	62.098	1.163	14.538	62.098	1.258	15.728	62.098
4	.813	10.160	72.258						
5	.757	9.466	81.724						
6	.592	7.403	89.127						
7	.515	6.440	95.567						
8	.355	4.433	100.000						

While in other factors, namely variables that show a correlation above 0.5, namely capital has a factor loading of 0.738. At first, the extraction was still difficult to determine the dominant item included in the factor because of the almost the same correlation value of several items. To overcome this, a rotation is carried out which is able to explain the distribution of variables more clearly and clearly, below is a table showing the results of the rotation to clarify the position of a variable on a factor.

Table 4. Rotated Component Matrix[a]

	Component	
	1	2
Production	.790	-.080
Education	.761	.305
Government Policy	.710	-.092
Labor	.679	.361
Capital	.166	.791
Price	.033	-.725
Land Area	.179	.055
Technology	.282	.094

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization. a. Rotation converged in 5 iterations.

The Component Matrix resulting from the rotation process (Rotated Component Matrix) shows a clearer and more real distribution of variables. Determining the input of variables into a particular factor is based on the amount of correlation between the variable and the factor, namely on a large correlation.

Based on the results of the component matrix value, it is known that of the eight factors, the ones that are feasible to influence welfare are three factors derived from:

a. The component 1: production
b. The component 2: capital

2. Multiple Linear Regression Analysis
   a. Classical Assumption Test

      Before testing the hypotheses of this research, classical assumption testing is conducted first to

ensure that the multiple linear regression test tool is appropriate for use in hypothesis testing. If the classical assumption test is met, then the multiple linear regression statistical test can be used. The normality test aims to determine whether the disturbances or residuals in a regression are normally distributed. A good regression model has data that is normally distributed or close to normal.

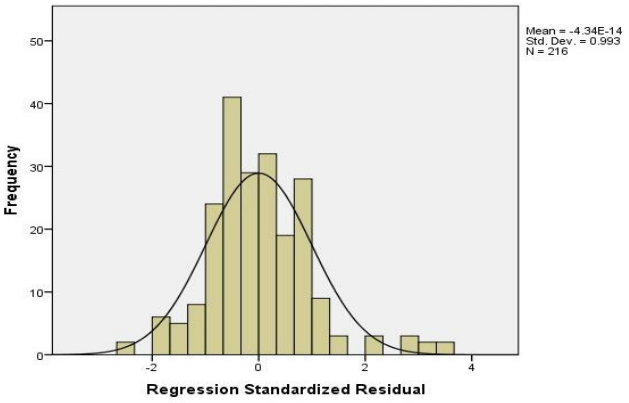

Figure 1. Normality Test Histogram

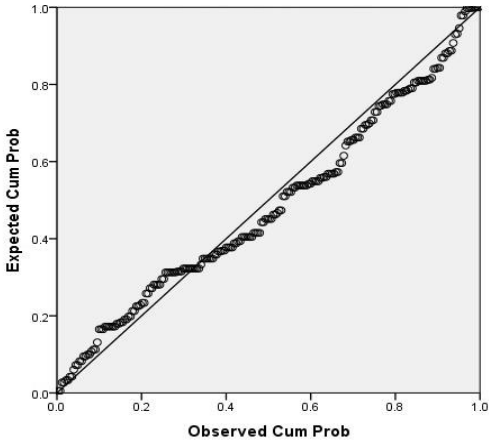

Figure 2. Normal P-P Plot Regression Standarized Residual

From the image above, it can be seen that the data in this study is normally distributed, as indicated by the histogram showing balanced skewness in the center and the normal P-P plot showing points lying along the diagonal line. Thus, it can be concluded that the data distribution is normal.

Table 5. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		216
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.00391961
Most Extreme Differences	Absolute	.150
	Positive	.150
	Negative	-.102
Test Statistic		.150
Asymp. Sig. (2-tailed)		.000[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

A regression model is said to meet the normality assumption if the residual Asymp.Sig (2-tailed) value is greater than 0.05. The Asymp.Sig (2-tailed) value is 0.150, which is above the 0.05 or 5% significance level. Therefore, it can be stated that the data in this study is normally distributed statistically and meets the requirements for use.

b. Multicollinearity Test

Multicollinearity test aims to determine whether there is correlation among independent variables in a regression model. This test is conducted by examining the tolerance value and variance inflation factor (VIF) from the analysis results using SPSS. If the tolerance value is > 0.10 or VIF is < 5, it is concluded that there is no multicollinearity.

Based on the data analysis, it was found that the Variance Inflation Factor (VIF) values are less than 5, namely price 1.001 < 5, production 1.012 < 5, land area 1.011 < 5, and the tolerance values are price 0.999 > 0.10, production 0.988 > 0.10, land area 0.989 > 0.10, indicating that there is no multicollinearity.

c. Heteroscedasticity Test

In this research, the researcher tests for the presence of heteroscedasticity using the Glejser test. In the heteroscedasticity test with the Glejser test, if the Sig. (significance) value of all explanatory variables is not statistically significant (p > 0.05), then it can be said that the regression equation model does not experience heteroscedasticity.

