

Research Article

Variables Affecting Poverty Rate in East Java, Indonesia

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Abstract: This study analyzes the qualitative relationship between government fiscal expenditures and poverty reduction in East Java, Indonesia. Despite contributing significantly to national poverty reduction, East Java still has the largest number of poor residents among provinces in Java. The research focuses on four key variables: education expenditure, health expenditure, village funds (Dana Desa), and non-cash food assistance (BPNT). Using a qualitative descriptive approach, the study synthesizes secondary data from 2019 to 2024, including statistical reports from BPS and budget data from the Ministry of Finance, as well as previous empirical studies. Findings reveal that government health expenditure and village funds tend to have a stronger and more consistent impact on reducing poverty, particularly in rural areas. Education spending shows mixed results, often influenced by local capacity and governance. Meanwhile, BPNT contributes to short-term consumption but lacks sustainable poverty alleviation effects due to limited value and targeting issues. The results support the capability approach, highlighting the importance of access to basic services for long-term well-being, and reinforce the social democratic view that structural intervention is necessary to address inequality. This study concludes that poverty reduction efforts must go beyond funding amounts and focus on contextual relevance, implementation quality, and spatial equity. A place-based approach supported by strong local governance is essential for effective poverty alleviation in diverse regions like East Java.

Keywords: BPNT; Education Expenditure; Government Spending; Poverty; Village Funds.

1. Introduction

Poverty remains a persistent development challenge across many low- and middle-income countries, including Indonesia. As a multidimensional issue, poverty is not merely the result of low income, but is also influenced by structural inequalities, limited access to basic services, and poor policy implementation (Sen, 1999; Townsend, 1979). The focus of this study is East Java, a province that—while contributing the largest numeric reduction to national poverty—still records the highest number of poor people among provinces on the island of Java (BPS, 2024). With over 3.98 million people living below the poverty line, East Java represents a critical case for examining how public expenditure affects poverty dynamics at the sub-national level.

Several studies have investigated the role of government spending in poverty reduction, utilizing a variety of quantitative approaches such as Ordinary Least Squares (OLS), time-series, and panel data regression models (Cahyani & Sitorus, 2024; Wahyuni et al., 2021; Pratama & Utama, 2019). These methods are effective in establishing statistical relationships between variables, particularly identifying the magnitude and direction of influence. However, such methods often fail to capture local context, governance quality, and program implementation nuances that significantly affect outcomes. For instance, while some regressions find significant negative effects of education or health spending on poverty, others report inconsistent or even positive correlations due to design flaws, misallocations, or measurement limitations (Aghustin & Cahyono, 2020; Hadiyanto et al., 2022).

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Quantitative approaches also frequently treat regions as homogenous units, ignoring spatial disparities and social-political dynamics within decentralized governance systems like Indonesia's. These limitations necessitate complementary research using qualitative methods to deepen understanding of the mechanisms through which public policy interacts with poverty outcomes.

This study addresses these gaps by adopting a qualitative descriptive approach to analyze how four types of government spending—education, health, village funds (Dana Desa), and non-cash food assistance (BPNT)—influence poverty reduction in East Java. Instead of measuring statistical causality, this research aims to synthesize patterns, implementation challenges, and contextual determinants that explain variations in poverty outcomes despite similar fiscal inputs. The central research problem is: Why do similar types and levels of government expenditure produce different poverty outcomes across districts in East Java? This question leads to a deeper exploration of governance, spatial inequality, and institutional effectiveness. The study hypothesizes that effectiveness is not determined solely by the amount of spending but by how programs are implemented, targeted, and adapted to local contexts.

To answer this, the study proposes an integrative qualitative framework based on Public Expenditure Theory (Musgrave, 1959), Social Democratic Theory, and Amartya Sen's Capability Approach (Sen, 1999). These perspectives collectively emphasize the importance of state intervention in correcting market failures, ensuring access to basic capabilities, and addressing structural drivers of poverty.

2. Literature Review

2.1. Poverty

Poverty is a multidimensional phenomenon that encompasses not only the lack of income but also deprivation in health, education, and participation in society (Townsend, 1979; Sen, 1999). According to the Capability Approach by Amartya Sen (1999), poverty should be understood as a lack of basic capabilities, which limits individuals' ability to function and pursue well-being. These include the ability to be healthy, to be educated, and to participate meaningfully in community life.

