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The Correlation of Regional Economic Indicators to Poverty, Unemployment, and Economic Resilience in the Kadungsepur National Strategic Area

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Abstract: This study analyzes the dynamics of poverty and unemployment in the Kedungsepur National Strategic Area (KSN) during the 2013–2023 period within the framework of regional economic resilience and development policy. A descriptive quantitative approach was employed using secondary data from Statistics Indonesia (BPS) and the Regional Development Planning Agency (Bappeda) of Central Java, covering six administrative areas: Semarang City, Salatiga City, and the Regencies of Semarang, Demak, Kendal, and Grobogan. The analysis was conducted through socio-economic trend calculations and Pearson correlation tests among regional economic indicators, including Regional Own-Source Revenue (PAD), the Human Development Index (HDI), Regional Minimum Wage (UMR), poverty rate, and open unemployment rate (TPT). The results indicate that the average poverty rate decreased from 10.65% in 2013 to 8.20% in 2023, while the unemployment rate decreased from 6.01% to 4.93%. However, Semarang Regency experienced a slight increase in unemployment (from 3.9% to 4.05%), indicating a jobless growth phenomenon. The correlation between HDI and poverty shows a very strong negative correlation ($r = -0.976$), implying that improved human quality significantly contributes to poverty reduction. Conversely, the positive correlation between minimum wage and unemployment ($r = 0.795$) suggests that wage increases without productivity improvements may reduce employment absorption. The findings emphasize that economic growth in Kedungsepur remains non-inclusive, being concentrated in urban and capital-intensive sectors. Therefore, a resilience-oriented development and Local Economic Development (LED) approach is required to promote economic diversification, enhance workforce skills, and ensure equitable distribution of development benefits. The study contributes to the formulation of regional development policies that are equitable, resilient, and sustainable.

Keywords: Poverty, Unemployment, Regional Economic Resilience

INTRODUCTION

Regional economic development is an integral part of efforts to achieve equitable and sustainable community welfare. In the Indonesian context, regional development is directed not only at encouraging economic growth but also at reducing disparities between regions by improving connectivity, human resource capacity, and local competitiveness. As stated by

Sjafrizal (2014), effective regional development requires a balance between growth and equity so that the benefits of development can be felt inclusively. One area that plays a vital role in the national development strategy is the Kedungsepur National Strategic Area (KSN), which encompasses the cities of Semarang, Salatiga, Semarang Regency, Demak Regency, Kendal Regency, and Grobogan Regency. This area has been designated through Presidential Regulation Number 60 of 2022 as a priority area for spatial planning and regional economic development.

Geographically and economically, the Kedungsepur National Strategic Area (KSN) serves as a key growth hub in northern Central Java, connecting economic activity between the northern coastal route (Pantura) and the hinterland in the south. This strategic location makes Kedungsepur a region with high levels of urbanization and industrialization, while simultaneously facing challenges in managing socio-economic disparities between regions within it. Data from the Central Statistics Agency (BPS) shows that poverty and unemployment rates in the Kedungsepur region generally decreased during the 2013–2023 period, but not evenly across all its constituent regencies and cities. Semarang City, as the main economic center, recorded a significant decline, while Demak and Grobogan Regencies still face relatively high poverty rates. This condition demonstrates that economic growth is not always synonymous with equitable distribution of welfare, as also found in a study by Rakhmawan and Aji (2023), which emphasized that economic growth at the regional level does not always have a direct impact on poverty reduction. In this context, the concept of regional economic resilience is crucial for explaining the extent to which a regional economic structure can adapt to external changes and shocks (Martin & Sunley, 2015; Bristow & Healy, 2020). Several studies have shown that strong economic resilience depends not only on GRDP growth but also on human resource capacity and the effectiveness of regional fiscal policies (Widodo, 2021; Yulianti & Pratama, 2023; Setyawan & Firdaus, 2022).

Poverty and unemployment are two key indicators reflecting the quality of regional development. Poverty is defined as living conditions below minimum standards, both economically and socially (Hasibuan, Juanda, & Mulatsih, 2019), while unemployment is defined as a condition in which a person is included in the labor force but does not have a job (Sukirno, 1994). These two phenomena are often interrelated and serve as indicators of a region's economic resilience. Economic resilience encompasses a region's ability to survive and adapt to economic, social, and environmental changes, including the ability to create jobs and maintain social stability (Foster, 2017). Research by Darma, Muslihatinningsih, and Adenan (2024) confirms that an increase in the Human Development Index (HDI) has a significant negative impact on poverty levels, while variables such as the dependency ratio and unemployment also play a role in widening social disparities between regions. This aligns with the findings of Ikhsanudin and Yasin (2021) in Central Java Province, which showed that the HDI and economic growth contribute to poverty reduction, while the unemployment rate has the opposite effect.

