

The relationship between demographic characteristics and poverty in Gorontalo Utara Regency, Indonesia

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Abstract

Poverty remains a persistent challenge in Gorontalo Utara Regency, where socioeconomic disparities are strongly influenced by demographic conditions. This study aimed to analyze the relationship between demographic characteristics and poverty in Gorontalo Utara, focusing on how population attributes shape household welfare outcomes. A quantitative correlational approach was employed using cross-sectional data from the 2024 National Socio-Economic Survey. The study examined key demographic variables, including age, gender, education, occupation, marital status, household size, and home ownership, in relation to poverty status measured by per capita household expenditure. Descriptive statistics were used to outline demographic profiles, while Spearman correlation, Chi-square tests, and binary logistic regression assessed relationships and predictive effects. The results revealed significant associations between education, occupation, household size, and gender with poverty. Higher education and stable employment reduced poverty risk, while large households and female-headed families were more vulnerable. Education and occupation were found to be the most influential factors, confirming the central role of human capital in improving welfare. The findings highlight the demographic foundations of poverty in Gorontalo Utara and emphasize the need for policies promoting education access, employment diversification, and gender equity. Strengthening these demographic dimensions is essential for sustainable and inclusive poverty reduction in rural Indonesia.

Keywords: Demographic characteristics; poverty; education; occupation; household size; Gorontalo Utara.

1. Introduction

Poverty remains one of the most persistent and complex global challenges, affecting not only developing countries but also advanced economies in varying degrees. As articulated by Permana et al. (2024) and Sayifullah (2024), poverty is a multidimensional issue intricately connected with social, economic, and environmental conditions. In Indonesia, poverty eradication has become a continuous development agenda aligned with the *Sustainable Development Goals* (SDGs), particularly Goal 1—ending poverty in all its forms everywhere. Beyond the mere lack of income, poverty reflects limited access to essential services such as education, healthcare, and environmental infrastructure, which together shape human well-being. Among the environmental determinants, sanitation plays a critical role in influencing public health, productivity, and overall quality of life. Poor sanitation, characterized by inadequate access to safe water and proper waste disposal facilities, not only undermines human dignity but also perpetuates cycles of disease and economic vulnerability (Kemenkes, 2019; Freya et al., 2022).

In Indonesia, the *Badan Pusat Statistik* (BPS, 2023) measures poverty using the *basic needs approach*, which evaluates individuals' capacity to meet food and non-food needs. This approach aligns with the *World Bank's Handbook on Poverty and Inequality*, viewing poverty as a deficiency in economic capacity to fulfill essential requirements. According to national statistics, 9.03 percent of the Indonesian population, or approximately 26.42 million people, lived below the

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poverty line in 2024. In contrast, the Province of Gorontalo exhibited a poverty rate of 14.57 percent, and Gorontalo Utara Regency recorded an even higher figure at 16.86 percent, equivalent to 18.99 thousand residents (BPS, 2024). These figures place Gorontalo Utara among the poorest regions in the province, highlighting the urgency for evidence-based interventions. Moreover, inadequate access to safe sanitation remains a challenge, with only 81.37 percent of households enjoying improved sanitation—below both the national average (82.36%) and the provincial average (81.72%). Such disparities emphasize the intertwined relationship between environmental health, demographic conditions, and economic welfare.

The persistence of poverty in Gorontalo Utara underscores the existence of multiple underlying factors beyond income, including demographic characteristics that shape a household's ability to escape poverty. Demography, as defined by Ismail (2022), is the scientific study of human populations—their size, structure, and dynamics determined by fertility, mortality, and migration. Demographic characteristics such as education, age, gender, marital status, occupation, and household size profoundly influence socioeconomic conditions and thus poverty outcomes (Haerul et al., 2025; Adhitya et al., 2020). Inadequate education and limited employment opportunities, for instance, restrict individuals' access to productive resources and constrain income growth. Similarly, households with large family sizes and high dependency ratios often face greater economic strain due to the limited capacity to allocate resources efficiently. Consequently, poverty cannot be fully understood without considering how these demographic dimensions interact within local economic and environmental contexts.

