



Poverty Influence on Human Development Index in the Lampung Province

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Abstract. Human development is a process of activities carried out by an area to develop the quality of life of the community. One measure of human development can be seen through the Human Development Index which is measured through health, quality of education and economic levels. Economic development is intended to improve the welfare of the community on the economic and social sides, it aims to minimize the increasing amount of poverty. Poverty has long been a problem of the Indonesian people, and until now there has been no sign of disappearing. Statistics continue to provide information about the large number of poor people. In Lampung Province, the problem of poverty and unemployment is also an important issue that becomes an annual problem in economic development. Therefore, it is not surprising that the HDI of Lampung Province is in the medium category. The purpose of this study is to analyze how and how much influence the number of poor people, the budget regional expenditure (APBD) of the Lampung Province food sector in 2011–2018, poverty line, and unemployment are open to the human development index (HDI) in Lampung Province. The method used is a quantitative descriptive method with an associative approach. The source of the data to be analyzed comes from data on the number of poor people, regional budget revenue (APBD) of the Lampung Province food sector in 2011–2018, poverty line, and open unemployment. Data collection techniques use documentation techniques using secondary data obtained from the Management Agency Regional Finance and Assets and BPS Province Lampung Province 2019 data. The data analysis technique used is multiple regression analysis using Minitab 15. The results show that there is a negative influence between the number of poor people, open unemployment and poverty lines on the HDI of Lampung Province. While the positive and linear influence shown by the food sector budget to the Lampung Province HDI. But overall, the analysis of variance results for the P value of regression was 0.033 where < 0.05 , which means that simultaneously (overall), the variable number of poor people, open unemployment, APBD food sector and the poverty line have a significant influence on the variable HDI in Lampung Province. Which means H_0 is rejected and H_1 is accepted.

Keywords: Poverty · HDI · Lampung

1 Background

Human development is a process of activities carried out by an area to develop the quality of life of the community. One measure of human development can be seen through the Human Development Index which is measured through health, quality of education and economic levels. The main development problem in Indonesia is low and uneven economic growth, which has an impact on the phenomenon of high unemployment, poverty, and endless income inequality [1]. Government's role in increasing HDI can also affect the regional budget of the food sector in public service. The role of the government in the policy of implementing regional autonomy and fiscal decentralization is based on the consideration that the regions are more aware of the needs and service standards for the people in their regions, so that the granting of regional autonomy is expected to spur improvement in the welfare of the people in the region [2].

Economic development is intended to improve the welfare of the community on the economic and social sides. One of the goals of economic development itself is to create opportunities and employment as much as possible so that the workforce that is in a country can be absorbed in the process of economic activity in the country. On the other hand the goal of economic development is the creation of growth and improvement of human resources [3].

The current economic growth is actually still a false economy (bubble economics). This is indicated by the high level of poverty in Indonesia, even though GDP growth is said to be good. Poverty has long been a problem of the Indonesian people, and until now there has been no sign of disappearing [4]. Statistics continue to provide information about the large number of poor people. The indicators of poverty are the poor population, the poverty line. The poor are residents who have an average expenditure per capita per month below the poverty line [5].

The number of poor people in an area is defined as the number of poor people in the region. Poverty Line (GK) = Food Poverty Line (GKM) + Non-Food Poverty Line (GKNM). This low standard of living has a direct effect on the level of health, moral living, and self-esteem of those classified as poor. Furthermore, another cause of poverty is the lack of human resources. If humans do not have the skills then he will not have income which causes the purchasing power to decrease so that it enters the circle of poverty. This will affect economic growth in a region or even a country. Human resources will affect the HDI and can also affect the unemployment rate [6].

Starting from poverty, various other social problems have arisen [5]. With poverty, unemployment is widely opened. In Lampung Province, the problem of the unemployment rate is also an important issue that becomes an annual problem in economic development [7]. The regional government as an extension of the central government must also take part in solving the unemployment problem in Lampung Province. Therefore, one of the main indicators of the success of national development is the rate of decline in the number of poor people. Effectiveness in reducing the number of poor people is the main growth in choosing development strategies or instruments [8].

If this condition is not quickly overcome, it will have an impact on HDI in Lampung Province. HDI includes three basic components that reflect human development efforts, namely longevity, which is calculated based on life expectancy at birth, knowledge that is measured based on average length of school and literacy rates of people aged 15 years and

over, and living standards are measured by per capita expenditure based on purchasing power parity. Lack of education, and poor nutrition and health, can reduce the capacity of the community to work. Thus, due to the low HDI, poor people cannot take advantage and work productively [9].

2 Methods

This research uses a quantitative descriptive method with an associative approach. The source of the data to be analyzed comes from data on the number of poor people, the regional budget (APBD) of the Lampung Province food sector in 2011–2018, poverty line, and open unemployment. Data collection techniques use documentation techniques using secondary data obtained from the Management Agency Regional Finance and Assets and BPS Province Lampung Province 2019 data.

The data analysis technique used is multiple regression analysis, which is to see the relationship or influence of two or more independent variables (independent variable X) on fixed variables (dependent variable Y). This technique is called linear because each estimate of the value expected to increase or decrease follows a straight line. Measurement of the influence of this variable involves more than one independent variable ($X_1, X_2, X_3, \dots, X_n$) that affects the fixed variable (Y). The independent or independent variables in this study are the number of poor population (X_1), open unemployment (X_2), APBD of the food sector (X_3) and poverty line (X_4). The dependent or dependent variable is the human development index (HDI) (Y). Optimization of model parameters uses Minitab version 15. While hypothesis testing uses a significance level of 5%.