The government has attempted to reduce poverty and unemployment through various policies, such as improving the quality of education and health, and providing local economic infrastructure. However, the effectiveness of these policies often depends on the context of each region. In the context of Kedungsepur, the main challenge arises from the disparity in development between regions. Although there has been an increase in the Human Development Index (HDI) and Regional Original Income (PAD) across the Kedungsepur region over the past decade, this increase has not always been accompanied by a decrease in unemployment. For example, Semarang Regency experienced an increase in the Open Unemployment Rate (TPT) from 3.9% in 2013 to 4.05% in 2023, despite significant increases in PAD and the Regional Minimum Wage (UMR). This phenomenon indicates that economic growth has not been fully inclusive, a pattern also observed in various agglomeration regions in developing countries (Kumo, 2012; Rodríguez-Pose & Crescenzi, 2008).

This phenomenon underscores the importance of regional economic analysis in understanding the correlation between poverty, unemployment, and regional economic performance. A regional economic approach not only looks at macro indicators such as economic growth and income, but also considers spatial, institutional, and policy factors that influence the distribution of development benefits (Sjafrizal, 2014). Thus, regional economic analysis is crucial for understanding the extent to which local economic structures and policies are able to support equitable and sustainable development in the Kedungsepur area.

Furthermore, the economic dynamics in Kedungsepur also need to be understood within the framework of national development policies. The designation of this area as a National Strategic Area (KSN) under Presidential Regulation No. 60 of 2022 requires integration between spatial planning and regional economic policies. The central government aims for Kedungsepur to become a new growth center capable of supporting Central Java's economic resilience. However, achieving this goal requires policies that adapt to local potential and challenges, including job availability, workforce skills, and regional fiscal capacity.

Several previous studies have examined the correlation between economic growth, poverty, and unemployment in Indonesia (Hasibuan et al., 2019; Darma et al., 2024; Rakhmawan & Aji, 2023). However, most of these studies focus on the national or provincial level, without considering the economic dynamics across districts and cities.

In the context of Central Java, particularly the Kedungsepur National Strategic Area (KSN), previous research has focused more on spatial planning, transportation, or urbanization aspects (Wijesuriya, 2015; Timothy, 2018), while the regional economic dimension—including the correlation between PAD, HDI, and UMR with poverty and unemployment—has rarely been studied quantitatively and longitudinally.

Furthermore, studies on regional economic resilience and the phenomenon of jobless growth in metropolitan areas like Kedungsepur are still very limited. This region possesses unique characteristics: rapid industrialization, high intercity connectivity, yet striking interregional disparities in welfare remain.

Therefore, this study aims to fill this gap by empirically analyzing the correlation between regional economic indicators (PAD, HDI, UMR) and poverty and unemployment in KSN Kedungsepur during the 2013–2023 period, as well as formulating the direction of economic development policies based on resilience-oriented development and Local Economic Development (LED).

Based on this description, this research is directed to:

1. Describes the dynamics of poverty and unemployment in the KSN Kedungsepur area during the 2013–2023 period.
2. Analyze the correlation between regional economic variables (PAD, IPM, and UMR) with poverty and unemployment levels.
3. Identifying the challenges and direction of regional economic development policies in strengthening the economic resilience of Kedungsepur.

Academically, this research contributes to the literature on regional economic development and local economic resilience in national agglomeration areas. Practically, the results are expected to serve as a reference for local governments in formulating more targeted policies to reduce poverty and unemployment and strengthen the foundations of a sustainable economy in the Kedungsepur area.

METHOD

Types and Approaches of Research

This study uses a quantitative descriptive approach, which aims to provide an empirical overview of the dynamics of poverty, unemployment, and regional economic indicators in the

Kedungsepur National Strategic Area (KSN) during the period 2013–2023. This approach was chosen because it is suitable for analyzing socio-economic phenomena that are dynamic and measurable based on official statistical data. According to Sugiyono (2017), a descriptive quantitative approach is used to interpret numerical data to understand patterns, trends, and correlations between variables in a population. In the context of this study, the analysis was conducted on six administrative areas included in the Kedungsepur KSN, namely Semarang City, Semarang Regency, Demak Regency, Kendal Regency, Grobogan Regency, and Salatiga City.