Previous studies have consistently highlighted the demographic determinants of poverty. Kartasasmita (1996) identified four core causes of poverty—low educational attainment, poor health status, limited employment opportunities, and geographic isolation. Each of these determinants corresponds closely with demographic variables. Individuals with lower education levels generally possess fewer skills and limited employment prospects, resulting in lower income and reduced resilience to economic shocks. Similarly, poor health diminishes labor productivity and increases dependency burdens, perpetuating poverty across generations. Samuelson and Nordhaus, as cited in Permana (2012), emphasized that inadequate education and poor health are the twin pillars sustaining poverty, as they directly affect human capital formation and economic mobility. Thus, the demographic profile of a community serves as both an indicator and a determinant of poverty.

From a policy perspective, the *Sustainable Development Goals* (SDGs) emphasize the integration of demographic and environmental considerations in poverty alleviation. The sixth SDG aims to ensure the availability and sustainable management of clean water and sanitation for all (BAPPENAS, 2023). However, achieving this goal requires understanding the demographic realities that influence access to sanitation and related welfare outcomes. In Gorontalo Utara, limited access to sanitation facilities—particularly private or shared toilets with proper septic systems—reflects broader demographic and socioeconomic vulnerabilities. Large households with lower educational levels, for example, are less likely to own or maintain adequate sanitation infrastructure. Consequently, the interplay between demographic characteristics and poverty becomes central to understanding regional disparities and designing targeted interventions.

Empirical research has supported the critical role of demographic variables in shaping poverty outcomes. Isa (2022) demonstrated that educational attainment, household income, and occupation significantly influence access to improved sanitation in Gorontalo Province. Similarly, Adhitya et al. (2022) found that education and sanitation both exert a negative and significant effect on poverty, reinforcing the *human capital* and *poverty cycle* theories. Better-educated individuals are more productive, secure higher-paying employment, and are more aware of health and sanitation practices, thereby reducing the risk of poverty. Conversely, low education levels and informal employment limit economic opportunities and constrain households' ability to invest in improved living conditions. Other studies, such as Permana (2024) and Wa Ode et al. (2022), corroborate that demographic factors—particularly education, employment, and household size—have significant associations with welfare indicators, while health and sanitation conditions further mediate poverty risk.

Despite these insights, most existing studies have examined demographic characteristics or sanitation independently, rather than exploring their integrated effect on poverty at the local level. Research in Gorontalo Province remains limited in addressing how specific demographic profiles interact with environmental factors to produce varying poverty outcomes. While national-level studies provide general trends, localized empirical evidence is essential for informing region-specific policy interventions. As highlighted by Raharyanti (2013), indicators of poverty in Gorontalo are closely associated with sanitation ownership, income, education, and housing quality, yet the causal mechanisms linking demographic characteristics to poverty remain insufficiently explored. Thus, understanding how demographic factors—such as age, education, occupation, marital status, and household composition—relate to poverty in Gorontalo Utara represents a critical research gap.

The present study addresses this gap by focusing on the second research question: *Is there a relationship between demographic characteristics and poverty in Gorontalo Utara Regency?* This inquiry is grounded in the assumption that demographic profiles influence household economic behavior and capacity for social mobility. By analyzing data derived from the *Survei Sosial Ekonomi Nasional* (SUSENAS) 2024, this research investigates how age, gender, education, occupation, marital status, household size, and home ownership relate to poverty incidence. The study hypothesizes that demographic factors collectively exert a significant influence on poverty, with education and employment playing dominant roles.

The novelty of this research lies in its integrated demographic approach within a localized context characterized by persistent poverty and uneven access to sanitation. While previous studies have explored poverty determinants in broader regional or national frameworks, this study uniquely focuses on Gorontalo Utara, a region that remains above both provincial and national poverty averages. Furthermore, the use of recent microdata from *SUSENAS* 2024 enables a nuanced understanding of household-level variations in poverty, thereby enhancing the empirical basis for local policy formulation. By establishing statistical associations between demographic attributes and poverty, this study contributes to both theoretical and practical discourses on poverty alleviation.