Table 6. Heteroscedasticity Test Result

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
1 (Constant)	.035	.019		1.909	.058
WLS_Luas_Lahan	.060	.085	.112	.705	.482
WLS_Produksi	-.120	.104	-.207	-1.151	.251

a. Dependent Variable: ABS_RES

Based on the results of the heteroscedasticity test in the table above, it can be seen that the significance values for each variable are 0.482 for the land area variable, 0.251 for the production variable, and 0.934 for the price variable. From these results, it can be concluded that the regression equation model does not experience heteroscedasticity. This is because the significance values for each variable are not significant, or the significance values are greater than 0.05.

The multiple linear regression equation model in this study is formulated:

$$Y = a + b1x1 + b2x2 + e$$

Where:

Y = Welfare

X1 = Production

X2 = Capital

e = Error term

Table 7. Multiple Linear Regression Result

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	1.721	.042		40.857	.000		
Production	.026	.003	.512	9.933	.000	.999	1.001
Capital	.008	.003	.147	2.830	.005	.988	1.012

a. Dependent Variable: Welfare

Based on the table above, the multiple linear regression was obtained as follows Y = 1.721 + 0.026 X1 + 0.008 X2 + e. The interpretation of the multiple linear regression equation was:

1) If everything in the independent variables is considered constant, the value of farm welfare is 1.721.

2) If there is an increase in production, then farm welfare will increase by 0.026 one unit value.

3) If capital increases, farm welfare will increase by 0.008 one unit value.

Based on the T-test results, it can be seen on the table:

Table 8. T-Test Result

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	1.721	.042		40.857	.000		
Production	.026	.003	.512	9.933	.000	.999	1.001
Price	.008	.003	.147	2.830	.005	.988	1.012

a. Dependent Variable: LN_Welfare

1. The effect of production on welfare, namely Tcount 6.513 > Ttable 1.256 and significant 0.000 < 0.05, then Ha is accepted, which states that production has a significant effect on welfare.
2. The effect of capital on welfare, namely Tcount 2.830 > Ttable 1.652 and significant 0.005 < 0.05, then Ha is accepted, which states that capital has a significant effect on welfare.

Meanwhile, based on the results of the F test below:

Table 9. F-Test Result

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.470	3	.157	54.634	.000[b]
	Residual	.607	212	.003		
	Total	1.077	215			

a. Dependent Variable: LN_Welfare

b. Predictors: (Constant), Production, Price

It can be seen that Fcount is 54.634 > Ftable of 2.64 and much smaller than 0.05, namely 0.000 < 0.05, then Ha is accepted that production and capital simultaneously have a significant effect on the welfare of rice farming in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency.

Discussion

The results of the Confirmatory Factor Analysis (CFA) indicate that from the Explained Variance table, it is evident that only 3 factors are formed. The factor originating from component 1 is mainly production, and the largest factor from component 2 is price. These research findings align with a study conducted by Wahed (2018), which states that land area, production, and price have a significant impact on farmers' welfare.

Based on the result of multiple linear regression test, it was found that this research was in line with the results found by Dahiri (2022) and Kuswanto et al. (2019) that increasing the welfare of farmers through increasing production is prioritized in the food crops sub-sector and in the lowest cluster. Efforts to increase the production of the food crop sub-sector are to maintain the existing planted area, increase the productivity of food crops, and maintain price stability. Another research also found that the capital is one of five points that affect agreeableness, conscientiousness, neuroticism, and openness. The majority of farmers are enthusiastic and have decent communication skills, but they lack confidence in their ability to perform agricultural duties. The principles of social capital and trust are fundamental to rural communities and serve as a foundation for enhancing other aspects of their operations, like mutual aid and respect (Supratikno et al., 2023; Saleh, 2022).

Conclusion

In the CFA test, it was found that of the eight factors, there were only two factors that were feasible to influence the welfare of rice farming, namely production and capital. The results of multiple linear regression test showed if everything in the independent variables was considered constant, the value of farm welfare was 1.721. If there was an increase in production, then farm welfare would increase by 0.026 one unit value. If capital increased, farm welfare would increase by 0.008 one unit value.

Rice production is a very important factor in influencing the welfare of rice farming, to increase rice production and obtain maximum results, it is hoped that farmers in Klambir V Kebun Village, Hamparan Perak District, Deli Serdang Regency will pay attention to rice care and production inputs such as seeds, fertilizers, pesticides and agricultural tools.

