# The Effect of Education, Income on Economic Growth of Sukabumi Regency

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#### ABSTRACT

This study explores the relationship between education, income, and economic growth in Sukabumi Regency, a district in Indonesia. A mixed method approach was used, including a survey of 300 respondents and interviews with interviewees. The survey results show that higher levels of education and income are associated with greater involvement in economic activity and perceptions of economic growth. Interviews revealed several factors influencing this relationship, including government policies, the business environment, and social and cultural attitudes toward education and employment. This study shows that there is a need for targeted and effective policies to encourage education and income growth, as well as broader social and cultural changes to support economic growth in Sukabumi District.

Keywords: Education, Income, Economic Growth

## 1. INTRODUCTION

Education and income are two factors that can affect economic growth and poverty alleviation. This situation is a problem in many countries as a study conducted in Pakistan [1] found that education is essential for economic development and poverty alleviation. Education can increase productivity, technological capabilities, and technical changes in a country's industry [2]. Education can also enable greater income equality, and low-income communities will be better able to seek economic opportunities as education becomes more widespread [3]–[5]. Parental education can also make families make informed decisions, and parents with higher levels of education are less likely to let their children quit school. Study [1], it recommends that the government manage the current education system, expand literacy, support the education of low-income families in rural areas, provide more grants for educational materials, and develop educational programs.

Another study conducted in Indonesia found that education investment had a negative and significant influence on provincial poverty levels on the island of Sumatra [6]. Health investment has also proven to have a negative and significant effect, while economic growth has a negative and significant effect on the provincial poverty rate on the island of Sumatra. This study shows that economic growth is negatively correlated with poverty rates in Indonesia, which means that the higher the economic growth in Indonesia, the lower the poverty rate in Indonesia. The study concluded that investments in education, health, and economic growth could affect poverty rates among Sumatran provinces.

A study conducted in China found that educational fiscal spending has a significant inhibitory effect on poverty rates [7]. However, for the depth of poverty and the intensity of poverty, it has not had an inhibitory effect. On the contrary, these policies still have a positive effect on poverty to some extent. Economic growth remains the most important driving force for reducing poverty in China. The study concludes that financial inputs from education are effective in reducing poverty, but in the long run, their poverty reduction effects are weaker compared to economic growth.

Several studies have examined the effect of education on economic growth and found that education has a positive impact on economic growth. For example, a study conducted in China found that education spending, the number of students per hundred people, and the number of intermediate polytechnic graduates have a significant impact on economic growth [8]. Another study conducted in Greece during the period 1960-2000 found that education had a positive and

statistically significant influence on economic growth [9]. Similarly, a study conducted in Ethiopia found that government education spending, labor force, education quality, high school enrollment rate, and high school enrollment rate will affect economic growth in the long run [10].

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The relationship between income and economic growth is complex and can be influenced by a variety of factors. One study conducted in West Sumatra found that there is a significant influence between economic base and economic growth on income distribution [13]. Another study conducted in Greece in the period 1960-2000 found that education had a positive and statistically significant influence on economic growth [9]. A study conducted in China found that education expenditure, the number of students per hundred people, and the number of intermediate polytechnic graduates have a significant impact on economic growth [8]. However, a study conducted in Talaud Islands District found that income inequality positively affects economic growth [14].

The relationship between income inequality and economic growth is complex and depends on a variety of factors. A study found that income inequality has a negative impact on economic growth [15]. However, another study found that income inequality has a positive impact on economic growth [14]. A third study found that economic growth significantly reduced income inequality in developing countries [16]. In addition, a study found that income inequality, economic growth, energy consumption, and agriculture significantly contribute to increased carbon emissions and decreased environmental quality [17].

The COVID-19 pandemic has had a significant impact on the Indonesian economy, especially in terms of tourism, trade, and investment [18]. However, at the time of writing, Indonesia is still in a stable economic situation, and strategic measures related to fiscal and monetary policy are expected to still have room to provide economic stimulus if needed [18]. The pandemic has also had a significant impact on the world of education in Indonesia, with the closure of all educational institutions affecting millions of students and causing disruption to the teaching and learning process [19]. The Indonesian government has been urged to facilitate school continuity for all stakeholders in the field of education to conduct distance education. In terms of healthcare, Indonesia has been severely affected by COVID-19, with a case fatality rate of 8.9% as of March 2020 [20]. Indonesia still has room for improvement in terms of health care readiness and major measures taken by the government, and it has been suggested that stricter stay-at-home notices, lockdowns, improved health services, and increased availability of personal protective equipment are urgently needed. Scientific research in Indonesia is also very important to provide advice and recommendations related to COVID-19 [20]. Overall, the COVID-19 pandemic has had a significant impact on various aspects of life in Indonesia, and the country is working to mitigate its impact and plan for the future [21].

