

**THE EFFECT OF EDUCATION, HEALTH, UNEMPLOYMENT AND
INFRASTRUCTURE ON POVERTY IN
BENGKAYANG REGENCY**

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Abstract

Education (X1) shows the results of the analysis of poverty (Y) in Bengkayang Regency. Not significant when viewed from the results of the t test partially can be obtained to count to the value of the Education Sector, $-1.449 > 1.796$ so that education has a positive and not significant effect on poverty, which is supported by a significant level of $0.385 < 0.050$. This shows that the Education Sector variable has no significant effect on Poverty (Y). Health (X2) has a negative and significant effect on Poverty, which is supported by the Probability Value (sig) of $0.437 < 0.050$. This means that in terms of health, the government in this case has made every possible effort for budget expenditures, but in fact in the field there are still many underprivileged people who have not been able to enjoy maximum hospital services. The results of the analysis of the direct effect of Unemployment (X3) on Poverty in Bengkayang Regency showed insignificant influence. The results of the analysis show that this path has a significant effect because the value of t count is 1,217, while the table is 1,796 ($t \text{ count } 1,217 > t \text{ table } 1,796$), thus in this direct relationship pattern, unemployment has a positive effect not significant to poverty, which is supported by Probability Value (sig) $0.371 > 0.050$. The results of the analysis of direct influence of Infrastructure (X4) on poverty levels in Bengkayang Regency show that the path coefficient between Infrastructure and poverty is $0.804 > 0.050$, which means that the pathway has a negative and insignificant effect.

The method used to analyze this research is linear regression with the least squares method usually known as OLS (Ordinary Least Square), which is a method used to determine the effect of an independent variable on the dependent variable.

Keywords: Education, Health, Unemployment, Infrastructure, Poverty

INTRODUCTION

The issue of poverty has been a concern and priority for the development of Bengkulu Regency since becoming an autonomous region in 1999. This is determined by the progress of development and the rate of the economic growth which acts as a starting point in improving the quality of the life and the development of resources and potential in Bengkulu Regency to overcome the existing poverty. One of the root causes of poverty in Bengkulu Regency is generally related to the inequality of access to education, health, and other basic services. In addition, poverty is also related to the lack of access to basic infrastructure and access to productive assets, and the low level of private investment and entrepreneurship, so that the poverty rate in Bengkulu Regency increases.

Basically, in mapping poverty, we are faced with complex problems, so poverty alleviation needs to be done comprehensively, systematically, and involving various existing stakeholders. Poverty also needs to involve people who are categorized as poor. Presidential Regulation number 15 of 2010 concerning the acceleration of poverty alleviation which delegates the formation, basic tasks and functions of TKPK in the regions, explains that the membership of the National Team accelerates poverty reduction consisting of government, community, business, and other stakeholders in poverty reduction. Thus, in overcoming the problem of poverty, the poor are strayed to be able to escape the poverty trap that exists and can develop a more decent livelihood.

Referring to this understanding, in 2005-2012 Bengkulu Regency experienced an average economic growth of 5.5% each year. This data shows that Bengkulu Regency has considerable prospects and potential that can be used to overcome the existing poverty problems. Bengkulu Regency has 38 strategic targets as the basis for implementing the prescribed vision and mission. Based on the existing targets, there are 10 strategic targets that are considered in accordance with poverty reduction. The 10 strategic targets are as follows:

Table 1.1
Strategic Goals on the Evaluation Result

No	Strategic Goals	Achievement	Evaluation result
1	The increasing of the number, quality and system of network coverage of basic infrastructure (education, health, housing, transportation, clean water, communication, irrigation, and electricity)	67.20%	succeeded
2	The increasing of the transportation function for remote areas	86.37%	Extremely succeeded
3	Internal accessibility increased between regions to create synergy in developing regional potential and even distribution of development levels between regions.	115.63%	Extremely succeeded
4	Industrial growth based on agriculture, plantation, fisheries, mining and forestry in a sustainable manner, and the tourism industry based on	92.50%	Extremely succeeded

	strengthening and developing economic, social, cultural and local communities, and preserving environmental functions.		
5	Good control of commodity selling prices in order to increase people's income		Has not succeeded
6	Increasing productivity of agricultural and fishery products by prioritizing leading sectors.	90.01%	Extremely succeeded
7	Fulfillment of food for the community in accordance with good nutritional standards.	90%	Extremely succeeded
8	Sustainable food availability.	303.55%	Extremely succeeded
9	The realization of a society that is highly educated, has character, and is insightful in the future.	87.66%	Succeeded
10	The increasing of the living standards aimed at improving various development indicators.	86.73%	Extremely succeeded

