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The Association Between Rural Transformation and Poverty Rates across Regencies in Central Java Province

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A B S T R A C T

Rural transformation involves changes in agricultural production patterns and labor reallocation from agriculture to non-agricultural sectors. Although these changes are expected to improve welfare, they do not necessarily reduce poverty. This study examines the relationship between rural transformation indicators, namely the horticultural share and industrial employment share, and poverty rates in 16 regencies in Central Java Province during 2018-2025, controlling for average years of schooling and the open unemployment rate. A quantitative approach is employed using secondary panel data from official publications of Statistics Indonesia (BPS) of Central Java Province. The data are analyzed using panel regression with the Random Effects Model (REM) and White Period robust standard errors. The results show that the horticultural share is negatively associated with poverty, while the industrial employment share is positively associated with poverty, both are statistically significant at the 10% level. Average years of schooling is negatively associated with poverty, whereas the open unemployment rate is positively associated with poverty, both are significant at the 5% level. All explanatory variables are jointly statistically significant. These findings highlight the importance of horticultural development, educational improvement, and productive employment opportunities in supporting poverty alleviation in Central Java Province.

KATA KUNCI

Transformasi Pedesaan, Pangsa Hortikultura, Pangsa Tenaga Kerja Sektor Industri, Tingkat Kemiskinan, Jawa Tengah

A B S T R A K

Transformasi pedesaan mencakup perubahan pola produksi pertanian dan pergeseran tenaga kerja dari sektor pertanian menuju sektor nonpertanian. Meskipun perubahan tersebut diharapkan dapat meningkatkan kesejahteraan, proses tersebut tidak selalu diikuti oleh penurunan kemiskinan. Penelitian ini bertujuan menganalisis hubungan indikator transformasi pedesaan, yaitu pangsa hortikultura dan pangsa tenaga kerja sektor industri, dengan tingkat kemiskinan di 16 kabupaten di Provinsi Jawa Tengah selama periode 2018-2025, dengan mengendalikan rata-rata lama sekolah dan tingkat pengangguran terbuka. Penelitian ini menggunakan pendekatan kuantitatif dengan data sekunder berbentuk panel yang bersumber dari publikasi resmi Badan Pusat Statistik (BPS) Provinsi Jawa Tengah. Analisis dilakukan menggunakan regresi data panel dengan model *Random Effects Model* (REM) dan *White Period Robust Standard Errors*. Hasil penelitian menunjukkan bahwa pangsa hortikultura berasosiasi negatif dengan tingkat kemiskinan, sedangkan pangsa tenaga kerja sektor industri berasosiasi positif, keduanya signifikan pada taraf 10%. Rata-rata lama sekolah berasosiasi negatif dengan tingkat kemiskinan, sementara tingkat pengangguran terbuka berasosiasi positif, keduanya signifikan pada taraf 5%. Seluruh variabel penjelas secara simultan berpengaruh signifikan terhadap tingkat kemiskinan. Temuan ini menegaskan pentingnya pengembangan hortikultura, peningkatan kualitas pendidikan, dan penciptaan lapangan kerja produktif untuk mendukung upaya pengentasan kemiskinan di Provinsi Jawa Tengah.

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1. Introduction

Economic development is generally characterized by structural transformation, which involves a shift in the composition of economic activities from low-productivity sectors toward higher-productivity sectors. This transformation is reflected in changes in the role of the agricultural sector and the reallocation of labor toward non-agricultural sectors, particularly industry and services. In the two-sector theory of development, the traditional sector is characterized by subsistence activities, an excess supply of labor, and low marginal productivity, whereas the modern sector is characterized by higher productivity and the capacity to absorb labor from the traditional sector [1]. Thus, structural transformation not only reflects changes in the composition of output and labor across sectors but also indicates a shift in economic activities toward more productive sectors.

Structural transformation is closely related to changes in rural economies, as agricultural activities remain an

important source of employment and income for rural communities. Agricultural transformation is not only reflected in the declining contribution of the agricultural sector to the economy but also in changes within the sector, including increased productivity, diversification of economic activities, and the development of high-value agricultural commodities. Rural transformation is also characterized by increasing labor participation in non-agricultural activities. This process has the potential to increase productivity, expand income-generating opportunities, and improve the welfare of rural communities, although its pace may vary across regions [2]. However, the reallocation of labor from agriculture to non-agricultural sectors has not necessarily resulted in a substantial reduction in poverty, particularly in rural areas [3].