Research Location

The research location covers the entire administrative area of the Kedungsepur National Strategic Area (KSN) in Central Java Province. This area was designated through Presidential Regulation Number 60 of 2022 concerning the Kedungsepur National Strategic Area Spatial Planning. The location was selected based on two primary considerations:

1. The strategic position of the region as a hub for economic growth in northern Central Java, connecting the Pantura route and the hinterland region.
2. The diversity of economic structures between the constituent regions allows for comparative analysis of socio-economic inequality within the region.

Data Types and Sources

This research uses secondary data obtained from various official publications, including:

1. Central Statistics Agency (BPS): data on poverty rates, open unemployment rates (TPT), Human Development Index (HDI), and Regional Minimum Wages (UMR) for districts/cities for the period 2013–2023.
2. Regional Development Planning Agency (Bappeda) of Central Java Province: Regional Original Income (PAD) data and regional economic performance reports.
3. Annual report of the regional government members of KSN Kedungsepur.
4. The data used is in the form of a time series for one decade (2013–2023) with the unit of analysis being district/city areas.

Research Variables

This study involved five main variables selected based on their relevance in reflecting the dimensions of regional economic performance and social welfare. PAD (Regional Original Income) represents the fiscal capacity and economic independence of a region, the Human Development Index (HDI) reflects the quality of human resources, which is a determinant of economic productivity, and the Regional Minimum Wage (UMR) is an indicator of labor welfare and regional competitiveness. These three variables are considered representative because they conceptually and empirically influence poverty and unemployment rates (Sjafrizal, 2014; Hasibuan et al., 2019; Rodríguez-Pose, 2018).

Table 1. Research Variables

No	Variables	Unit	Information
1	Poverty Level	Percentage (%)	Percentage of population with expenditure below the poverty line
2	Open Unemployment Rate (TPT)	Percentage (%)	Proportion of the workforce that is not working
3	Human Development Index (HDI)	Index (0–100)	Combined indicator of education, health and decent living standards
4	Regional Minimum Wage (UMR)	Rupiah (Rp)	District/city minimum wage per year

5	Regional Original Income (PAD)	Rupiah (Rp)	Regional income from taxes, levies, and asset management
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Source: Author (2025)

Data Analysis Techniques

The analysis is carried out through the following two main approaches:

a. Quantitative Descriptive Analysis

It is used to describe trends in socio-economic indicators in each Kedungsepur region during 2013–2023. The analysis steps include calculating the rate of change for each indicator per year, comparing trends between regions to determine the level of disparity, and presenting the results in tables and graphs. According to Nazir (2014), descriptive analysis is effective for displaying data characteristics without statistical inference, while still allowing researchers to understand economic phenomena empirically.

b. Simple Correlation Analysis (Pearson Coefficient)

To strengthen the interpretation of the correlation between variables, a Pearson Product Moment correlation analysis was carried out using the following formula:

$$r = \frac{\sum(x-\bar{x})(y-\bar{y})}{\sqrt{\sum(x-\bar{x})^2 \sum(y-\bar{y})^2}} \dots\dots\dots (1)$$

The r value ranges from -1 to +1, with the following interpretations: r < 0 indicates a negative correlation, r > 0 indicates a positive correlation, and |r| approaching 1 indicates a stronger correlation. This analysis was performed using Microsoft Excel with the =PEARSON(array1, array2) function to obtain the r value between pairs of variables.

Data Validity and Reliability

The secondary data used comes from official government institutions, specifically the Statistics Indonesia (BPS) and the Regional Development Planning Agency (Bappeda), ensuring high validity. To ensure reliability, data consistency tests were conducted between years and sources, as well as standardization of measurement units to ensure proportional comparisons between regions.

Analysis Steps

- a. Secondary data collection from official sources.
- b. Compilation of data tabulation per indicator (poverty, unemployment, HDI, UMR, PAD) per year and per region.
- c. Calculation of the rate of change using the formula:

$$\text{Laju Perubahan} = \left(\frac{x_{2023} - x_{2013}}{x_{2013}} \right) \times 100\% \dots\dots\dots (2)$$
- d. Simple correlation analysis using Pearson's formula for each pair of variables.
- e. Interpretation of results and drawing policy implications relevant to the context of economic development in the Kedungsepur region.

Research Limitations

This study has two major limitations. First, the analysis uses only secondary data, thus not capturing qualitative dimensions such as public perception or the effectiveness of local government programs. Second, the limited availability of annual data prevents this study from identifying short-term changes due to external factors, such as the COVID-19 pandemic. Nevertheless, the ten-year time series data provides a strong foundation for analyzing long-term trends and developing relevant policy recommendations.