Source : BAPPEDA of Bengkayang Regency

Various programs have been implemented which can be said to be successful and have an impact on poverty reduction in Bengkayang Regency. It still has to try harder to reach targets that have not been successful. More in-depth analysis of the problem of poverty in Bengkayang Regency is very necessary to find the causal factors regarding the problem of poverty in Bengkayang Regency. Therefore, the authors are interested in analyzing the factors of education, health, unemployment and infrastructure towards poverty that occurs in Bengkayang Regency.

RESEARCH PURPOSES

This study aims to determine the effect of education, health, unemployment and infrastructure on poverty in Bengkayang Regency.

THEORITICAL REVIEW

Suparlan (2000) defines that poverty is a state of shortage of property and valuables suffered by a person or group of people living in an environment of extreme poverty or lack of capital, both in terms of money, knowledge, social power, politics, law, and access to facilities public services, business opportunities, and work. Furthermore, poverty means a condition where people or groups of people do not have the ability, freedom, assets and accessibility for their needs in the future, and are very vulnerable to the risks and pressures caused by diseases and sudden increases. for prices of food and school fees (UNCHS, 1996; Pandji-Indra, 2001).

World Bank (2002) in Gamal Abdul (2016), categorizes the characteristics of the poor according to communities, regions, households, and individuals. In community factors, infrastructure is the main determinant of poverty. The condition of infrastructure is very closely related to the level of community welfare. Good infrastructure will make it easier for the community to carry out economic and social activities, in addition it makes it easier for investors to invest in the area concerned. Indicators of important infrastructure development are irrigation canals, access to electricity, and main road transport conditions. Another indicator of the characteristics of

community factors is equal access to a business or work such as the existence of financial and industrial institutions.

The United Nation Development Program (UNDP) reviews poverty from two sides, namely in terms of human income and quality. Viewed from the side of income, extreme poverty (extreme poverty) or absolute poverty is a lack of income for the needs of meeting basic needs or the minimum needs of calories needed. In terms of human quality, overall poverty, or often referred to as relative poverty, is a lack of income to meet non-food needs, such as clothing, energy, and shelter (UNDP, 2000).

Another type of poverty classification is persistent poverty, which is a situation where people or families consistently remain poor for a relatively long period of time. In America, what is meant by persistent poor groups are those who have received welfare benefits for more than 8 years (Berrick, 1995; Pandji-Indra, 2001). Whereas transient poverty is a situation where the life of a person or family can temporarily fall below the poverty line if there are layoffs, fall ill and increase the cost of education (Pandji-Indra, 2001). This transient poverty condition can be found when a country is hit by an economic crisis or natural disaster. Another review of poverty is poverty line and poverty measurement, which is a quantitative indicator for determining poor individuals or groups.

The definition of the meaning of poverty is very diverse, diversity in the definition of poverty because these problems have propagated at the multidimensional level, meaning poverty is related to each other with various dimensions of human needs. The inability to meet minimum living standards that are in accordance with the level of life worthiness can be said as poverty (Todaro, 2006).

Another opinion stated by Sharp, et al in Mudrajat Kuncoro (2006) identifies causes of poverty that are viewed from the economic side. a) Micro-based poverty arises because of the inequality of resource ownership by each individual which causes inequality in income distribution; b) Poverty arises due to differences in the quality of human resources with each other c) Poverty arises due to differences in

each individual in accessing capital. These three causes of poverty lead to the theory of the poverty vicious circle (Vicious circle of poverty). The low productivity has been caused by the existence of backwardness, market imperfections, and lack of capital. Low productivity will result in the low income they receive. Low income will have implications for low savings and investment. Low investment results in underdevelopment. Therefore, every effort to reduce poverty should be directed at cutting this poverty circle and trap (Kuncoro, 2006).

Effect of Education on Poverty Levels

Education plays a key role in shaping the ability of a developing country to absorb modern technology and to develop capacity to create sustainable growth and development (Todaro, 2006). Mankiew (2000) mentions, someone who is highly educated can produce new ideas about how the best choice for producing goods and services. If this idea is accepted by the wider population, then everyone can use it so that the idea can be said to be an external benefit of education. In this case, the rate of return of education received by the population is greater than the rate of return received by the individual.