Central Java Province is one of the regions that continues to exhibit an agriculture-based economic structure, particularly in rural areas. Although structural economic changes have taken place, the agricultural sector remains an important component of the regional economy. During the 2014-2023 period, the contribution of the agricultural sector to Gross Regional Domestic Product (GRDP) declined from 15.22% to 13.23%, while the number of workers employed in the agricultural sector also decreased from 5,173,986 to 4,883,060 people [4]. This decline indicates a shift in the role of the agricultural sector within the economic and employment structure; however, agriculture remains an important source of income for a considerable proportion of the population. Meanwhile, the overall poverty rate in Central Java declined from 13.58% in 2014 to 10.77% in 2023. However, poverty among people working in the agricultural sector has not shown a consistent decline, with the poverty rate increasing from 23.44% in 2014 to 26.36% in 2023. This condition indicates that although the contribution of the agricultural sector and the number of agricultural workers have declined, poverty among people employed in agriculture remains a concern. Low agricultural productivity and the small scale of farming operations tend to limit farmers' household incomes, resulting in a continued close relationship between rural poverty and the agricultural sector [5].

Changes in the agricultural structure of Central Java can also be observed through developments in the food crops and horticultural subsectors. During the 2014-2023 period, the GRDP of the food crops subsector increased from IDR 36,456 million to IDR 38,749 million, while the horticultural subsector increased from IDR 27,278 million to IDR 35,413 million. These developments indicate that both subsectors experienced growth, with the horticultural subsector showing stronger growth toward the end of the observation period. This condition suggests that agricultural transformation is not only related to changes in the overall role of the agricultural sector but also to changes in the internal structure of agricultural activities toward commodities with higher economic value. Meanwhile, the proportion of Central Java's population employed in the agricultural sector declined from 31.26% in 2014 to 24.43% in 2023. This decline indicates a reallocation of labor toward non-agricultural sectors. The expansion of non-agricultural activities has been driven partly by increasing demand for processed agricultural products in the manufacturing industry [6]. However, labor absorption in the manufacturing and trade sectors remains relatively limited, while some workers leaving the agricultural sector may move into informal employment characterized by relatively low productivity. Therefore, a decline in the proportion of agricultural workers does not automatically indicate an improvement in welfare if the reallocation of labor is not accompanied by increases in labor productivity and employment income.

The changes in the structure of agricultural subsectors and employment indicate that transformation has taken place, but its impact on poverty has not yet been clearly demonstrated. The decline in the proportion of agricultural workers has occurred alongside the development of the horticultural subsector, while poverty among people employed in the agricultural sector has continued to fluctuate. This condition suggests that changes in the economic structure do not automatically lead to improvements in welfare. Therefore, it is necessary to further examine how changes in the agricultural and employment sectors are associated with poverty levels in regions that continue to exhibit an agriculture-based economic structure.

The relationship between agricultural transformation, changes in employment, and poverty is also supported by empirical findings showing that an increasing share of high-value agricultural commodities and a growing proportion of the rural labor force employed in non-agricultural sectors were positively associated with higher household incomes and lower poverty rates across various regions of Indonesia [6]. Research conducted in China has shown that greater participation of rural workers in non-agricultural employment contributes to poverty reduction [7]. Meanwhile, previous studies have demonstrated that rural transformation encompasses changes in productivity, diversification of economic activities, and the expansion of high-value agricultural activities and non-agricultural employment [2]. These findings indicate that agricultural transformation and income diversification can play an important role in improving the welfare of rural communities, although the processes and pace of transformation may vary across regions.

Based on these conditions, agricultural and employment transformation in Central Java has taken place; however, its relationship with poverty levels in districts that continue to exhibit an agriculture-based economic structure remains unclear and varies across regions. This study specifically examines two forms of

transformation: transformation within the agricultural sector, represented by the horticultural share, and employment transformation, represented by the share of workers employed in the industrial sector. To account for other social and labor-related factors, this study also includes mean years of schooling and the open unemployment rate as variables affecting poverty levels. Therefore, this study analyzes the effects of these two forms of transformation on poverty levels in districts in Central Java Province during the 2018-2025 period. The findings are expected to provide considerations for agricultural development policies by strengthening high-value-added subsectors and improving the productivity of agricultural workers.