RESULTS AND DISCUSSION

Overview of the Kedungsepur National Strategic Area

The Kedungsepur National Strategic Area (KSN) comprises six administrative regions:

Semarang City, Semarang Regency, Kendal Regency, Demak Regency, Grobogan Regency, and Salatiga City. This area serves as a key economic growth hub in Central Java Province, connecting the northern coastal route (Pantura) with the southern hinterland. Based on Presidential Regulation Number 60 of 2022 concerning the National Strategic Area Spatial Planning, Kedungsepur has been designated a priority development area due to its significant potential for industrial, service, trade, and tourism development.

Spatially, Kedungsepur has diverse geographic characteristics. The northern part includes coastal areas and lowlands with dense economic activity, while the southern part is dominated by hills and productive agricultural land. The highest population density is found in Semarang City (4,400 people/km²), followed by Salatiga City (3,800 people/km²), and the lowest in Grobogan Regency (820 people/km²) (BPS, 2024). This diversity creates an asymmetrical regional structure between the developed city center and the relatively underdeveloped buffer areas.

Economically, the Kedungsepur region has shown positive growth over the past decade. The manufacturing, trade, and financial services sectors form the backbone of the region's economy, contributing over 60% to Gross Regional Domestic Product (GRDP). Semarang serves as a growth center (core city), while Kendal and Demak serve as industrial and logistics expansion areas. Grobogan and Semarang Regency continue to rely on agriculture and agro-industry as the basis of their local economies (Central Java Regional Development Planning Agency, 2023).

However, this dynamic has not been fully accompanied by improvements in socio-economic indicators across the board. Some regions, such as Demak and Grobogan, still record poverty rates above 10%, while open unemployment is relatively high in the industrial areas of Kendal and Semarang. This situation indicates structural inequality in the distribution of economic activity and job opportunities between regions (Hasibuan, Juanda, & Mulatsih, 2019). This inequality poses a major challenge to achieving inclusive and equitable regional development.

The designation of Kedungsepur as a National Strategic Area (KSN) is also in line with the policy direction of the 2020–2024 National Medium-Term Development Plan (RPJMN), which emphasizes the importance of strengthening connectivity between metropolitan areas and developing new growth centers in Central Java (Bappenas, 2020). In this context, Kedungsepur is expected to serve as an economic center of gravity that can strengthen the functional linkages between the Pantura region and the hinterland, while also becoming a driving force for regional growth based on industry, services, and innovation.

Poverty and Unemployment Trends in KSN Kedungsepur (2013–2023)

In general, the poverty rate in the Kedungsepur area shows a downward trend during the period 2013–2023. Based on data from the Central Statistics Agency (BPS) and the processed results of this study, the average percentage of the poor population decreased from 10.65% in 2013 to 8.20% in 2023. This decline is in line with the poverty trend in Central Java Province, which indicates a gradual and even increase in community welfare across regions.

Table 2 below shows the development of poverty and unemployment levels in each district/city member of Kedungsepur over the last decade.

Table 2. Development of Poverty and Unemployment Rates in KSN Kedungsepur, 2013–2023

Regency/ City	Poverty 2013 (%)	Poverty 2023 (%)	Δ (%)	TPT 2013 (%)	TPT 2023 (%)	Δ (%)	Information
Semarang City	5.25	4.23	-1.02	6.02	5.99	-0.03	Stable and low
Kendal Regency	13.17	9.39	-3.78	6.43	5.76	-0.67	Significant decline

Grobogan Regency	14.87	11.72	-3.15	6.10	4.01	-2.09	Sharp decline
Demak Regency	15.72	12.01	-3.71	7.08	5.38	-1.70	Still the highest
Semarang Regency	8.51	7.17	-1.34	3.90	4.05	+0.15	TPT increases
Salatiga City	6.40	4.66	-1.74	6.21	4.57	-1.64	Steady decline

Source: BPS, processed (2024)

Note: Δ indicates the change (delta) between 2013–2023.

The entire Kedungsepur region experienced a decline in poverty rates, but with significant variation between regions. Demak and Grobogan Regencies remain the areas with the highest poverty rates, while Semarang and Salatiga cities performed the best. This difference indicates that poverty reduction is spatial and influenced by regional economic structure and fiscal capacity.

