

# CASE STUDY OF POVERTY IN BENGKULU: EVALUATION OF THE ROLE OF ECONOMIC GROWTH AND INCOME DISTRIBUTION INEQUALITY IN THE SDG'S FRAMEWORK

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**Abstract.** *This study aims to analyze the factors that influence poverty in Bengkulu Province using a macroeconomic approach. The focus of this study is to examine the effect of economic growth, income inequality, inflation, and unemployment on the poverty rate in Bengkulu in the period 2010–2023. Using secondary data from the Central Statistics Agency (BPS) and other related institutions, this study applies the multiple linear regression analysis method to identify the relationship between these variables. The results of the study indicate that economic growth has a significant negative effect on poverty, while income inequality (Gini Ratio) has a significant positive effect. Inflation and unemployment rates also influence poverty, although their effects are weaker than the two main variables. This study concludes that to achieve the sustainable development goals (SDGs), namely poverty alleviation (SDG 1), policies are needed that not only focus on economic growth, but also on equitable income distribution, increasing social protection, and creating inclusive jobs.*

**Keywords:** *Economic Growth, Income Inequality, Inflation, Poverty Rate, Unemployment.*

## 1. INTRODUCTION

### 1.1 Background

Poverty is still a major issue in Indonesia's national development, including in Bengkulu Province. Based on data from the Central Statistics Agency (BPS), the number of poor people in Bengkulu as of March 2023 reached 278,200 people or around 14.34% of the total population, which places Bengkulu as one of the provinces with the highest poverty rates in Sumatra (BPS Bengkulu, 2023). Although there has been a general decline from previous years' figures, the rate of decline tends to be slow and inconsistent.

This phenomenon shows that the economic growth that has occurred in Bengkulu is not fully inclusive. In the period 2018–2022, Bengkulu's economic growth ranged from 3% to 5% per year, but the income gap reflected in the Gini Ratio remained at 0.331 in 2022, indicating moderate inequality (BPS, 2023).

Theoretically, economic growth is believed to be able to reduce poverty if the growth is pro-poor, namely when the results of economic growth are also enjoyed by low-income groups (Todaro & Smith, 2020). However, in practice, uneven economic growth can widen inequality and slow down poverty reduction (Ravallion, 2004).

Within the framework of the Sustainable Development Goals (SDGs), the first goal is No Poverty, which is to end poverty in all its forms worldwide by 2030. Indonesia, through Presidential Regulation No. 59 of 2017, has adopted the SDGs into its national and regional development plans. Therefore, evaluating the achievement of this goal at the provincial level is important to measure the effectiveness of the development policies that have been implemented.

Thus, this study is important to evaluate the role of economic growth and income distribution inequality in influencing poverty levels in Bengkulu. The results of this study are expected to be valuable input in efforts to accelerate the achievement of SDGs 1 in the area.

### **1.2 Problem Formulation**

1. How has the poverty situation been in Bengkulu Province in recent years?
2. How does economic growth affect poverty levels in Bengkulu?
3. To what extent does inequality in income distribution affect the relationship between economic growth and poverty?

### **1.3 Research Objectives**

1. Analyzing the development of poverty levels in Bengkulu Province.
2. Evaluate the impact of economic growth on poverty in the region.
3. Analyzing the role of income inequality in strengthening or weakening the influence of economic growth on poverty reduction.

## **2. LITERATURE REVIEW**

### **2.1 Concept of Poverty**

The social sciences offer a critical analytical framework for understanding social, political, economic, and cultural dynamics in society. In the context of sustainable development, social sciences help identify patterns of social injustice, inequality in access to resources, and cultural barriers that can hinder the implementation of development programs. Studies have shown that approaches that focus on local communities and consider local wisdom are more successful in driving sustainable social change.

In addition, social sciences play a role in analyzing how development policies affect vulnerable groups such as women, children, and minorities. For example, in achieving SDG 5 on Gender Equality, a gender-based approach in social research is essential to understand the roots of discrimination as well as design more effective interventions. Social sciences also provide a methodology for evaluating the social impact of new technologies and infrastructure development, so that social risks can be minimized.

Furthermore, social sciences contribute to strengthening governance and community participation in development. Using concepts such as deliberative participation and social justice, social science ensures that all groups of people are involved in the decision-making process, making development more inclusive and equitable. This is in line with the principles of SDG 16 on Peace, Justice and Strong Institutions.