References

Arum, P. S., Ibrahim, J. T., & Bakhtiar, A. (2023). The Effect of Social Capital on Farmer Welfare. *Agriecobis (Journal of Agricultural Socioeconomics and Business)*, *6*(02), 180–188. https://doi.org/10.22219/agriecobis

Dahiri. (2022). DISPARITAS DAN UPAYA MENINGKATKAN KESEJAHTERAAN PETANI. *Jurnal Budget: Isu Dan Masalah Keuangan Negara*, *7*(2), 298–317.

Ernawatiningsih, N. P. L., Budhi, M. K. S., Marhaeni, A. A. I. N., & Yuliarmi, N. N. (2023). IMPROVING FARMERS WELFARE BY ENHANCING THE ABILITY OF INFORMATION TECHNOLOGY ADOPTION. *Journal of Community Development in Asia*, *6*(1), 100–109. https://doi.org/10.32535/jcda.v6i1.2067

Hasanah, U., Faried, A. I., & Sembiring, R. (2022). Pemberdayaan Masyarakat Desa Dalam Mengelola Bumdesa Di Kota Pari Kecamatan Pantai Cermin, Kabupaten Serdang Bedagai Dengan Analytic Hierarchy Process (AHP). *Jurnal Pendidikan Dan Konseling*, *4*(6), 4550–4557.

Kuswanto, K., Alamsyah, Z., Armandelis, A., & Zulfanetty, Z. (2019). The Impact of the Efficiency of Rubber Production on the Welfare of Rubber Farmers in Jambi Province. *International Journal of Economics and Financial Issues |*, *9*(2), 80–86. https://doi.org/10.32479/ijefi.7503

Lumbanraja, P. L., Lumbanraja, P. C., Muttaqin, A. W., & Samal, S. I. (2023). The Influence of Farmers' Welfare on Oil Palm Plantation Productivity in Indonesia. *InJAR (Indonesian Journal of Agricultural Research)*, *06*(02), 92–105. https://doi.org/10.32734/injar.v6i2.11955

Nasution, D. P. (2020). Analysis of Factors Affecting Rice Farmer's Welfare in Sirampit District. *American Journal of Humanities and Social Sciences Research*, *4*(4), 168–172. www.ajhssr.com

Nasution, L. N., & Yusuf, M. (2018). ANALISIS KONSUMSI, EKSPOR, DAN PERTANIAN TERHADAP PERTUMBUHAN EKONOMI DI SUMATERA UTARA. *Jurnal Kajian Ekonomi Dan Kebijakan Publik*, *3*(2), 82.

Rangkuty, D. M., Nasution, L. N., & Ramadhani, A. E. (2020). ANALISIS VARIABEL MAKRO EKONOMI TERHADAP PERTUMBUHAN EKONOMI DI INDONESIA. *Jurnal Kajian Ekonomi Dan Kebijakan Publik*, *5*(1), 78–85.

Rusiadi, Adivia, A., Yusuf, M., & Rangkuty, D. M. (2024). THE IMPACT OF THE GREEN ECONOMY ON SUSTAINABLE DEVELOPMENT IN THE ABRIC COUNTRIES. *ICHES: International Conference on Humanity Education and Society*, 1–15.

Saleh, K. (2022). The Role of Social Capital in Improving the Welfare of Rice Farmers in Tangerang Banten Regency. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *4*, 29648–29657. https://doi.org/10.33258/birci.v5i4.7117

Supratikno, S. I., Adi, I. R., & Lubis, D. P. (2023). THE INFLUENCE OF AGRARIAN REFORM, SOCIAL CAPITAL, FARMER SPIRITUALITY AND PERSONAL TRIBUTE ON FARMERS' WELFARE IN KABUPATEN BOGOR, WEST JAVA. *Eduvest-Journal of Universal Studies*, *3*(5), 966. http://eduvest.greenvest.co.id

Tarigan, V. E., & Fadlan, A. (2024). ANALISIS FAKTOR-FAKTOR PRODUKSI TERHADAP PENDAPATAN PENGUSAHA TAPE DI KELURAHAN LADANG BAMBU KECAMATAN MEDAN TUNTUNGAN. *Referensi: Jurnal Ilmu Manajemen Dan Akutansi*, *12*(1), 35–40. https://doi.org/10.3336

Tong, Q., Yuan, X., Zhang, L., Zhang, J., & Li, W. (2024). The impact of livelihood capitals on farmers' adoption of climate-smart agriculture practices: Evidence from rice production in the Jianghan Plain, China. *Climate Risk Management*, *43*, 1–17. https://doi.org/10.1016/j.crm.2023.100583

Wahed, M. (2018). PENGARUH LUAS LAHAN, PRODUKSI DAN HARGA GABAH TERHADAP KESEJAHTERAAN PETANI PADI DI DAERAH SENTRAL PRODUKSI PADI KABUPATEN JEMBER. *Journal of Economics Development Issues (JEDI)*, *1*(1), 33–40.