Weak economic conditions as a result of low income will keep someone from living a prosperous life. Per capita income is often used as a measure of prosperity and the level of development of a country. The greater the income per capita, it will be more prosperous the country (Kuncoro, 2015). Todaro & Smith (2011) said that the high cost of quality education is a barrier for low-income families to finance their children's education. Portrait of Indonesian Education (2016 Central Bureau of Statistics) says that a person's education level is still influenced by economic status. If a person's economic status is higher, the level of education will be higher.

In association with the theory of vicious cycle of poverty, Nurse version illustrates that backwardness and underdevelopment is a matter that the chain must be cut off to overcome the problem of poverty that occurs. Underdevelopment and underdevelopment can be overcome by the existence of education organized by the state for its citizens to obtain knowledge that can

reduce the level of backwardness and underdevelopment of an area. Education is also Human Capital, the higher the education completed by a person, the more productive the person is. This will increase income for both individual income and national income. The increasing individual income will increase their consumption capacity, so that they can lift their lives from poverty.

Effects of Health on Poverty Levels

Access to health services is a responsibility that must be given by the government to its people. Health is a minimum standard of living that must be owned by every community. Public health that tends to be good will have an impact on productivity and work ethic which also increases; as a result the income generated increases along with improving health in the community. Both individual and aggregate income will increase. Increased income will raise the degree of someone to get out of poverty.

Lincolin (1999) explained that interventions to improve health from the government are also an important policy tool to reduce poverty. Whereas Nurse in the theory of the vicious cycle of poverty, also suggests low productivity as a factor that causes poverty. Low productivity can be caused by low levels of health. Low health will cause the work ethic to decline and a person's productivity will be low. Low productivity will have an impact on declining income and can bring someone to be vulnerable to poverty.

The Effect of Unemployment on Poverty Levels

According to Sadono (2004) unemployment is a problem that often engulfs the economic activities of a country and is very important to overcome. This will cause some negative impacts if the unemployment rate is high. These impacts can be in the form of economic impacts and social impacts. Economically unemployment has an impact on the decline in the number of national products and the decline in income, while reducing the level of welfare of society as a whole.

According to Sadono Sukirno (2004), the bad effect of unemployment is to reduce people's income which ultimately

reduces the level of prosperity that someone has achieved. The decreasing welfare of the people due to unemployment will certainly increase their chances of being trapped in poverty because they do not have income. If unemployment in a country is very bad, political and social chaos always applies and has a negative effect on the welfare of society and the prospects for long-term economic development.

Meanwhile, according to Tambunan (2001) in Rosyadi (2017), unemployment can affect poverty levels in various ways, including: a) if the household has a liquidity limit which means that current consumption is strongly influenced by current income, then disaster of unemployment will directly affect the income poverty rate with the consumption poverty rate. b) If households do not face liquidity constraints which mean that current consumption is not too influenced by current income, then an increase in unemployment will lead to an increase in poverty in the long run, but not too much in the short term.

As the theory of poverty vicious circle nurse version that describes the low productivity as one of the causes of poverty. Deprivation can be interpreted as a level of productivity of someone who is low or can also not do productivity at all. This is because unemployed people do not have a job to generate wages or salaries. Even though most households depend on the salary / wages they earn to fulfill their daily needs. Unemployment is more common in low income groups so they have to live below the poverty line. This factor is expected to cause a significant and positive relationship to poverty. In other words, the more unemployment will lead to an increase in poverty.

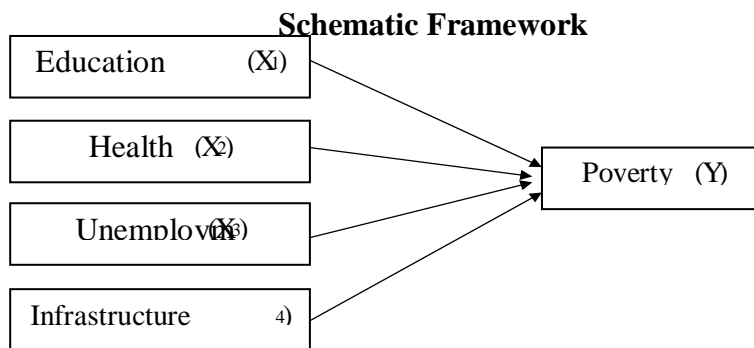
RESEARCH METHODS

1. Operational Definition

The definition of operational variable is the definition of the variable (expressed in the concept definition), operationally, practically, in the realm of the object of the research / object under study. The variables used in this study are independent variables and dependent variables.