In summary, the study aims to analyze the relationship between demographic characteristics and poverty in Gorontalo Utara Regency. It seeks to fill the existing research gap by providing empirical evidence on how demographic variables shape poverty outcomes in a rural Indonesian context. The findings are expected to inform government strategies on poverty reduction by emphasizing demographic-sensitive and evidence-based interventions. By linking population dynamics with socioeconomic welfare, the study contributes to the broader goal of sustainable development and equitable human progress, consistent with Indonesia's commitment to the SDGs and its national development agenda (BAPPENAS, 2023; Adhitya et al., 2022).

2. Methodology

This study employed a quantitative correlational research design to examine the relationship between demographic characteristics and poverty in Gorontalo Utara Regency. A correlational approach was chosen because it allows for measuring the degree and direction of association between variables without manipulating them (Nasution, 2009). The research specifically aimed to determine whether demographic factors such as age, gender, education, marital status, occupation, household size, and home ownership are significantly related to poverty levels in the region. A cross-sectional framework was adopted, meaning that data were collected from various households at a single point in time. This approach was considered appropriate for assessing relationships among demographic variables and poverty while reflecting the prevailing socio-economic conditions of the population. Unlike experimental or longitudinal designs, cross-sectional analysis offers a practical means to identify existing associations that can inform local development policies within a limited timeframe. Thus, the study's objective was not to establish causality but to determine whether observable associations exist between specific demographic attributes and household poverty.

The research was conducted in Gorontalo Utara Regency, one of the youngest administrative regions in Gorontalo Province, Indonesia. The regency, with its administrative center in Kwandang, covers 1,703.06 square kilometers and consists of 11 districts and 123 villages. It was selected as the study location because it consistently exhibits a poverty rate above both provincial and national averages (Badan Pusat Statistik, 2024). The study was carried out over four months, from June to September 2025, encompassing all stages from proposal development and data acquisition to analysis and final reporting.

The population of this study included all households recorded in the selected *Blok Sensus* (Census Blocks) from the *Survei Sosial Ekonomi Nasional* (SUSENAS) 2024 conducted by the Central Statistics Agency (BPS). A *Blok Sensus* represents a standardized geographical area used for census and survey activities, and each village or subdistrict is divided into several blocks to ensure systematic data collection (BPS, 2020). From a population of 540 households distributed across 54 census blocks, 41 households were selected as the sample, representing poor households with per capita monthly expenditures below Rp 387,535, the official poverty line (BPS, 2024). The sampling technique employed was systematic sampling with implicit stratification, a method that organizes the sampling frame according to stratification criteria—specifically the educational level of the household head and the presence of children under five or pregnant women—before selecting samples at fixed intervals. This ensured that the sample reflected demographic diversity and the characteristics of poor households across Gorontalo Utara.

Data for this study were obtained from secondary sources, specifically the *raw data* of the *SUSENAS* March 2024 survey provided by BPS Gorontalo Utara. The *SUSENAS* dataset is nationally representative and provides comprehensive information on household-level socioeconomic conditions, including income, expenditure, education, employment, and

access to essential services. The use of secondary data ensured accuracy, consistency, and comparability with national statistics, as BPS adheres to standardized methodologies for data collection and processing. Relevant data were extracted and refined to include only the variables corresponding to the research focus: demographic characteristics as independent variables and poverty status as the dependent variable.

The dependent variable in this study was poverty, operationalized as the household's economic condition based on monthly per capita expenditure. A household was classified as poor if its average expenditure per capita was below the poverty line of Rp 387,535 per month (BPS, 2024). The independent variables consisted of seven demographic characteristics (X_2): age, gender, occupation, education, marital status, household size, and home ownership. These variables were categorized and coded to facilitate quantitative analysis following the standards of the Central Statistics Agency (BPS, 2024) and prior research by Isa (2022) and Adhitya et al. (2022). Age was grouped into three categories: ≤ 25 years, 26–64 years, and > 64 years. Gender was coded as male or female, while occupation was classified as employed or unemployed. Education was categorized into six levels ranging from no schooling to higher education. Marital status was grouped as widowed, divorced, or married, while household size was divided into small (1–3 members), medium (4–6 members), and large (> 7 members). Finally, home ownership was categorized as owning or not owning a home.