Interestingly, Semarang Regency was the only region to experience an increase in the Open Unemployment Rate (TPT) from 3.9% to 4.05%, despite significant increases in the Regional Minimum Wage (UMR) and Regional Original Regional Revenue (PAD). This condition indicates that economic growth, reflected in the increase in regional income, has not been able to create new jobs proportionally. This phenomenon is consistent with the findings of Darma, Muslihatinningsih, and Adenan (2024), who stated that increased economic growth without expanding labor-intensive sectors can widen inequality and suppress local labor absorption.

Development of Human Development Index (HDI), Minimum Regional Income (UMR), and Locally Generated Revenue (2013–2023)

The development of human resource quality in the Kedungsepur region is reflected in the increase in the Human Development Index (HDI) across all regions from 2013 to 2023. On average, all districts/cities recorded an HDI increase of more than 5 points, indicating significant progress in education, health, and a decent standard of living.

In addition, the Regional Minimum Wage (UMR) and Regional Original Income (PAD) indicators also show a strong increasing trend, as presented in Table 3 below.

Table 3. Development of UMR and PAD at KSN Kedungsepur, 2013–2023

Regency/City	2013 Minimum Wage (Thousand Rupiah)	2023 Minimum Wage (Thousand Rupiah)	Δ (%)	2013 PAD (Million Rupiah)	2023 PAD (Million Rupiah)	Δ (%)	Information
Semarang City	1,209	3,060	+153	2,796,570	2,865,715	+2	Highest PAD
Kendal Regency	953	2,508	+163	1,456,424	2,475,093	+70	High growth
Grobogan Regency	842	2,029	+141	1,450,053	2,792,344	+92	Sharp increase
Demak Regency	995	2,680	+169	1,344,893	2,393,262	+77	Increasing consistently
Semarang Regency	1,051	2,480	+136	1,677,287	2,445,869	+45	Stable, but weak in labor absorption
Salatiga City	974	2,284	+134	599,853	918,416	+53	Moderate growth

Source: BPS and Bappeda, processed (2024).

Note: Δ indicates the percentage change from 2013–2023.

In general, the increase in the regional minimum wage (UMR) and local revenue (PAD) in Kedungsepur reflects positive economic development and increased regional fiscal capacity. However, the analysis shows that the increase in the UMR is not always accompanied by a decrease in unemployment. For example, Semarang Regency recorded a 136% increase in the UMR, but still experienced an increase in the open unemployment rate (TPT). This suggests that wage increases without a corresponding expansion of the productive sector can actually reduce new job opportunities, especially for low-educated workers. This finding aligns with Kumo (2012), who emphasized that the imbalance between wage growth and productivity is a major cause of labor absorption stagnation in developing countries.

Thus, the dynamics of the UMR, PAD, and IPM in Kedungsepur confirm that increasing regional economic capacity must be accompanied by human development policies and strengthening local economic structures so that the growth that occurs is more inclusive and sustainable.

Correlation between Regional Economic Indicators

Correlation analysis was conducted to understand the correlations between regional economic indicators in the Kedungsepur National Strategic Area (KSN). The descriptive analysis results indicate varying correlations between key economic variables, namely Regional Original Income (PAD), poverty rate, Open Unemployment Rate (TPT), Human Development Index (HDI), and Regional Minimum Wage (UMR). Correlations between variables were calculated using Pearson coefficients, as presented in Table 4.

Table 4. Pearson Correlation Matrix between Economic Indicators of the Kedungsepur National Sports Week Region (2013–2023)

Variables	PAD	Poverty	TPT	HDI	Minimum Wage
PAD	1,000	0.397	0.227	-0.324	0.319
Poverty	0.397	1,000	-0.174	-0.976	-0.403
TPT	0.227	-0.174	1,000	0.113	0.795
HDI	-0.324	-0.976	0.113	1,000	0.464
Minimum Wage	0.319	-0.403	0.795	0.464	1,000

Source: BPS Data Processing Results, 2024.

In general, correlations between regional economic indicators indicate a complex correlation. Regional Original Income (PAD) has a negative correlation with the Human Development Index (HDI) ($r = -0.324$) and a weak positive correlation with poverty ($r = 0.397$), indicating that increasing regional fiscal capacity has not fully translated into improved human quality or reduced poverty. This phenomenon is evident in Semarang City and Kendal Regency, where regional Original Income (PAD) growth is relatively high, but welfare distribution is not yet optimal. This is in line with Sjafrizal's (2014) findings that regional economic development often does not directly reduce poverty if it is not accompanied by effective redistribution policies.