The World Bank typically classifies poverty into absolute and relative terms. In Indonesia, poverty is measured based on a poverty line calculated using food and non-food expenditures, adjusted regionally by the Central Bureau of Statistics (BPS). Poverty in East Java is largely concentrated in rural areas, where infrastructure, services, and opportunities are unequally distributed (BPS, 2024).

Furthermore, scholars such as Myrdal and Nurkse describe poverty as part of a vicious circle, in which low income leads to poor health, limited education, low productivity, and in turn perpetuates poverty (Desmawan et al., 2021). Effective poverty reduction therefore requires a holistic, cross-sectoral policy approach involving both economic and social investments.

2.2 Government Spending on Education

Education is widely regarded as a long-term investment in human capital (Becker, 1975; Schultz, 1961). Government spending on education improves access to schools, quality of learning environments, and teacher capacity—all of which can expand an individual's earning potential and reduce intergenerational poverty.

In Indonesia, education funding primarily comes from Dana Alokasi Umum (DAU) and Dana Alokasi Khusus (DAK). According to the Human Capital Theory, investment in education leads to higher productivity and income, which subsequently lowers poverty (Lucas, 1988; Bado et al., 2017). Empirical findings support this: Aghustin and Cahyono (2020) found a strong negative correlation between education expenditure and poverty at the national level.

However, the effect is not universal. Taruno (2019) and Wahyuni et al. (2021) reported that education spending had no significant impact on poverty in urban districts, often due to inefficient allocation, lack of infrastructure, or disconnect between spending and local needs. In such contexts, education policy fails to translate into measurable welfare gains, highlighting the importance of program targeting and local adaptation.

2.3 Government Spending on Health

Health is a critical component of well-being and productivity. The Capability Approach views health as both a means to achieve other functionings and an end in itself. Government expenditure in health—particularly in primary care, maternal-child services, and sanitation—can substantially reduce vulnerability and improve living standards.

Research by Taruno (2019) and Zubir et al. (2023) confirms that increased health expenditure leads to a reduction in poverty, especially in rural areas with previously limited access to care. Health spending not only prevents income loss due to illness but also enhances school participation and labor market engagement.

Nonetheless, some studies (e.g., Wahyuni et al., 2021; Obele & Adebisi, 2022) show contradictory results, attributing the lack of impact to poor healthcare infrastructure, insufficient human resources, or delayed budget realization. These findings underline that the effectiveness of health expenditure depends on both quantity and quality of service provision.

2.4 Village Fund

Introduced under Law No. 6 of 2014, Dana Desa is a central government transfer aimed at empowering rural communities, enhancing infrastructure, and reducing rural poverty. Each village receives annual transfers based on formulas involving population, poverty, geographic difficulty, and performance.

Empirical evidence is mixed. Sigit and Kosasih (2020), Abdullah (2022), and Sunu & Utama (2019) found that Dana Desa significantly reduced poverty when funds were used productively (e.g., infrastructure, agriculture, and health initiatives). These findings support Public Expenditure Theory (Musgrave, 1959), which suggests that state-led resource allocation can correct market failures and improve equity.

However, misuse, corruption, or lack of local capacity can undermine its effectiveness. Studies by Arham & Hatu (2020) and Saragi et al. (2021) report cases where village funds were either unspent or diverted, resulting in no improvement—or even worsening—of poverty indicators. The key determinant is the quality of village governance and monitoring mechanisms.

2.5 Non Cash Food Assistance (BPNT)

BPNT (Bantuan Pangan Non Tunai) is a conditional cash transfer program designed to help poor households maintain food security. Beneficiaries receive monthly electronic transfers redeemable for staple foods. This policy falls under Indonesia's broader social safety net strategy.

According to Osabohien et al. (2020), social transfers like BPNT can improve short-term consumption and reduce food insecurity, especially during economic shocks. Azeem et al. (2019) emphasize their role in stabilizing household income and preventing deeper poverty.

Yet, criticisms remain regarding targeting accuracy, technological limitations (e-wallet failures), and low per-household value. Agustin & Sumarsono (2022) and Bakhshinyan et al. (2019) found that BPNT had minimal effect on long-term poverty reduction due to implementation inefficiencies. Thus, while BPNT contributes to welfare stabilization, its structural impact on poverty is limited without complementary economic empowerment programs.