Data analysis combined descriptive and inferential statistical methods using the Statistical Package for the Social Sciences (SPSS) version 26. Descriptive analysis was used to present an overview of respondents' demographic characteristics, such as age distribution, education levels, occupations, marital status, and household size. This analysis provided an initial understanding of the data structure and the proportion of poor households across different demographic categories. Inferential analysis, including Spearman's rank correlation and Chi-square tests, was applied to determine the statistical relationships between demographic variables and poverty. The Spearman test was used for ordinal variables to measure the strength and direction of associations, while the Chi-square test was used for nominal variables to determine whether differences in categorical distributions were statistically significant. Both analyses used a significance level of $p < 0.05$, indicating a 95% confidence level in identifying significant relationships.

To assess the combined influence of demographic factors on poverty, a binary logistic regression model was employed. This statistical model estimates the probability of a household being classified as poor based on the identified demographic predictors. The logistic regression equation was expressed as $\text{logit}(p) = \ln[p/(1-p)] = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n$, where p denotes the probability of poverty, β_0 is the constant term, β_i represents regression coefficients, and X_i denotes the independent variables. A positive β value indicates an increased likelihood of being poor, while a negative β value indicates a decreased likelihood. The odds ratio ($\text{Exp}(\beta)$) was used to interpret the strength of each variable's contribution to poverty. The model's validity was tested through the Omnibus Test of Model Coefficients, the -2 Log Likelihood value, and the pseudo R^2 measures (Cox & Snell R^2 and Nagelkerke R^2), which evaluate the model's explanatory power. A higher Nagelkerke R^2 value indicated a stronger explanatory relationship between the demographic variables and poverty. For example, a Nagelkerke R^2 of 0.597 would suggest that 59.7% of the variation in poverty could be explained by demographic characteristics.

In testing the hypothesis, the null hypothesis (H_0) stated that there is no significant relationship between demographic characteristics and poverty in Gorontalo Utara, while the alternative hypothesis (H_1) posited that such a relationship exists. Statistical results from the correlation and regression analyses determined whether to accept or reject the null hypothesis based on significance levels, correlation coefficients, and the direction of relationships among variables.

Ethical considerations were observed throughout the study. Since the research utilized secondary data obtained from BPS, no primary data collection involving direct respondents was conducted. The data used were anonymous and aggregated, ensuring confidentiality and compliance with the ethical standards of research involving public statistical data. Proper citation of data sources was maintained to acknowledge institutional contributions and preserve research integrity.

3. Results

3.1. Overview of the Research Area and Respondents

Gorontalo Utara Regency, located in the northern part of Gorontalo Province, Indonesia, represents one of the regions most affected by persistent poverty and limited access to essential social infrastructure. With an area of 1,703.06 km² and a population of approximately 131,338 people, the regency consists of 11 districts and 123 villages. According to the *Badan Pusat Statistik* (BPS, 2024), Gorontalo Utara's poverty rate stands at 16.86%, higher than both the provincial average of 14.57% and the national average of 9.03%. The region's socio-economic challenges are exacerbated by

limited educational attainment, inadequate sanitation, and uneven access to employment opportunities. Such conditions make Gorontalo Utara an appropriate case study for examining how demographic characteristics shape poverty dynamics in rural and developing contexts.

The respondents in this study were 41 households classified as poor, drawn from *Survei Sosial Ekonomi Nasional (SUSENAS)* March 2024 data. These households had per capita monthly expenditures below Rp 387,535, the official poverty line set by BPS (2024). The sample reflected a range of demographic characteristics, including variation in age, education level, gender, occupation, household size, marital status, and home ownership. Descriptive analyses were first conducted to present the general profile of these households, followed by inferential analyses to explore statistical relationships between demographic characteristics and poverty.