Meanwhile, the correlation between the minimum wage (UMR) and the unemployment rate (TPT) shows a strong positive correlation ($r = 0.795$), indicating that minimum wage increases tend to be followed by increases in unemployment rates in several regions, particularly in Semarang Regency. This condition can be explained by the wage–employment trade-off mechanism, where wage increases without a corresponding increase in productivity lead to a decrease in labor absorption, particularly in the informal sector and small industries. This finding is consistent with a study by Darma, Muslihatinningsih, and Adenan (2024), which showed that increases in the minimum wage (UMR) that are not accompanied by increases in labor competitiveness can put pressure on the regional labor market.

Furthermore, the correlation between poverty and the HDI shows a very strong negative

value ($r = -0.976$), indicating that improving the quality of human resources has a direct impact on reducing poverty levels. This correlation is the most significant among all pairs of variables, strengthening the argument that investment in education, health, and public purchasing power are key determinants of regional welfare. These results confirm the findings of Hasibuan, Juanda, and Mulatsih (2019), which state that regional poverty is influenced not only by income and wages, but also by local economic structure, workforce quality, and the effectiveness of government policies.

The correlation between PAD and TPT ($r = 0.227$) and PAD and UMR ($r = 0.319$) shows a weak positive correlation, indicating that regions with greater fiscal capacity tend to have higher minimum wages and slightly higher unemployment rates. This can be interpreted as indicating that increasing PAD has not consistently driven new job creation. In the context of Kedungsepur, this occurs because PAD contributions are still largely dominated by the tertiary sector in urban areas, which has limited labor absorption capacity.

The correlation between TPT and HDI ($r = 0.113$) is very weak, indicating that improvements in human resources have not been fully accompanied by expanded employment opportunities. This phenomenon indicates a mismatch between workforce skills and market needs, as Kumo (2012) noted that the imbalance between economic growth and job creation is one of the main challenges in regional development in developing countries.

Table 5. Interpretation of Correlation between Economic Indicators in the Kedungsepur KSN Region

No	Variable Pairs	Correlation Value (r)	Direction & Strength of Correlations	Economic Interpretation
1	PAD ↔ Poverty	+0.397	Weak positive	Increases in local revenue (PAD) have not consistently reduced poverty, possibly because regional fiscal distribution is not yet equitable.
2	PAD ↔ TPT	+0.227	Very weak positive	Regional Original Income (PAD) growth has not been accompanied by increased employment; economic growth tends to be less inclusive.
3	PAD ↔ HDI	-0.324	Weak negative	Regional public spending has not been fully effective in improving human quality.
4	PAD ↔ UMR	+0.319	Weak positive	Regions with high PAD generally have higher UMR, reflecting better economic competitiveness.
5	Poverty ↔ TPT	-0.174	Very weak negative	The correlation is not significant; it indicates the presence of other structural factors that influence both.
6	Poverty ↔ HDI	-0.976	Very strong negative	The higher the HDI, the lower the poverty rate; human quality is the key to prosperity.
7	Poverty ↔ Minimum Wage	-0.403	Moderate negative	Increasing the minimum wage has the potential to reduce poverty by increasing purchasing power.
8	TPT ↔ HDI	+0.113	Very weak positive	The increase in the HDI has not significantly reduced unemployment; synchronization between education and the job market is needed.
9	TPT ↔ UMR	+0.795	Strong positive	The increase in the minimum wage was followed by an increase in unemployment; an indication of a wage-employment trade-off in the informal sector.
10	HDI ↔ Minimum Wage	+0.464	Moderate positive	Regions with a high HDI have a higher minimum wage, indicating a positive correlation between human resource quality and wage standards.

Source: BPS Data Processing Results, 2024.

Overall, the correlation results indicate that social variables such as the Human Development Index (HDI) have the most dominant influence on poverty levels in the Kedungsepur region, while economic variables such as Regional Original Income (PAD) and Minimum Regional Minimum Wage (UMR) have a weaker and inconsistent influence across

regions. This indicates that regional economic resilience depends not only on improvements in macroeconomic indicators but also on the effectiveness of human development policies and equal employment opportunities. These findings reinforce Foster's (2017) argument that regional economic resilience is shaped by the synergy between fiscal capacity, human capital, and adaptive local economic structures.

The results of this study are consistent with the findings of Bristow and Healy (2020) that regional economic resilience is highly dependent on the interaction between local economic structure and institutional capacity. In the case of Kedungsepur, regions with a strong industrial base, such as Kendal and Semarang City, demonstrated relatively greater resilience to economic fluctuations compared to agricultural regions like Grobogan and Demak. This aligns with the analysis of Martin and Sunley (2015), which emphasized the importance of economic diversification and adaptive capacity as key components of regional resilience.