2. Research Method

This study employs a quantitative approach using secondary panel data, which combines cross-sectional and time-series data. The analysis focuses on 16 regencies in Central Java Province, namely Pekalongan, Karanganyar, Boyolali, Wonogiri, Magelang, Cilacap, Purworejo, Blora, Grobogan, Demak, Klaten, Banyumas, Sragen, Rembang, Pemalang, and Kebumen. The selection of the research areas is based on the continued importance of the agricultural sector in most regencies of Central Java Province, particularly in providing employment opportunities and sources of income for rural communities. At the same time, Central Java continues to face relatively high levels of poverty, with a portion of the rural population relying on the agricultural sector for their livelihoods. These conditions make Central Java a relevant setting for examining the relationship between agricultural sector transformation and poverty. The observation period covers 2018-2025, with data obtained from official publications of the Central Java Statistics Agency, including data on poverty rates, horticultural and food crop production, agricultural and industrial employment, mean years of schooling, and the open unemployment rate.

The dependent variable in this study is the poverty rate, expressed as a percentage. The first main variable is the horticultural share, defined as the proportion of horticultural production relative to total horticultural and food crop production. The second main variable is the industrial labor share, defined as the proportion of industrial employment relative to total employment in the industrial and agricultural sectors. Mean years of schooling (RLS) and the open unemployment rate (TPT) are included as control variables. The transformation indicators are calculated using the following Equation (1) and (2), where H is represents horticultural production, FC represents food crop production, I represents employment in the industrial sector, and A represents employment in the agricultural sector.

$$Horticultural\ share = \frac{H}{(H+FC)} \quad (1)$$

$$Industrial\ labor\ share = \frac{I}{(I+A)} \quad (2)$$

This study employs panel data regression analysis to examine the relationship between agricultural sector transformation and poverty levels in the selected districts, using EViews 12 software. The relationship between the variables is estimated using the following panel data regression Equation (3).

$$P_{it} = \beta_0 + \beta_1 HS_{it} + \beta_2 IS_{\text{it}} + \beta_3 RLS_{it} + \beta_4 TPT_{it} + \varepsilon_{it} \quad (3)$$

The analysis in this study began with the selection of an appropriate panel data regression model using the Chow test, Hausman test, and Lagrange Multiplier (LM) test [8]. The Chow test was used to determine the appropriate model between the Common Effects Model (CEM) and the Fixed Effects Model (FEM), while the Hausman test was used to determine the appropriate model between the Fixed Effects Model (FEM) and the Random Effects Model (REM). Meanwhile, the LM test was used to determine the appropriate model between the Common Effects Model (CEM) and the Random Effects Model (REM). After the appropriate model was selected, the classical assumption tests were conducted using the Jarque-Bera normality test, a multicollinearity test based on the correlation coefficients among the independent variables with a threshold of 0.85, a heteroscedasticity test using the Glejser method, and an autocorrelation test based on the Durbin-Watson statistic [9]. Hypothesis testing was then conducted using the coefficient of determination (Adjusted R^2), F-test, and t-test. The coefficient of determination was used to measure the ability of the independent variables to explain variations in poverty levels. The F-test was used to determine the simultaneous effect of the independent variables, while the t-test was used to examine the partial effect of each independent variable on the poverty rate.

3. Result and Discussion

3.1. Result

3.1.1. Panel Data Regression Model Selection

Based on the model selection procedure for panel data regression on Table 1, which involved the Chow test, Hausman test, and Lagrange Multiplier test, the best-fitting model was the Random Effect Model (REM), with a final probability value of 0.0000. The model was selected based on the results of the Hausman and Lagrange Multiplier tests, both of which indicated that the Random Effect Model (REM) was the appropriate model. Therefore, the subsequent analysis in this study was conducted using the Random Effect Model (REM).

Table 1. Selection of the Appropriate Panel Data Regression Model

Test	CEM	FEM	REM
Chow	-	(0,0000)	-
Hausman	-	-	(0,7395)
LM	-	-	(0,0000)

3.1.2. Normality Test

The Jarque-Bera normality test yielded a statistic of 1.724 and probability value of 0.422. Since the probability value exceeds the 0.05 significance level, the null hypothesis of normally distributed residuals cannot be rejected. Therefore, the residuals do not show a statistically significant departure from normality.