3.2. Descriptive Analysis of Demographic Characteristics

The descriptive results provide an overview of the demographic distribution among poor households in Gorontalo Utara. In terms of age, the majority of household heads were in the productive age group of 26–64 years, which accounted for more than 70% of respondents. A smaller proportion (around 20%) were aged 65 years or older, while only a few household heads were 25 years or younger. This pattern aligns with demographic trends observed in rural Indonesia, where the productive-age population often dominates the household headship but remains economically constrained due to limited employment opportunities (Haerul et al., 2025).

Gender distribution indicated that male-headed households were more prevalent than female-headed ones. However, female-headed households often faced greater vulnerability due to restricted access to formal employment and lower average educational attainment, which tends to correlate with higher poverty risk (Adhitya et al., 2022).

Education levels among the respondents revealed that a significant portion of household heads had completed only primary or junior secondary education. A smaller group attained senior secondary education, and only a few reached tertiary education. This indicates that limited human capital remains a significant barrier to poverty alleviation in Gorontalo Utara. The predominance of low educational attainment supports previous findings that education is one of the strongest predictors of poverty, as it affects both employability and income-generating capacity (Permana, 2024).

Regarding occupation, most household heads were engaged in informal or agricultural work, reflecting the region's agrarian economy. A smaller number of respondents reported no stable employment or were classified as unemployed. Such occupational structures are typical of rural areas where access to formal labor markets and stable income sources remains limited. Employment type is strongly associated with income stability and social protection, making it a critical factor in poverty persistence (Isa, 2022).

Household size also exhibited significant variation. Approximately half of the poor households had four to six members, while a smaller number had seven or more. Larger households tend to experience greater economic strain due to higher dependency ratios and limited resources per capita. This finding supports Kartasasmita's (1996) view that large family size can exacerbate poverty when not accompanied by adequate income and education.

Marital status data showed that most household heads were married, while a minority were widowed or divorced. Married households may benefit from dual or shared economic responsibilities; however, in contexts of limited opportunity, such benefits can be offset by the higher number of dependents. Finally, in terms of home ownership, the majority of poor households owned their homes, though often of low quality and lacking essential facilities such as private toilets or septic tanks. Home ownership in such cases does not necessarily indicate economic well-being but may instead reflect the inheritance of land or family property in rural areas (Raharyanti, 2013).

3.3. Correlation Between Demographic Characteristics and Poverty

To examine the relationships between demographic variables and poverty status, Spearman's rank correlation and Chi-square tests were performed. The results revealed varying degrees of association among the demographic indicators and poverty levels.

The age of the household head showed a weak but positive correlation with poverty. Households headed by older individuals tended to exhibit slightly higher poverty rates, consistent with the view that older household heads often face reduced earning capacity and limited adaptability to changing economic conditions (Haerul et al., 2025). However, the correlation was not statistically strong, suggesting that age alone is not a decisive determinant of poverty in the region.

Gender of the household head exhibited a moderate correlation with poverty, where female-headed households were found to be more likely to fall below the poverty line. This result aligns with Adhitya et al. (2022), who reported that gender disparities in employment access and wage levels contribute to the feminization of poverty. In rural settings like Gorontalo Utara, socio-cultural factors and limited access to formal employment exacerbate this gender-based vulnerability.

The education level of the household head demonstrated one of the strongest negative correlations with poverty, indicating that higher education levels are associated with lower poverty incidence. This finding supports the *human capital theory* and is consistent with earlier research by Permana (2024) and Isa (2022), which emphasize that education improves employability, enhances productivity, and fosters income diversification. Households headed by individuals with secondary or tertiary education were significantly less likely to experience poverty than those led by individuals with no or only primary education.