Based on the theoretical review and the relationship between variables that have

been stated previously, the author tries to make a frame of mind that explains how these variables affect poverty. The thinking framework in this study is that poverty is influenced by four economic development variables, including education, health, unemployment and infrastructure. Then these variables as independent variables (free) / together, with the dependent variable (bound), namely poverty as measured by regression analysis tools. The schematic framework can be described as follows:



- a) Education (X1) in this study is referred to expenditure for the construction of educational facilities and infrastructure carried out by the Bengkulu Regency Government in the vulnerable period of 2013-2017
- b) Health (X2) in this study is referred to expenditure for the construction of health facilities and infrastructure carried out by the Government of Bengkulu Regency in the vulnerable period of 2013-2017.
- c) Open unemployment (X3) in this study is referred to the development of conditions of the people who experience unemployment or do not have jobs in productive age in Bengkulu Regency. In vulnerable time from 2013-2017.
- d) Infrastructure (X4) in this study is referred to expenditure for the construction of infrastructure facilities carried out by the Government of Bengkulu Regency, in the vulnerable period of 2013-2017
- e) Poverty Level (Y) is the inability of the economic side to fulfill basic food and non-food needs measured from the expenditure

side. So Poor People are residents who have an average monthly per capita expenditure below the poverty line in Bengkulu Regency, in the vulnerable period of 2013-2017.

2. OLS (Ordinary Least Square)

The method used to analyze this study is linear regression with the least square method usually known as OLS (Ordinary Least Square), which is a method used to determine the magnitude of the influence of an independent variable on the dependent variable,

then this research model can be mathematically written as follows:

$$Y = f (X_1, X_2, X_3, X_4)$$

Systematically the function above is that poverty (Y) will be influenced by Education (X1), Health (X2), Unemployment (X3), and Infrastructure (X4).

The model of education, health, unemployment, infrastructure and poverty from the independent variables used in

this study are:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu$$

In which:

Y = poverty

β_0 = constants

β_1, β_2 = parameter

X1 = education

X2 = health

X3 = unemployment

X4 = infrastructure

μ = disturbance error

This analysis aims to find out how much the independent variables influence on poverty, which is related to the variables namely education, health, unemployment and infrastructure. The analysis of the above equation is done with the help of the Eviews program version 9.

RESULTS AND DISCUSSION

1. Effect of Education (X1) on Poverty (Y) in Bengkulu Regency

Education (X1) shows the results of the analysis of poverty (Y) in Bengkulu Regency are not significant, if seen from the results of the partial t test can be obtained t-count with the value of education level, $-1.449 > 1,796$ so that education has no significant positive effect on poverty, which is supported by a significant level of $0.385 < 0.050$. This shows that the Education variable has no significant effect on Poverty (Y). This shows that people with high level of education will find employment in the area that has a leading sector in accordance with their education, because this will have more freedom to compete in other regions or provinces whose business leading sector is in accordance with the education they have.

The results of this study indicate that the main causes of why education levels do not have a significant effect on poverty in Bengkulu Regency because the provision of high budget expenditures for the education sector has not been able to create new employment opportunities to reduce poverty, which can increase intellectual unemployment created by under-prepared education graduates work and professionals. This can cause the level of education does not significantly influence the level of poverty.

2. Effect of Health (X2) on Poverty (Y) in Bengkulu Regency

The results of the analysis show that the level of health has a significant effect because the t-count value is 1,217, while the t-table is 1,796 ($t\text{-count } 1,217 > t\text{-table } 1,796$), thus the pattern of this direct relationship has a negative and significant effect on Poverty. which is supported by Probability Value (sig) $0.437 < 0.050$. This means that in terms of health, the government has sought as much as possible the budgetary expenditure for health, but the facts in the field are still many people who are less able to enjoy maximum service from the hospital.