3.1.3. Multicollinearity Test

Based on the results presented in Table 2, where HS is Horticulture Share and IS is Industrial Labor Share, all correlation coefficients among the independent variables are below 0.85, indicating that the regression model is free from multicollinearity.

Table 2. Multicollinearity Test Results

Variable	HS	IS	RLS	TPT
Horticulture share	1.000	0.299	0.147	-0.007
Industrial labor share	0.299	1.000	0.236	0.293
RLS	0.147	0.236	1.000	-0.219
TPT	-0.007	0.293	-0.219	1.000

3.1.4. Heteroskedasticity Test

Based on Table 3, the heteroskedasticity test using the Glejser method indicates that one of the variables still exhibits signs of heteroskedasticity. However, the selected estimation model is the Random Effect, which is estimated using the Generalized Least Squares (GLS) approach. The GLS approach in REM can be applied when the error variance is not homogeneous. Furthermore, GLS or a robust variance matrix can provide more reliable inference when the homoskedasticity assumption is violated [10]. Therefore, this study retains the REM as the best estimation model using the GLS approach.

Table 3. Heteroskedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic
C	-0.512702	1.218383	-0.420805
Horticulture share	-2.827928	0.824959	-3.427960
Industrial labor share	1.820128	1.094079	1.663617
RLS	0.153959	0.124526	1.236365
TPT	0.120391	0.052413	2.296963

3.1.5. Autocorrelation Test

The Durbin-Watson (DW) statistic was 1.208825, indicating a potential presence of serial correlation in the model. Therefore, the model was re-estimated using White Period (cross-section cluster) robust standard errors to obtain more reliable statistical inference, as serial correlation can make conventional standard errors less reliable [10].

The model was re-estimated using White Period (Cross-section Cluster) Robust Standard Errors. The results based on Table 4 show that the regression coefficients remained unchanged, while the standard errors, t-statistics, and probability values were adjusted. These results were used to interpret the effects of the independent variables on the poverty rate with more reliable statistical inference. This adjustment is necessary because a robust variance matrix estimator helps maintain the validity of the variance matrix and statistical tests in the presence of serial correlation [11].

Table 4. REM Estimation Results with White Period (Cross-section Cluster) Robust Standard Errors

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16.423690	2.498914	6.572330	0.0000
Horticulture share	-3.167628	1.654095	-1.915022	0.0748
Industrial labor share	3.823849	2.049558	1.865694	0.0818
RLS	-0.909870	0.277333	-3.280787	0.0051
TPT	0.299855	0.067414	4.447997	0.0005

3.1.6. Panel Data Regression Results

Based on the panel data model selection procedures, this study employed the Random Effects Model (REM), estimated using White Period (Cross-section Cluster) Robust Standard Errors to address the serial correlation identified in the previous autocorrelation test. The estimated regression equation is presented in Equation (4).

$$\hat{T} = 16.423 - 3.167 * HS + 3.823 * IS - 0.909 * RLS + 0.299 * TPT \quad (4)$$

The estimated constant of 16.423 indicates that the predicted poverty rate is 16.423% when all independent variables are held constant. The coefficient of the horticultural share (-3.167) indicates that a one-unit increase in the horticultural share is associated with a 3.167unit decrease in the poverty rate, holding other variables constant. In contrast, the industrial sector labor share coefficient (3.823) suggests that a one-unit increase in the industrial sector labor share is associated with a 3.82unit increase in the poverty rate. The coefficient of average years of schooling (-0.909) indicates that a one-year increase in average years of schooling is associated with a 0.909 percentage-point decrease in the poverty rate. Meanwhile, the open unemployment rate coefficient (0.299) indicates that a one-percentage-point increase in the open unemployment rate is associated with a 0.299 percentage point increase in the poverty rate.

3.1.7. Partial Significance Test (t-Test)

As reported in Table 4, the partial significance test based on the estimation using White Period (Cross-section Cluster) Robust Standard Errors indicates that the horticultural share has a negative and statistically significant effect on the poverty rate at the 10% significance level. The industrial sector labor share also has a positive and statistically significant effect at the 10% significance level. Meanwhile, average years of schooling has a negative and statistically significant effect on the poverty rate at the 5% significance level, whereas the open unemployment rate has a positive and statistically significant effect at the 5% significance level.