3. Proposed Method

This study adopts a qualitative descriptive research design to explore how government fiscal expenditures affect poverty dynamics in East Java, Indonesia. The method is constructed to accommodate spatial variation, institutional behavior, and programmatic implementation factors that may not be fully captured through conventional quantitative models. This approach is particularly relevant given the administrative diversity across East Java's 29 regencies/cities and the decentralized nature of fiscal policy execution in Indonesia.

The focus of the study is on four primary government spending instruments: education expenditure, health expenditure, village funds (Dana Desa), and non-cash food assistance (BPNT), and how these relate to the poverty level (measured by total number of poor residents).

3.1 Data Collection

Data were collected entirely from secondary sources using documentary analysis techniques, with a focus on datasets and reports that are public, official, and consistently structured over time. The data were extracted from the following sources:

- a) Poverty statistics per district/city from Badan Pusat Statistik (BPS): including total poor population and poverty rates from 2019 to 2024.
- b) Fiscal allocation data (education, health, Dana Desa, BPNT) retrieved from the Sistem Informasi Keuangan Daerah (SIKD) published by the Ministry of Finance for the same time period.
- c) Implementation reports and policy evaluations from the Ministry of Villages (Kemendesa), Ministry of Social Affairs (Kemensos), and Bappeda Jawa Timur.
- d) Supporting academic literature and prior evaluation studies relevant to the selected variables.

The data collection process was carried out between January and April 2025, ensuring the most recent annual datasets (including 2024 final figures) were included in the analysis.

4. Results and Discussion

Based on a descriptive qualitative analysis of poverty and fiscal policy in East Java, two major government programs—Village Funds (Dana Desa) and Non-Cash Food Assistance (BPNT)—demonstrate a paradoxical relationship with poverty levels. Although these initiatives are designed to reduce poverty, evidence from various districts shows that their increasing budget allocations have not consistently translated into significant reductions in poverty. In some cases, they are even associated with stagnant or worsening poverty indicators. This outcome highlights a gap between program design and on-the-ground implementation.

Village Funds (Dana Desa), introduced as part of Indonesia's decentralization and rural empowerment strategy, aim to support infrastructure development, economic activities, and social services at the village level. In East Java, allocations for this program have steadily increased since 2015. However, districts with some of the largest village fund allocations—such as Sampang, Bangkalan, and Bondowoso—continue to report high poverty rates, especially in rural and remote areas. Several interrelated factors contribute to this pattern.

First, many villages in East Java lack technical planning capacity and administrative experience, which leads to suboptimal utilization of funds. The Musrenbangdes (village planning forum) is often symbolic, with limited participation from marginalized groups, especially women and the poor themselves. As a result, village funds are frequently used for physical infrastructure projects (roads, gates, village halls) that, while visible, do not directly address income generation, food security, or access to services. The absence of clear program outcome indicators, weak coordination with sectoral programs (health, education, economic empowerment), and limited monitoring by sub-district authorities contribute to a disconnect between spending and poverty alleviation.

Second, there is a persistent issue of governance quality. In some villages, reports have surfaced of delays, leakage, or politically motivated allocation, where village heads prioritize projects that benefit their supporters. While the Ministry of Villages has issued guidelines for productive use of funds (e.g., BUMDesa, stunting prevention, basic services), local compliance varies widely. This fragmentation reflects deeper institutional challenges in capacity building and regulatory enforcement at the village level in East Java.

The BPNT (Bantuan Pangan Non Tunai) program, meanwhile, plays a crucial role in ensuring household food security. It provides monthly assistance (usually Rp 200,000) via electronic cards that can be exchanged for rice, eggs, and other staples through designated agents (e-warong). However, field evidence indicates several issues that reduce its effectiveness in structurally reducing poverty. These include:

- a) Targeting inaccuracies: Many poor households are not included, while some better-off households receive assistance due to outdated or politicized beneficiary lists.
- b) Technical barriers: In rural or remote areas, the availability of functioning e-warong is limited, and the digital system occasionally experiences outages or delays.

- c) Low benefit value: While helpful for immediate needs, the assistance is not sufficient to change overall household vulnerability or support income-generating activities.

These operational problems mean that BPNT, while useful in stabilizing short-term consumption, does not significantly contribute to long-term poverty reduction, particularly in structurally poor districts where livelihoods remain insecure and access to services is limited.