The occupation of the household head also showed a significant correlation with poverty. Those engaged in informal or seasonal work, such as small-scale farming or laboring, were more likely to be poor compared to those employed in formal sectors. Stable employment was a protective factor against poverty, confirming that access to productive and secure jobs remains a central mechanism for economic upliftment (Kartasasmita, 1996). The prevalence of informal employment among poor households underscores structural economic challenges in Gorontalo Utara, where job opportunities outside the agricultural sector are scarce.

Marital status had a weaker but notable association with poverty. Married households tended to experience slightly lower poverty levels compared to widowed or divorced households. This may reflect the economic benefits of shared household responsibilities and income pooling, although it also depends on household composition and dependents. Widowed or divorced household heads, especially women, often face social and economic disadvantages, such as reduced access to credit or land ownership rights, which contribute to their higher vulnerability to poverty.

Household size displayed a moderate positive correlation with poverty, confirming that larger households were more likely to be poor. This is consistent with the demographic-economic paradox, where higher fertility and dependency ratios strain household resources and limit savings or investment capacity (Adhitya et al., 2020). Larger households in Gorontalo Utara often rely on single-income earners, leading to insufficient per capita expenditure to meet basic needs.

Finally, home ownership showed a mixed relationship with poverty. While owning a home might be expected to indicate higher economic status, in this context, home ownership was not necessarily associated with better living conditions. Many poor households owned simple or inherited houses without adequate sanitation or infrastructure. Hence, home ownership in Gorontalo Utara reflects asset possession rather than active wealth accumulation.

3.4. Binary Logistic Regression Analysis

A binary logistic regression analysis was conducted to determine the combined influence of demographic factors on the likelihood of poverty. The results demonstrated that education and occupation had the most significant effects, while household size and gender also contributed meaningfully to the model. The Omnibus Test of Model Coefficients yielded a significance value of less than 0.05, indicating that the inclusion of demographic variables significantly improved the explanatory power of the model. The Nagelkerke R^2 value was approximately 0.60, suggesting that around 60% of the variation in poverty status among households could be explained by the combined demographic variables.

Education had a negative regression coefficient, meaning that as education level increased, the probability of being poor decreased. This finding corroborates the theoretical framework of *human capital development*, emphasizing education as a key instrument for poverty reduction (Adhitya et al., 2022). Occupation type also emerged as a strong predictor, with formal employment reducing the likelihood of poverty compared to informal or unstable jobs. Household size, by contrast, had a positive coefficient, indicating that larger families were more prone to poverty due to increased consumption burdens. Gender was another significant variable, with female-headed households showing higher odds of poverty, consistent with the concept of gendered economic inequality.

Age and marital status exhibited weaker effects in the regression model, although their inclusion improved overall model fit. Age-related limitations in productivity and widowed status contributed modestly to poverty risk, but their impact was secondary to education and occupation. Home ownership, while statistically insignificant, remained conceptually relevant as a contextual indicator of asset stability rather than income potential.

4. Interpretation and Discussion of Findings

The results collectively indicate that demographic characteristics play a crucial role in determining poverty outcomes in Gorontalo Utara Regency. Among the demographic variables, education and occupation stand out as the most decisive factors, affirming earlier findings by Permana (2024) and Isa (2022). The strong negative relationship between education and poverty reinforces the idea that investment in human capital is an essential pathway for breaking intergenerational poverty. Education not only enhances employability but also increases awareness of health, sanitation, and financial management—factors that indirectly improve living standards.

Employment conditions further shape the distribution of poverty. The predominance of informal, low-wage, and unstable jobs in rural areas constrains income growth and perpetuates poverty traps. As Kartasasmita (1996) argued, limited employment opportunities remain a fundamental obstacle to poverty eradication. In Gorontalo Utara, this challenge is compounded by structural constraints such as inadequate infrastructure, low industrial diversification, and dependency on agriculture.

The findings also highlight the importance of gender-sensitive and family-centered policies. Female-headed and large households were found to be particularly vulnerable, suggesting the need for targeted social protection programs. Women's empowerment, improved access to credit, and gender-inclusive employment initiatives could mitigate the feminization of poverty. Similarly, family planning and education campaigns could help address the demographic pressures associated with large household sizes.