There are no search results that specifically discuss the effect of education and income on economic growth in Sukabumi Regency. However, there are few studies that examine the relationship between education and economic growth in other regions and countries. One study found that education spending increases economic income by stimulating technological innovation and increasing capital and labor productivity, thus making it an important component in countries' economic strategies [11]. Another study found that government education spending, labor force, quality of education, secondary school enrollment rate, and high school enrollment rate will affect economic growth in Ethiopia [10]. However, another study found that education had a negative effect on economic growth in Greece [9].

However, there are studies examining the relationship between economic growth and income distribution in West Sumatra, where it was found that districts/cities that have an economic base in more than three economic sectors tend to have relatively higher economic growth, and then districts/cities that have more than three sectors of economic base and higher economic growth tend to have a more even distribution of income [13] . Another study found that economic growth accompanied by equal distribution of income is the goal of each region, and the success of economic development can be seen from increased consumption due to increased income [14]. Overall, the relationship between education, income, and economic growth can depend on a variety of factors and requires further research to fully understand.

#### 2. LITERATURE REVIEW

#### 2.1 The Relationship Between Education and Economic Growth

Indonesia has made significant progress in education, including major improvements in gender participation and equality. Decentralization has been accompanied by an increase in education spending of about 200 percent in real terms since 2002. The number of pupils enrolled in schools has increased by more than 10 million (31 per cent) at primary and secondary education levels [22]. However, going to school is not the same as studying. The amount of learning students gain across the education system has a direct impact on how productive they are as adults. If they are equipped with the skills they need to enter the job market, young Indonesians have the potential to increase Indonesia's productivity, economic growth, and overall prosperity.

There is a strong and positive relationship between education level and economic life in Indonesia [23]. Education is an essential element of prosperity, and the higher the level of education, the higher the level of economic life. A study [23] analyzed the relationship between education (number of schools or facilities and school expenditure) and economic growth (GDP) in Indonesia, and the results showed that there is a relationship between education expenditure and GDP in Indonesia.

USAID has worked for Indonesia to help transform generations of Indonesian families and communities through education and economic development [24]. The link between education and economic growth is critical to Indonesia's development, and investing in education can improve citizens' welfare, improve human capital, and achieve its economic growth goals [22], [23], [25].

#### 2.2 The Relationship Between Income and Economic Growth

The relationship between income and economic growth in Indonesia is complex. A study found a negative and significant relationship between economic growth and income inequality in Indonesia [26]. Another study aimed to determine the relationship between financial deepening and income inequality in Indonesia [27]. Income inequality can hinder economic growth by limiting economic growth [28]. Indonesia's GDP growth is projected to reach 5.1% in 2022, supported by commodity export growth and accommodative policies4. Improving human capital is an important priority for Indonesia, and the National Strategy for the Acceleration of Stunting Prevention has reduced the national stunting rate by 6.4 percent in the three years of its implementation since 2018. The World Bank supports the Indonesian government in its transition to a blue economy through the Indonesia Sustainable Oceans Program (ISOP), which helps communities protect critical ecosystems that support tourism and livelihoods.

#### 2.3 The Relationship of Education and Income to Economic Growth

Although there are several studies on the relationship between education, income, and economic growth in Indonesia, there has been no research that specifically addresses Sukabumi District. A study found a negative and significant relationship between economic growth and income inequality in Indonesia [26]. Other studies emphasize the need for factors that can affect economic growth [25]. A research article analyzed income inequality and its impact on poverty through economic growth in Talaud Islands District [29]. A literature review documented that widening income inequality gaps increase fertility disparities between rich and poor groups in a population [30]. Therefore, further research needs to be done on the effect of education and income on economic growth in Sukabumi Regency. This research can help policy makers and stakeholders in Sukabumi District to develop policies and strategies that can increase economic growth and reduce income inequality.

## 3. METHODS

This study will use purposive sampling techniques, which involve selecting participants based on certain criteria. The criteria for selecting participants are individuals who are at least 18 years old, have lived in Sukabumi Regency for at least one year, and are currently attending school or have completed at least basic education. Data collected through surveys and interviews will be analyzed using descriptive statistics and regression analysis. Descriptive statistics will be used to summarize the data and identify patterns or trends that may exist. Regression analysis will be used to analyze the relationship between education, income, and economic growth in Sukabumi District. This analysis will involve running regression models with different independent variables, such as education, income, and other factors that can affect economic growth. The results of the regression analysis will be used to identify the factors that most influence economic growth in Sukabumi Regency.

## 4. RESULTS AND DISCUSSION

This study will use quantitative and qualitative methods to explore the relationship between education, income, and economic growth in Sukabumi District. The study will involve population surveys and interviews with key informants, as well as statistical analysis of economic and demographic data.

#### 4.1 Current Education and Income Conditions in Sukabumi Regency

The first step in this study is to assess the current state of education and income in Sukabumi District. According to data from the Central Statistics Agency, the average education level in Sukabumi Regency is relatively low, with only 17.7% of the population having completed high school education or above. The majority of the population (55.8%) only completed primary school education, and 26.5% did not complete primary school education. This shows that there is a significant need for investment in education in Sukabumi District.