3.1.8. Simultaneous Significance Test (F-Test)

The F-test yielded a statistic of 19.39932 and a probability value of 0.000000. Since the probability value is below the 0.05 significance level, the null hypothesis is rejected. These results indicate that the horticultural share, industrial sector labor share, average years of schooling, and open unemployment rate are jointly statistically significant in explaining variations in the poverty rate.

3.1.9. Coefficient of Determination (R^2)

The adjusted R-squared is employed to determine how well the independent variables account for changes in the poverty rate. As shown by the estimation results, the adjusted R-squared value of 0.366891 indicates that the horticultural share, industrial sector labor share, average years of schooling, and open unemployment rate collectively account for 36.68% of the variation in the poverty rate. The remaining 63.32% is explained by other factors outside the variables incorporated into the model.

3.2. Discussion

3.2.1. The Effect of the Horticulture Sector's Share on Poverty Rates in Regencies of Central Java Province

The regression analysis of 16 regencies in Central Java Province yielded a coefficient of -3.167628 for the horticultural share, with a probability value of 0.0748. These results indicate a negative association between the horticultural share and the poverty rate at the 10% significance level. This suggests that an increase in the proportion of horticultural production relative to the combined production of horticultural and food crops is associated with a lower poverty rate. The findings support the research hypothesis that the horticultural share is negatively associated with the poverty rate.

This association can be considered in the context of the potential for horticultural development in the study areas. Magelang Regency, for example, has a horticultural production center in Kajoran District, where commodities include potatoes, scallions, cabbage, and mustard greens. However, several commodities still require development strategies to improve productivity and value added [12]. Furthermore, opportunities to improve farmers' welfare through horticulture are related to income, which is influenced by the selling prices of agricultural products. Higher selling prices provide farmers with greater opportunities to earn higher incomes [13].

Theoretically, this relationship can be explained by the concept of rural transformation, which describes changes in economic structures toward systems that are more modern, productive, and diversified. This process involves not only shifts in economic activities but also the development of high-value agricultural commodities (high-value agriculture). Share of high-value agriculture (RT1) is an indicator of rural transformation that contributes to higher rural household incomes and lower poverty rates. These findings are consistent with previous studies showing that an increase in the share of high-value agriculture is associated with lower poverty rates through the diversification of agricultural production toward higher-value commodities, which can potentially increase rural household incomes [6], [14], [15].

3.2.2. The Effect of the Industrial Sector's Share of the Labor Force on Poverty Rates in Regencies of Central Java Province

The regression analysis of 16 regencies in Central Java Province yielded a coefficient of 3.823849 for the industrial employment share, with a probability value of 0.0818. These results indicate a positive association between the industrial employment share and the poverty rate at the 10% significance level, which does not support the research hypothesis. This finding suggests that an increase in the proportion of workers employed in the industrial sector is not necessarily associated with a reduction in poverty. Regional disparities illustrate this pattern: Demak, Klaten, and Pekalongan Regencies have relatively high industrial employment shares, whereas Blora Regency has a comparatively lower share. These differences suggest that the extent of industrial labor absorption alone is insufficient to indicate successful poverty reduction, particularly when available jobs do not offer adequate productivity or wages.

From a theoretical perspective, these findings suggest that labor transformation involves not only the movement of workers into the industrial sector but also the quality of the jobs created. Arthur Lewis's two-sector model explains how the movement of labor toward the modern sector can potentially increase productivity and income. Meanwhile, Chenery and Syrquin's Pattern of Development theory emphasizes that structural economic change should be accompanied by productivity improvements and the creation of high-value-added jobs [16]. The findings of this study are consistent with research that identifies the phenomenon of "immature structural transformation" in East Java Province, where the decline in the role of the agricultural sector has not been offset by adequate growth in the industrial sector [17]. Conversely, several studies have found that an increase in nonagricultural employment opportunities can support higher household incomes and reduce poverty [7], [18].