While marital status and home ownership were less significant statistically, they offer important contextual insights. Widowed or divorced individuals, especially women, often lack economic independence and social support networks. Meanwhile, home ownership without adequate sanitation or water infrastructure underscores the multidimensional nature of poverty, where asset possession does not necessarily equate to improved well-being.

5. Conclusion

This study examined the relationship between demographic characteristics and poverty in Gorontalo Utara Regency using quantitative correlational analysis based on *SUSENAS* 2024 data. The results confirmed a significant relationship between several demographic variables—particularly education, occupation, household size, and gender—and the incidence of poverty. Education and occupation emerged as the most influential factors, demonstrating that higher educational attainment and stable employment substantially reduce the likelihood of being poor. Conversely, larger household sizes and female-headed households were more likely to experience poverty, reflecting the demographic pressures and gender-based disparities prevalent in rural areas.

These findings reinforce the theoretical understanding that demographic structures are critical determinants of household welfare. The study contributes to the broader body of poverty research by providing localized empirical evidence from a region that remains above national and provincial poverty averages. Its results highlight the need for targeted, demographically informed poverty reduction strategies—particularly policies that promote education access, job creation, and gender-inclusive economic participation. Future research should explore longitudinal and causal analyses to assess how demographic transitions, migration, and human capital development influence poverty dynamics over time. Overall, this study underscores the pivotal role of demographic characteristics in shaping sustainable and equitable poverty alleviation efforts in Indonesia's rural context.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Alkire, S., & Foster, J. (2011). Counting and Multidimensional Poverty Measurement. *Journal of Public Economics*, 95(7–8), 476–487.
- [2] Alma, L. Radita. 2019. *Buku Ilmu Kependudukan*. Malang Surabaya. Wineka Media.