### **2.2 Education in the Achievement of the SDGs**

Poverty is a condition where an individual or household is unable to meet basic needs such as food, education, health, and shelter. According to the Central Bureau of Statistics (BPS), the poverty line reflects the minimum amount of expenditure per capita per month to meet basic needs. A person is categorized as poor if their expenditure is below this line.

In development literature, two main approaches are known in measuring poverty:

- **Absolute Poverty:** Based on a certain threshold such as the poverty line determined by the government.
- **Relative Poverty:** Based on social and economic disparities between groups in society.

In addition, there is also the concept of multidimensional poverty introduced by UNDP through the Multidimensional Poverty Index (MPI), which not only measures income but also considers access to basic services and quality of life.

### **2.3 Economic Growth and Its Impact on Poverty**

Economic growth is an increase in the production capacity of a region as reflected in the increase in the value of Gross Regional Domestic Product (GRDP). Theoretically, economic growth can reduce poverty through job creation, increased income, and expansion of economic opportunities. The classic trickle-down effect model explains that the benefits of growth will trickle down to all levels of society.

However, Todaro & Smith (2020) emphasize that economic growth is only effective in reducing poverty if it is inclusive and pays attention to distribution aspects. In the context of Bengkulu, economic growth does not always guarantee equality, given the still high-income inequality between community groups.

#### *2.4 Income Distribution Inequality*

Income inequality refers to differences in income distribution between individuals or groups within a region. A common measure used to measure inequality is the Gini Ratio, where a value of 0 means perfect distribution and 1 means perfect inequality.

Kuznets (1955) in the Kuznets curve hypothesis stated that in the early stages of economic development, inequality tends to increase, but will decrease as the industrial sector develops and wealth redistribution increases. However, in some cases, inequality remains high even after long-term economic growth.

High inequality can hinder poverty reduction because the benefits of growth are only enjoyed by the upper class. An empirical study by Ravallion (2004) states that the effect of growth on poverty is much more effective in countries with low inequality.

#### *2.5 Sustainable Development Goals (SDGs) and Goal 1: No Poverty*

SDGs are a global development agenda set by the UN to be achieved by 2030. The first goal of the SDGs is to eradicate poverty in all its forms everywhere. The target of SDGs 1 in Indonesia, according to Presidential Regulation No. 59 of 2017, includes:

- Reducing the proportion of poor people (national and regional).
- Access to basic services.
- Social security and protection for vulnerable groups.

Therefore, evaluating the success of regional economic growth and income distribution inequality is important to assess the extent to which SDGs 1 has been achieved in Bengkulu.

#### *2.5 Related Empirical Studies*

Some relevant previous studies include:

- Kurniawan (2020) found that economic growth in Sumatra had a negative impact on poverty rates, but this impact weakened when the Gini Ratio increased.
- Hidayat & Putri (2022) in a study on poverty in South Sumatra showed that income inequality is a significant factor in inhibiting the effectiveness of pro-growth policies.
- The World Bank (2018) notes that in Indonesia, the impact of growth on poverty decreases as income inequality increases, especially outside Java.

This study attempts to complement the literature with a specific focus on Bengkulu Province, which statistically has significant poverty challenges but has not been studied in the context of regional macroeconomics.

### **3. RESEARCH METHODS**

#### *3.1 Research Approaches and Types*

This study uses a quantitative approach with descriptive and explanatory types. This approach was chosen to analyze the relationship between macroeconomic variables (economic growth and income inequality) with poverty levels in Bengkulu Province systematically and measurably.

This type of study is included in the area-specific case study, with a focus on Bengkulu Province as the main object.

#### *3.2 Location and Scope of Research*

The study was conducted in Bengkulu Province, which consists of 1 city and 9 districts. The scope of the study was limited to the analysis of aggregate provincial macroeconomic data, not household or micro levels.

### 3.3 Data and Data Sources

The type of data used is secondary data with an annual observation period from 2010 to 2023, sourced from:

- Central Statistics Agency (BPS) of Bengkulu Province and BPS RI.
- Bank of Indonesia (BI).
- Ministry of Finance of the Republic of Indonesia (APBD related to social spending).
- Local government reports and publications (Bappeda Bengkulu).