Dian Octaviani (2001) in Agung Prastopo's Research (2011) said that some households in Indonesia have a very large dependence on the income of salary or wages obtained at this time. The loss of employment causes a reduction in most of the revenue used to buy daily necessities. Furthermore, if the

unemployment problem occurs in low-income groups (especially people with income levels slightly above the poverty line), the incidence of unemployment easily shifts their position to the poor. This means the higher level of unemployment will increase poverty.

3. Effect of Unemployment (X3) on poverty (Y) in Bengkulu Regency

The results of the analysis show that this path coefficient is not significant because the t-count value is -1.517 while the t-table is 1,796 ($t\text{-count} = -1.517 > t\text{-table} = 1,796$), thus in this direct relationship pattern, unemployment has a positive effect not significant to Poverty, which is supported by Probability Value (sig) $0.371 > 0.050$. The results of the analysis of the direct effect of Unemployment (X3) on Poverty in Bengkulu Regency showed insignificant influence.

According to Sadono Sukirno (2004), the bad effect of unemployment is to reduce people's income which ultimately reduces the level of prosperity that someone has achieved. The decreasing welfare of the unemployed people will increase their chances of being trapped in poverty because they have no income. If unemployment in a country is extremely bad, political and social chaos always apply and has a negative effect on the welfare of society and the prospects for long-term economic development.

Deffrinica (2017) in her research said that the unemployment rate affects the poverty rate in Bengkulu Regency, empirical data shows a pattern of unidirectional relations between unemployment and poverty levels. Unemployed people in the household automatically become poor because other family members have inadequate income to meet their family's needs in the household. This condition (increasing unemployment rate where the poverty rate actually increases) is found in many Bengkulu districts. When a group is not a workforce (students / students) passes education and is included in the workforce group, but does not necessarily immediately work, sometimes the waiting period gets a relatively long job.

In addition, there are also those who deliberately withdraw from the workforce for

reasons of finding better jobs. This event will create unemployment (especially in the case of educated unemployment). Unemployment occurs, because this family life is still borne by other family members who have insufficient income or income to meet household needs and low education factors cannot support high income and have good jobs, and thus the average income is still above the poverty line.

4. Influence of Infrastructure (X4) on poverty (Y) in Bengkayang Regency

The results of the analysis show that the path has no significant effect because the t-count value is 0.316 while the t-table is 1,796 (t-count is $0.316 > t\text{-table } 1.796$), thus the results of the analysis of direct influence of Infrastructure (X4) on poverty levels in Bengkayang Regency show that the path coefficient between Infrastructure and poverty is $0.804 > 0.050$, which means that the pathway has a negative and insignificant effect.

Central Bureau of Statistics (BPS) notes that the 2010-2014 National Medium-Term Development Plan (RPJMN) has outlined that the 2010-2014 Development Vision is "The realization of a Prosperous, Democratic and Just Indonesia" (Ministry of Finance, 2011). The development vision was then used as the basis for the government in taking various policies. One of them is the implementation of the Accelerated Rural Disadvantaged Areas Infrastructure Development Program (P2IPDT) implemented by the government through the Ministry of Development of Disadvantaged Regions (PDT).

CONCLUSION

Based on the results of the analysis, discussion and hypothesis testing, some conclusions can be drawn as follows:

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BPS. 2013. Bengkayang Regency in Figures 2013

1. Education has no significant but it has positive effect on the increase of poverty in Bengkayang Regency. It can be assumed that the education budget increases and poverty also increase. This means that there is an impact but still low from the Government's Education Expenditures in reducing the increase in poverty in Bengkayang Regency. The decreasing number of the existing jobs which is not balanced with the opening of new jobs causes more and more educated poor people found in Bengkayang Regency.
2. Health has a negative and significant effect on reducing poverty in Bengkayang Regency, where the health budget increases and poverty decreases. There is a significant impact on the allocation of health budgets in reducing poverty. Because health facilities have touched all poor people in Bengkayang Regency.
3. Unemployment has no significant effect on the level of poverty in Bengkayang Regency. It can be concluded that the high level of unemployment in the community occurs because certain family lives are still borne by other family members who have insufficient income or income to meet household needs and low education factors cannot support high income and have jobs that good, and thus the average income is still above the poverty line.
4. Infrastructure has no significant but it has negative effect on reducing poverty. It can be concluded that the infrastructure budget increases and poverty decreases. It means that there is an imbalance in infrastructure development due to the still low decline in poverty.

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