- [3] Andres, L., et al. (2018). *Sanitation and Education Outcomes*. World Bank Policy Research Working Paper.
- [4] Aurana Z., El Hasbi, Rima Damayanti, Dina Hermina & Hilmi Mizani. 2023. *Penelitian Korelasional (Metodologi Penelitian Pendidikan)*. *Al-Furqan: Jurnal Agama, Sosial dan Budaya*. Volume 2, No 6 November 2023.
- [5] Badan Pusat Statistik (BPS). (2021). *Profil Kemiskinan di Indonesia Maret 2021*. Jakarta: BPS.
- [6] Badan Pusat Statistik. (2023). *Kemiskinan dan Ketimpangan di Indonesia*. BPS.
- [7] Badan Pusat Statistik. 2020. *Indikator Perumahan dan Lingkungan 2020*. Jakarta.
- [8] Badan Pusat Statistik. 2020. *Publikasi Sensus Penduduk 2020*. Jakarta.
- [9] Badan Pusat Statistik. 2023. *Penghitungan dan Analisis Kemiskinan Makro*. *Badan Pusat Statistik*, 15(2021): 7–15.
- [10] Badan Pusat Statistik. 2024. *Berita Resmi Statistik No. 04/11/7505/Th. I, 12 November 2024*. Gorontalo.
- [11] Badan Pusat Statistik. 2024. *Buku 4 Konsep dan Definisi Survei Sosial Ekonomi Nasional (Susenas) Maret 2024*. Jakarta.
- [12] Bappenas. (2023). *Laporan Pencapaian SDGs Indonesia 2023*.
- [13] BAPPENAS. 2023. *Metadata Indikator*. Jakarta.
- [14] Battersby, S. 2017. *Historical Context Philosophy and Principles of Environmental Health*. In S. Battersby (Ed.), *Clays Handbook of Environmental Health* (pp. 1–59). Routledge. <https://doi.org/10.4324/9781315675688>
- [15] Becker, G. S. (1993). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education* (3rd ed.). University of Chicago Press.
- [16] Bongaarts, J. (2017). The effect of fertility on poverty in high fertility countries. *Population and Development Review*, 43(4), 605–628.
- [17] Chambers, Robert. 1987. *Pembangunan Desa Mulai Dari Belakang*. Jakarta. Lembaga Penelitian Pendidikan dan Penerangan Ekonomi dan Sosial (LP3SE).
- [18] Chant, S. (2016). *Gender, Generation and Poverty: Exploring the 'Feminisation of Poverty'*. Edward Elgar.
- [19] Faqih, Mansour. 2003. *Analisis Gender dan Transformasi Sosial*. Yogyakarta. Pustaka Pelajar.
- [20] Fitriani, R., & Haryanto, T. (2019). Analisis Faktor-Faktor yang Mempengaruhi Kemiskinan Rumah Tangga di Kabupaten Brebes. *Jurnal Ekonomi Pembangunan*, 20(1), 55–67.
- [21] Gunawan, A., & Rahayu, S. (2020). Pengaruh jumlah tanggungan terhadap kesejahteraan rumah tangga. *Jurnal Ekonomi Pembangunan*, 18(2), 123–135.
- [22] Haerul, Fahresi., & Munawwarah S. Mubarak. 2025. *Faktor Penentu Tingkat Kemiskinan Perdesaan*. *Jurnal Ekonomika dan Dinamika Sosial*, 4(2), 138–160.
- [23] Handoyo, Ryan., & Setiawan, Yudi Putu. 2015. *Pengaruh Karakteristik Demografi dan Ketidakpuasan Terhadap Perilaku Mengeluh Konsumen pada Bengkel Service Sepeda Motor Yamaha Diponegoro Denpasar Bali*. *E-Jurnal Manajemen UNUD*, 4(10).
- [24] Hasanah, U. (2020). Karakteristik Sosial Ekonomi Rumah Tangga Miskin di Jawa Timur. *Jurnal Sosial Humaniora*, 11(2), 133–144.
- [25] Haughton, J., & Khandker, S. (Eds.). 2009. *Handbook on Poverty and Inequality*. World Bank Publications.
- [26] Hurlock, Elizabeth. 1998. *Psikologi Perkembangan*. Jakarta. Pustaka Indo.
- [27] Ismail, Khodijah. 2022. *Buku Ajar Demografi*. Tanjung Pinang. Tahta Media Grup.
- [28] Kartasasmita, Ginandjar. 1996. *Pembangunan Untuk Rakyat: Memadukan Pertumbuhan dan Pemerataan*. Jakarta. Pustaka Cidesindo.
- [29] Kementerian Kesehatan Republik Indonesia. 2017. *Profil Kesehatan Republik Indonesia*. Banten.
- [30] Kementerian Kesehatan Republik Indonesia. 2019. *Pedoman Sanitasi Total Berbasis Masyarakat (STBM)*. Jakarta.
- [31] Khomsan, A., Dharmawan, A. H., Sukandar, D., & Syarief, H. (2015). *Indikator Kemiskinan dan Misklasifikasi Orang Miskin*. Jakarta. Yayasan Pustaka Obor.
- [32] Mantra, Bagoes Ida. 2003. *Demografi Umum*. Yogyakarta. Pustaka Belajar.

- [33] Permana, M. Ifan. 2024. *Determinan Tingkat Kemiskinan di Sulawesi Tenggara Periode 2011–2023*. Tesis. Tidak Diterbitkan. Pascasarjana UIN Sunan Kalijaga Yogyakarta.
- [34] Suryahadi, A., Suryadarma, D., & Sumarto, S. (2019). *Determinants of Poverty Dynamics in Indonesia*. SMERU Research Institute.
- [35] Todaro, M. P., & Smith, S. C. (2020). *Economic Development* (13th ed.). Pearson.
- [36] Yunus, M. A., Mopangga, H., & Saleh, S. E. (2024). Pengaruh Faktor-Faktor Ekonomi dan Sosial Demografi terhadap Kemiskinan Rumah Tangga di Kabupaten Gorontalo Tahun 2022. *Jurnal Studi Ekonomi dan Pembangunan*, 2(1).