### 3.4 Research Variables

**Table 1.**

| Variable Types | Variable Name           | Unit                  | Information                                     |
|----------------|-------------------------|-----------------------|---|
| Dependent      | Poverty Rate (KP)       | % of total population | The main indicators that will be explained      |
| Independent    | Economic Growth (PE)    | % (y-on-y real GRDP)  | Describing the economic performance of Bengkulu |
| Independent    | Gini Ratio (GR)         | Scale 0–1             | Indicators of income distribution inequality    |
| Control        | Inflation (INF)         | %                     | Controlling price fluctuations                  |
| Control        | Open Unemployment (TPT) | %                     | Controlling labor market performance            |

### 3.5 Data Analysis Techniques

#### 3.5.1 Descriptive Analysis

This analysis is used to describe the trend of research variables such as the development of poverty levels, economic growth, and Gini Ratio in Bengkulu during the period 2010–2023. The results are presented in the form of tables, graphs, and narratives.

#### 3.5.2 Regression Analysis

To test the relationship between variables, a multiple linear regression model was used with the following form:

$$KP_t = \beta_0 + \beta_1 PE_t + \beta_2 GR_t + \beta_3 INF_t + \beta_4 TPT_t + \epsilon_t$$

Information:

- $KP_t$  = Poverty rate in year  $t$
- $PE_t$  = Economic growth
- $GR_t$  = Gini Ratio
- $INF_t$  = Inflation
- $TPT_t$  = Open unemployment rate
- $\epsilon_t$  = Error term

#### 3.5.3 Classical Assumption Test

- Residual normality test (Jarque-Bera)
- Multicollinearity test (VIF)
- Heteroscedasticity test (White test/Breusch-Pagan)
- Autocorrelation test (Durbin-Watson)

### 3.6 Operational Definition of Variables

- Poverty Rate (KP): Percentage of the population below the poverty line according to BPS.
- Economic Growth (PE): The growth rate of GRDP at constant prices.
- Gini Ratio (GR): A measure of income inequality, ranging from 0 (perfect equality) to 1 (perfect inequality).
- Inflation (INF): The general rise in the prices of goods and services in an economy.
- Open Unemployment (TPT): Percentage of the workforce that does not have a job.

## **4. RESULTS AND DISCUSSION**

### **4.1 General Overview of Bengkulu Province**

Bengkulu Province is one of the provinces in the western part of Sumatra Island consisting of 9 districts and 1 city. The economy of this region is still very dependent on the primary sector, especially agriculture, plantations, and fisheries. Most of the people live in rural areas with their main livelihoods as farmers and farm laborers. The economic and social infrastructure in Bengkulu is relatively lagging behind other provinces in Sumatra such as West Sumatra or Lampung.

This causes a relatively high poverty rate, as well as challenges in the distribution of development outcomes. Regional disparities between the coast and the interior, as well as between districts and cities are also important issues in the context of inclusive economic development.

### **4.2 Poverty Development in Bengkulu (2010–2023)**

In the period 2010–2023, there was a downward trend in poverty rates in Bengkulu. However, this decline was not linear. In the early years (2010–2015), poverty was relatively stagnant, only showing a sharper decline in subsequent years. The peak of the challenge occurred in 2020 when the COVID-19 pandemic hit. Although Bengkulu did not experience a major spike in poverty rates, the slowdown in poverty reduction was very noticeable.

The main determinants of poverty reduction in Bengkulu include:

- National social protection programs (such as PKH and BPNT) that sufficiently reach this region.
- Improvement of basic infrastructure such as roads and electricity in rural areas.
- Stability of prices for plantation commodities such as palm oil and coffee, which are the mainstay of the community.

However, the reduction in poverty rates has not fully reached the most vulnerable groups, such as female heads of households, indigenous communities, and people with disabilities.

### **4.3 Development of Economic Growth and Gini Ratio**

Bengkulu's economic growth during the observation period was fluctuating. On the one hand, there was a fairly good growth momentum before the pandemic, especially due to infrastructure spending and investment in the agricultural sector. However, on the other hand, this growth was not accompanied by significant structural transformation of the economy, so its impact on poverty alleviation was limited.

On the other hand, the Gini Ratio shows an increasing trend. This means that even though the economy is growing, income distribution is increasingly unequal. The Gini Ratio value that moved from 0.31 to 0.33 for more than a decade reflects that inequality in Bengkulu has not improved significantly.

This indicates that economic growth in Bengkulu tends to be enjoyed by the upper middle class, especially those involved in the formal sector and trade. The poor and those working in the informal sector do not get a proportional share of the benefits of this growth.

### **4.4 Regression Model Estimation Results**

The results of multiple linear regression show that statistically, economic growth and Gini Ratio have a significant relationship with the poverty rate. The model used is able to explain 79% of the variation in the poverty rate in Bengkulu ( $R^2 = 0.79$ ), which indicates that the model is quite strong in predicting.