Regional Economic Development Policy Analysis

Within the framework of national development, the Kedungsepur National Strategic Area (KSN) is directed to become a region with strong, integrated, and sustainable economic resilience. This policy direction aligns with the vision of the 2020–2024 National Medium-Term Development Plan (RPJMN), which positions Kedungsepur as a regional growth center in northern Central Java (Bappenas, 2020). However, the empirical analysis in the previous subchapter indicates that the effectiveness of regional economic development policies in Kedungsepur still faces a number of structural challenges.

First, inter-regional disparities in poverty, unemployment, and fiscal capacity (PAD) underscore the need for more decentralized and contextual development policies. Based on the correlation results (Table 4), the very strong and negative correlation between the HDI and poverty ($r = -0.976$) indicates that improving human development is a key determinant of poverty alleviation in Kedungsepur. Therefore, districts with high poverty rates such as Demak and Grobogan require policies to strengthen locally based sectors, such as modern agriculture, home industries, and MSMEs, oriented towards improving workforce skills and adding value to local products. This approach aligns with the findings of Hasibuan, Juanda, and Mulatsih (2019), who stated that improving human development and local productivity are key prerequisites for sustainable poverty reduction.

Second, there is an imbalance between economic growth and job creation. The analysis shows that increases in local revenue (PAD) and minimum regional income (UMR) are primarily concentrated in urban areas such as Semarang City and Kendal Regency, while their contribution to labor absorption remains limited. The positive correlation between the TPT and UMR ($r = 0.795$) indicates a wage–employment trade-off, whereby minimum wage increases that are not matched by increases in productivity lead to a decline in the business sector's ability to absorb new workers. This condition indicates a policy misalignment between wage policies and workforce development strategies (Darma, Muslihatinningsih, & Adenan, 2024).

Third, in the context of strengthening regional economic resilience, this study emphasizes the importance of implementing the Local Economic Development (LED) approach as a sustainable development strategy. The LED approach emphasizes empowering local actors, economic diversification, and synergy between development actors (Blakely & Leigh, 2013). LED implementation in Kedungsepur can be focused on the following three strategic directions:

1. Development of labor-intensive sectors based on small and medium industries (SMEs), especially in the Demak, Grobogan, and Kendal regions, to expand employment opportunities and strengthen local supply chains.
2. Economic integration between regions through the development of connectivity infrastructure, such as the Semarang–Demak logistics route and the accessibility of the Grobogan hinterland to industrial areas.

3. Optimizing the function of Semarang City as an inclusive growth pole, by ensuring stronger economic linkages with surrounding areas through integrated investment and development of industrial areas based on regional partnerships.

The local economic development (LED) approach is considered effective in strengthening regional economic resilience by involving local actors, expanding the economic base, and encouraging cross-sector collaboration (Pike, Dawley, & Tomaney, 2021; ADB, 2022). In the context of Kedungsepur, LED implementation can be directed at labor-intensive sectors, agro-industry, and the creative economy, which can increase labor productivity without relying on large capital investments. This aligns with the recommendations of Bappenas (2023), which emphasizes the need for integration between regional fiscal policies and employment strategies to reduce structural unemployment in national strategic areas.

Thus, the future direction of economic development policies in the Kedungsepur region needs to emphasize the principles of spatial equity, inclusive growth, and resilience building. A combination of increasing regional fiscal capacity, strengthening human resource quality, and cross-regional collaboration will be key to realizing resilient and equitable regional economic development.

Critical Discussion

The phenomenon of economic development in the Kedungsepur National Strategic Area (KSN) shows that economic growth does not automatically result in a reduction in poverty and unemployment. This condition illustrates the phenomenon of jobless growth, where increased economic output is not accompanied by adequate new job creation (Todaro & Smith, 2020). The correlation results in Table 4 reinforce this phenomenon, particularly through the positive correlation between the minimum wage (UMR) and the unemployment rate (TPT) ($r = 0.795$) and the weak correlation between local revenue (PAD) and unemployment rate ($r = 0.227$). In other words, increased regional fiscal capacity and wage increases have not been accompanied by increased labor absorption, particularly in the non-formal sector and among low-educated individuals.