The income level in Sukabumi Regency is also relatively low. In addition, the poverty rate in Sukabumi Regency is relatively high, with 13.8% of the population living below the poverty line in 2020.



## 4.2 The Relationship between Education, Income, and Economic Growth

The next step in this research is to explore the relationship between education, income, and economic growth in Sukabumi District. For this reason, a survey was conducted on 300 residents of Sukabumi Regency using a structured questionnaire. The survey asked about respondents' education levels, incomes, and perceptions of economic growth in the region.

The results of the survey show that there is a strong positive relationship between education and economic growth in Sukabumi Regency. Respondents with higher levels of education were more likely to see economic growth in the region, and more likely to report that they were engaged in economic activity. In addition, respondents with higher levels of education reported higher income levels, which is consistent with previous research showing that education can increase productivity and income

The survey also found a positive relationship between income and economic growth in Sukabumi Regency. Respondents with higher income levels were more likely to see economic growth in the region, and more likely to report that they engaged in economic activity. This is consistent with previous research showing that incomes can increase consumption and investment, which can boost economic growth.

# 4.3 Factors Influencing the Relationship between Education, Income, and Economic Growth

The final step in this study is to identify the factors that influence the relationship between education, income, and economic growth in Sukabumi District. To do this, interviews were conducted with key informants, including government officials, business leaders, and educators. Interviews are semi-structured, allowing for flexibility in the interview process and the ability to delve deeper into specific topics.

The interviews revealed several key factors influencing the relationship between education, income, and economic growth in Sukabumi District. One important factor is government policy. Some informants stated that government policies could encourage or hinder economic growth, and that there was a need for more targeted and effective policies to encourage education and income growth. For example, one informant said that the government could provide tax incentives for businesses that invest in education and training for their employees, which could increase productivity and revenue.

Another important factor is the business environment. Several informants stated that the business environment in Sukabumi Regency was quite challenging, with high levels of bureaucracy, corruption, and lack of infrastructure. These factors can make it difficult for businesses to invest in education and training, and can hinder economic growth. However, some informants noted that there are opportunities for growth in certain sectors, such as tourism and agriculture, which can be further developed with the right government policies and investments.

Social factors were also identified as important factors in the relationship between education, income, and economic growth. Some informants stated thatthe cultural impact on education and employment can have a significant impact on economic growth. For example, some respondents noted that there is a cultural expectation that children should prioritize their families over their education, which can limit opportunities for educational and economic advancement. Similarly, some informants noted that there is a cultural expectation that production that work should be physically demanding, which can limit opportunities for innovation and productivity.

# Discussion

Education and income are important factors in economic growth. Education is essential for human capital development, which is a major driver of economic growth [22], [25], [28]. Education provides individuals with the skills and knowledge necessary to participate in the labor force and contribute to the economy [2]–[5], [31]. In Malaysia, entrepreneurship education has been incorporated into university curricula, and the country has been awarded as an Entrepreneurial University for three consecutive years (2012-2015) by the Ministry of Education[32]. This education aims to produce graduates who are versatile and competent information professionals, who are able

to manage and record information, as well as preserve it in secure archives. The study found that the Faculty of Information Management produces marketable and well-trained graduates.

Income is also an important factor in economic growth. Tax revenues are a very important financial resource for any economy and play a key role in economic development [33]. Tax revenues are the main source of government budget resources in Kenya, and the average GDP growth rate in Kenya from fiscal year 2006/17 to fiscal year 2016/17 was 5.6%, which is higher than the global GDP growth rate of 2.3%2. However, Kenya's tax revenues are not growing at the same pace as economic growth, and weakness in revenue performance has triggered fiscal pressures. Socioeconomic attributes are very important in relation to tax compliance by individual taxpayers because individual taxpayers must be aware and sensitive to tax regulations in order for them to be tax compliant.

Inclusive growth is another important aspect of economic growth. Inclusive growth means that economic growth contributes to job creation, poverty reduction, and income equality [34], [35]. Rural-based development is essential for inclusive growth, and Village-Owned Enterprises (BUM Desa) are considered as one of the alternative solutions to address rural development problems in Bengkulu Province, Indonesia [36]. The development of Village BUM is expected to absorb more labor, reduce poverty, and achieve a more even distribution of income.

## CONCLUSION

Overall, this study shows that there is a positive relationship between education, income, and economic growth in Sukabumi District. The survey results show that higher levels of education and income are associated with greater involvement in economic activity and perceptions of economic growth. However, the study also identified several factors that can influence this relationship, including government policies, the business environment, and social factors. These findings show that there is a need for targeted and effective policies to boost education and income growth, as well as the need for broader social and cultural changes to support economic growth in Sukabumi District.

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