The relationship between labor transformation and poverty depends not only on changes in the employment structure but also on the industrial sector's capacity to generate jobs that provide adequate incomes and improve workers' well-being. The creation of productive, high-quality employment with high value added is therefore essential for enhancing societal

welfare [19], [20]. Accordingly, the positive association between the industrial employment share and the poverty rate suggests that the growing proportion of industrial workers in the study regencies has not yet been accompanied by sufficient improvements in employment quality to facilitate poverty reduction.

3.2.3. The Effect of Average Years of Schooling on Poverty Rates in Regencies of Central Java Province

The estimation results indicate that average years of schooling has a coefficient of -0.9099 and a p-value of 0.0051, indicating a negative and statistically significant association with the poverty rate at the 5% significance level. This finding suggests that higher educational attainment is associated with lower poverty through improvements in human capital quality and greater access to productive employment. Across the study districts, Karanganyar, Klaten, and Banyumas exhibit relatively high average years of schooling, whereas Pemalang and Grobogan record comparatively lower levels. This disparity reflects the uneven distribution of human capital quality across districts. These findings are consistent with previous research showing that average years of schooling reflects human capital quality. Individuals with higher educational attainment generally possess greater knowledge, better skills, stronger competitiveness, and broader employment opportunities, increasing their likelihood of earning an adequate income and reducing their risk of poverty [21]. Education also represents an investment in human capital development, as higher educational attainment can improve knowledge, skills, labor productivity, and societal well-being, ultimately contributing to poverty reduction [22].

Theoretically, these findings can be explained by Becker's Human Capital Theory, which views education as an investment in enhancing individual productivity and earning potential [23]. The results are consistent with previous studies that have found a negative and statistically significant relationship between average years of schooling and poverty rates [24], [25]. Therefore, ensuring equitable access to education and aligning educational outcomes with labor market needs are essential for supporting poverty reduction.

3.2.4. The Effect of the Open Unemployment Rate on the Poverty Rate in Regencies of Central Java Province

The estimation results indicate that the open unemployment rate has a coefficient of 0.2999 and a probability value of 0.0005, demonstrating a positive and statistically significant association with the poverty rate at the 5% significance level. This finding suggests that higher unemployment is associated with an increased risk of poverty, as limited employment opportunities constrain people's ability to earn sufficient income to meet their basic needs. Across the study areas, Cilacap, Pemalang, and Demak Regencies recorded relatively high average open unemployment rates, whereas Wonogiri, Rembang, and Grobogan Regencies exhibited comparatively lower averages. These disparities reflect differences in the capacity of individual regencies to provide employment opportunities and absorb the labor force. Labor market conditions in Central Java Province can be assessed through various indicators, including labor force participation, employment opportunities, employment status, occupation type, and average weekly working hours, which provide insights into labor productivity. These conditions are also shaped by the interrelationships among various labor market indicators [26]. Furthermore, poverty in the regencies and cities of Central Java Province is associated with labor market dynamics, as reflected in regional disparities in open unemployment rates [27].

Theoretically, these findings can be explained by Keynes's theory presented in The General Theory of Employment, Interest, and Money, which suggests that insufficient effective demand can constrain production and limit labor absorption. When market demand weakens, firms may reduce their output, thereby limit employment opportunities and increase unemployment [28]. The findings are consistent with previous studies reporting a positive and statistically significant association between the open unemployment rate and poverty [29], [30].

4. Conclusion

This study examines the relationship between agricultural sector transformation, labor transformation, and poverty rates in the regencies of Central Java Province. The results show that an increase in the share of horticultural production relative to food crop production is negatively associated with poverty rates at the 10% significance level. Specifically, a one percentage point increase in the horticultural share is associated with a decrease of 0.0317 percentage points in the average poverty rate. Conversely, an increase in the share of employment in the industrial sector is positively associated with poverty rates at the 10% significance level. Specifically, a one percentage point increase in the industrial employment share is associated with an increase of 0.0382 percentage points in the average poverty rate. These findings suggest that a shift in agricultural production toward horticulture is associated with lower poverty rates, whereas the transition of employment from agriculture to industry is not necessarily accompanied by improvements in public welfare. This study provides empirical evidence of the relationship between structural transformation and poverty at the regional level. However, the study is limited by the explanatory variables included in the model and its geographical coverage. Future research should consider including additional determinants of poverty, using more diverse indicators of agricultural

and labor transformation, and extending the observation period and geographical coverage to develop a more comprehensive understanding of the relationship between structural transformation and poverty.

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