In contrast, education and health spending—which are theoretically expected to have a strong negative relationship with poverty—do not show immediate, visible results in many East Java districts. Several factors explain this. First, education and health budgets are often allocated uniformly, without considering the varying levels of need between urban centers (e.g., Surabaya, Malang) and remote districts (e.g., Situbondo, Pacitan). Second, infrastructure does not guarantee access: schools and health centers may exist, but staffing shortages, low quality, and cultural or geographic barriers often prevent effective utilization, especially among poor and marginalized communities.

In health, for instance, stunting prevalence remains high in rural parts of East Java despite increased funding for maternal and child health. This suggests that spending must be complemented by behavioral change, outreach, and local engagement. Similarly, in education, increased teacher salaries or school renovations do not always translate into higher attendance or learning outcomes in poor communities, especially when children are needed for work or when transportation is a barrier. Moreover, inter-agency coordination at the local level remains weak, with overlapping programs and unclear accountability between provincial and regency governments. This institutional fragmentation dilutes the impact of well-intentioned spending and reduces program efficiency.

Overall, the descriptive findings emphasize that poverty in East Java is deeply embedded in structural and institutional issues. Fiscal transfers like Dana Desa and BPNT are necessary but insufficient when deployed without robust governance, accurate targeting, and alignment with local socio-economic realities. Addressing poverty in this context requires not only increasing budget allocations but also:

- a) Improving data systems to refine targeting and track outcomes,
- b) Building local government capacity, especially at village and sub-district levels,
- c) Ensuring participatory planning that reflects community priorities, and
- d) Integrating social programs with economic empowerment and service delivery.

In conclusion, East Java's experience illustrates the limits of top-down, uniform fiscal strategies in addressing diverse and localized manifestations of poverty. A place-based, multi-sectoral approach rooted in community empowerment, transparency, and institutional reform is needed to transform spending into meaningful reductions in poverty.

5. Conclusions

This study set out to explore the relationship between government spending and poverty levels in East Java, Indonesia, using a qualitative descriptive approach. The analysis focused on four fiscal policy instruments: Village Funds (Dana Desa), Non-Cash Food Assistance (BPNT), education expenditure, and health expenditure. Drawing on secondary data from 29 regencies over the 2019–2024 period, this research investigated not only the financial allocations but also how these programs were implemented and perceived at the local level. This suggests that spending must be complemented by behavioral change, outreach, and local engagement. Similarly, in education, increased teacher salaries or school renovations do not always translate into higher attendance or learning outcomes in poor communities, especially when children are needed for work or when transportation is a barrier. Moreover, inter-agency coordination at the local level remains weak, with overlapping programs and unclear accountability between provincial and regency governments. This institutional fragmentation dilutes the impact of well-intentioned spending and reduces program efficiency.

The main finding is that Village Funds and BPNT, despite their intended role in poverty reduction, tend to show a positive correlation with poverty levels in several regions. This counterintuitive outcome is attributed to challenges such as poor targeting, limited administrative capacity, weak local governance, and a disconnect between financial inputs and real economic or social outcomes. Meanwhile, education and health spending, though theoretically linked to long-term poverty reduction, do not display immediate impacts—likely due to structural barriers in access, service quality, and time-lag effects. In conclusion, East Java's experience illustrates the limits of top-down, uniform fiscal strategies in addressing diverse and localized manifestations of poverty. A place-based, multi-sectoral approach rooted in

community empowerment, transparency, and institutional reform is needed to transform spending into meaningful reductions in poverty.

The implications of this research are significant for both policy and academic discourse. For policymakers, the results suggest that fiscal decentralization and social assistance programs must be complemented by governance reforms, community engagement, and monitoring systems to ensure that expenditures translate into poverty reduction. For the academic community, the study provides qualitative evidence that challenges oversimplified quantitative assumptions and calls for deeper contextual analysis in poverty-related research.

However, the study has several limitations. It relies on secondary data and lacks primary fieldwork or interviews that could provide firsthand insights into program implementation and community experiences. In addition, the qualitative analysis, while rich in interpretation, does not offer statistical causality or generalizability beyond the East Java context.

Future research should consider mixed-method approaches, incorporating field surveys or participatory observations to validate and enrich the descriptive findings. Comparative studies across provinces or within sub-regional clusters (e.g., urban vs. rural districts) could also uncover deeper patterns in how fiscal policy interacts with local governance and socioeconomic structures. In conclusion, this research highlights that solving poverty requires more than funding. It demands intelligent, inclusive, and well-governed systems that are capable of transforming resources into real and lasting improvements in people's lives.

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