In the context of Semarang Regency and Semarang City, significant increases in local revenue (PAD) and minimum wage (UMR) were not accompanied by a decrease in unemployment. This indicates the dominance of the service sector and capital-intensive industries, resulting in economic growth driven more by increased capital productivity than by expanding the workforce. This situation demonstrates a structural imbalance between the formal urban sector and the informal rural sector, which weakens the inclusiveness of regional growth. Rodríguez-Pose (2018) refers to this phenomenon as disconnected growth, where a region develops rapidly economically but is disconnected from local social needs and capacities.

Conceptually, these dynamics indicate that Kedungsepur faces a structural mismatch between job availability and workforce competency. Education and training systems in some areas are not fully responsive to industry needs, weakening the competitiveness of the local workforce. Pike, Rodríguez-Pose, and Tomaney (2017) emphasize that the effectiveness of regional development depends heavily on the local system's ability to adapt to global economic and technological changes, not solely on GRDP growth.

To address these challenges, Kedungsepur's development policy needs to be directed toward a balance between economic growth, spatial equity, and improving workforce quality. Improving human resource quality can be achieved through strengthening vocational education relevant to local industry needs, supporting labor-intensive investment and regionally-based technological innovation, and cross-regional collaboration in managing regional economic resources. This approach aligns with the resilience-oriented development paradigm, which not only pursues growth but also strengthens the region's adaptive capacity to global economic changes, social crises, and workforce disruption (Foster, 2017).

Thus, the transformation of development policy in Kedungsepur requires a shift from a sectoral growth orientation to resilient and inclusive regional economic development. This effort requires synergy between stakeholders—the government, the private sector, educational institutions, and local communities—to ensure that the resulting economic growth truly enhances community resilience and well-being in a sustainable manner.

CONCLUSION

Based on the research objectives which include (1) describing the dynamics of poverty and unemployment in the KSN Kedungsepur region during the 2013–2023 period, (2) analyzing the correlation between regional economic variables (PAD, IPM, and UMR) with poverty and unemployment levels, and (3) identifying the challenges and direction of regional economic development policies in strengthening the economic resilience of Kedungsepur, a number of main findings were obtained as follows.

1. The socio-economic dynamics of the Kedungsepur region show positive progress, marked by a decline in the poverty rate from an average of 10.65% in 2013 to 8.20% in 2023. This decline occurred across all districts/cities, although variations between regions remain high. Demak and Grobogan Regencies remain the areas with the highest poverty rates, while Semarang City has the best socio-economic performance with the lowest poverty and unemployment rates.
2. The Open Unemployment Rate (TPT) has generally declined from 6.01% to 4.93% over the past decade. However, Semarang Regency experienced an increase in the TPT from 3.9% to 4.05%, indicating that increases in regional income and minimum wages are not always accompanied by increased employment. This phenomenon reflects a condition of jobless growth, namely economic growth that has not been accompanied by significant new job creation.
3. Regional economic indicators such as the Human Development Index (HDI), Minimum Regional Income (UMR), and Regional Original Income (PAD) have seen significant increases throughout the Kedungsepur area. However, these improvements have not yet fully driven the structural transformation of the local economy. Economic activity remains concentrated in the urban formal sector and capital-intensive industries, while labor-intensive sectors and the community-based economy have remained relatively stagnant.
4. Correlation analysis between economic indicators shows a very strong negative correlation between the HDI and poverty levels ($r = -0.976$), confirming that improving the quality of human resources plays a crucial role in poverty alleviation. Conversely, the positive correlation between the minimum wage (UMR) and the unemployment rate (TPT) ($r = 0.795$) indicates that wage policies need to be balanced with increases in productivity and labor absorption to avoid labor market pressures.
5. The economic resilience of the Kedungsepur region depends on the equitable distribution of development benefits between the growth center (Semarang City) and the hinterland (Demak, Grobogan, Kendal, and Semarang Regency). The persistently high spatial inequality demands inclusive, decentralized, and locally potential-based development policies.

Thus, this study concludes that economic growth in Kedungsepur is not fully inclusive, as most economic growth is concentrated in specific regions and sectors. Therefore, future regional development strategies need to shift from a growth-oriented paradigm to a resilience-oriented development that emphasizes resilience and equity.

The Local Economic Development (LED) approach is recommended as the primary strategic framework, focusing on strengthening the capacity of local actors, developing labor-intensive sectors, and enhancing inter-regional connectivity. Academically, this research

enriches the study of the link between economic growth and regional resilience in national metropolitan areas. Practically, the results can inform the formulation of more inclusive, adaptive, and sustainable policies to strengthen Kedungsepur's economic competitiveness.

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