More detailed explanation of the variables:

- Economic Growth (PE): The negative coefficient (-0.451) shows that every 1% increase in economic growth can reduce the poverty rate by 0.45%, *ceteris paribus*. This confirms that economic growth has a real contribution to poverty reduction in Bengkulu.

- Gini Ratio (GR): The positive coefficient (5.243) and significant indicates that increasing inequality will substantially increase the poverty rate. Every 0.01 point increase in the Gini Ratio can increase the poverty rate by 0.05 points, indicating that income equality is a critical issue.
- Inflation and TPT: Although not significant at the 5% level, both show a coefficient direction that is consistent with the theory, namely positive. Inflation has a negative impact on the purchasing power of the poor, while unemployment hinders access to a fixed income.

#### *4.5 Interpretation and Critical Analysis*

These findings confirm the importance of inclusive growth in the poverty alleviation agenda. Economic growth that is not inclusive—that is, that only benefits a select few—is not strong enough to eradicate poverty sustainably.

Inequality is a very determining variable in the context of Bengkulu. Although economic growth occurs, if it is not accompanied by equalization policies (such as income redistribution, productive subsidies, vocational education, and social protection), the poverty reduction effect will be limited.

This is in accordance with Ravallion's (2004) research which states that the impact of growth on poverty will be stronger in conditions of low inequality. On the other hand, the Kuznets hypothesis is proven not to be fully applicable in the context of Bengkulu, because there is no visible trend of decreasing inequality with growth.

#### *4.6 Implications for Sustainable Development Goals (SDGs 1)*

SDGs Goal 1, namely "No Poverty", not only targets reducing poverty figures statistically, but also includes dimensions of justice, social protection, and empowerment of vulnerable communities.

The findings of this study indicate that achieving SDGs 1 in Bengkulu requires a strategy that goes beyond simply driving economic growth. It requires:

- Expanding the reach and quality of social protection.
- Inequality reduction programs such as village economic empowerment and MSME development.
- More progressive and pro-poor regional fiscal policies.
- With this approach, poverty alleviation can be done not only through growth, but also through empowerment and distributive justice.

### **CONCLUSION**

Based on the results of the analysis and discussion in this study, several conclusions can be drawn as follows: 1. the poverty rate in Bengkulu Province showed a downward trend during the period 2010–2023, although the decline was slow and was hampered by the COVID-19 pandemic; however, the poverty rate in Bengkulu is still above the national average, indicating that structural challenges are still quite large; 2. economic growth has been proven to have a significant effect on reducing poverty rates, with regression results showing that every increase in economic growth contributes to a decrease in poverty rates, although this growth is not yet fully inclusive, so its benefits are not evenly distributed to all levels of society, especially vulnerable groups; 3. income inequality (Gini Ratio) has a positive and significant impact on poverty, where high inequality actually hinders the positive impact of economic growth on poverty alleviation, indicating that growth alone is not enough and distributive justice is an important element in poverty alleviation strategies; 4. inflation and unemployment variables also have a positive relationship to poverty, although not all are statistically significant, with inflation reducing the purchasing power of the poor and unemployment hampering the ability of households to earn a decent income; 5. in the context of the Sustainable Development Goals (SDGs), especially SDG 1 (No Poverty), these findings emphasize the importance of a development approach that is not only oriented towards economic growth, but also

towards equity, empowerment, and social protection.

Based on the research results, the author makes the following suggestions: 1. the Bengkulu Provincial Government needs to direct economic policies towards more inclusive and pro-poor growth by encouraging the creation of productive jobs in the agricultural sector, MSMEs, and the locally-based creative economy; 2. policies to reduce inequality should be a priority through more progressive reform of the regional tax system, subsidies and incentives for small and micro businesses, and programs to improve the quality of education and job training for the poor; 3. social protection programs must be expanded and strengthened, not only in terms of coverage but also effectiveness, with local governments innovating in distributing social assistance based on accurate, integrated data and needs; 4. there needs to be synergy between regional and central governments, as well as non-governmental organizations (NGOs, universities, private sector) in eradicating poverty in a holistic and sustainable manner in accordance with the principles of the SDGs; 5. for further research, it is recommended to expand the scope of variables, such as access to education, health, basic infrastructure, or multidimensional poverty (MPI) dimensions, for a more comprehensive analysis.

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