The multiple linear regression model used in this study is.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_i.$$

Information

Y = HDI (dependent variable).

X = APBD / sector (Independent variable).

X_1 = Data on the number of poor people in Lampung Province 2011–2018.

X_2 = Data of Lampung Province open unemployment 2011–2018.

X_3 = APBD Data of Lampung Province Food sector 2011–2018.

X_4 = Lampung Province poverty line data 2011–2018.

a = constant.

$\beta_1, \beta_2, \beta_3, \beta_4$ = Regression Coefficient.

e_i = confounding variable.

The hypothesis.

H_0 = There is no influence between the number of poor population with Lampung Province HDI.

H_1 = There is an influence between the number of poor people with Lampung Province HDI.

H_0 = There is no influence between open unemployment with HDI Lampung Province.

Table 1 Data on Poor Population, Open Unemployment, APBD of Food Sector, Poverty Line, HDI, Lampung Province Region 2011–2018.

NO	Year	HDI (Y)	Poor population (X ₁)	Open unemployment (X ₂)	APBD Food (APBD, Rp. In Billion) (X ₃)	Line of poverty (X ₄)
1	2011	64.02	1,056.77	6.38	3,710,000,000	245502
2	2012	64.87	981.06	5,20	0	263087
3	2013	65.73	911,53	5.69	7,800,000,000	295395
4	2014	66.42	919.73	4.79	4,385,731,000	318821
5	2015	66.95	902.74	5.14	6,272,626,310	356771
6	2016	67.65	912.34	4.62	11,099,541,790	368592
7	2017	68.25	871.77	4.33	5,120,000,000	384882
8	2018	69.02	861.40	4.06	6,562,642,070	109160

Source: Lampung Province Regional Financial and Asset Management Agency in 2018

H₁ = There is an influence between open unemployment and Lampung Province HDI.

H₀ = There is no influence between the food sector budget with the Lampung Province HDI.

H₁ = There is an influence between the food sector budget with the Lampung Province HDI.

H₀ = There is no influence between the poverty line with the Lampung Province HDI.

H₁ = There is an influence between the poverty line and the Lampung Province HDI.

H₀ = There is no influence between the number of poor population. Open unemployment, regional food sector budget and poverty line on HDI in Lampung Province

H₁ = There is an influence between the number of poor people, open unemployment, regional food budget and poverty line on HDI in Lampung Province

3 Result and Discussion

3.1 Results

The data used in this study include data on the number of poor people, open unemployment data, APBD data in the food sector and Lampung Province poverty line data in 2011–2018, as follows (Table 1) .

From the data above then an analysis using multiple linear regression is done because the variables are more than 1. Multiple linear regression analysis is a linear relationship between two or more independent variables (X) with the dependent variable (Y). This analysis is to determine the direction of the relationship between the independent variables with the dependent variable is positive or negative and to predict the value of the

Table 2 Coefficient of Determination (R2).

$S = 0.620461$	$R\text{-Sq} = 94.3\%$
	$R\text{-Sq (adj)} = 86.7\%$

dependent variable if the independent increases or decreases. From the data table above, a regression analysis using Minitab 15 is obtained, the results obtained by the regression equation are:

$$\text{HDI} = 75.0 - 0.000007(X1) - 1.65(X2) + 0.115(X3) - 0.000002(X4).$$

Information

X1 = Number of poor population.

X2 = Unemployment is open.

X3 = APBD of the Food sector.

X4 = Poverty Line.

From the regression equation above a constant figure of 75.0 is obtained. Can be interpreted that if the number of poor population (X1) there is no change (equal to zero), the HDI of Lampung Province is 75.0. However if the number of poor people increases by 1%, the HDI of Lampung Province will decrease by - 0.000007 because of the coefficient the regression is negative (opposite). This means, if the number of poor people decreases by 0.000007 then the HDI will increase by 0.000007. If open unemployment (X2) is equal to zero or there is no change, then the HDI of Lampung Province is 75.0. However, if open unemployment increases by 1%, the HDI of Lampung Province will decrease by -1.65 because the regression coefficient is negative (opposite) This means, if open unemployment falls by 1.65 then the HDI will increase by 1.65. If the food sector budget (X3) is equal to zero or there is no change, the HDI of Lampung Province is 75.0. However, if the food sector APBD increases by 1%, the HDI of Lampung Province will also increase by 0.115 (positive sign). This means, if the food sector APBD rises by 0.115, then the HDI will also increase by 0.115. If the poverty line (X4) is equal to zero or there is no change, the HDI of Lampung Province is 75.0. However, if the poverty line increases by 1%, the HDI of Lampung Province will also decrease by - 0.000002. This means, if the poverty line drops by 0.000002, then the HDI will increase by 0.000002.

Furthermore, to see the coefficient of determination, can be seen in the following (Table 2):

The coefficient of determination, R-sq adjusted at 86.7% means the diversity of HDI can be explained by the variable number of poor people, open unemployment, APBD of the food sector and the poverty line by 86.7% and the rest is explained by other variables outside the model. R-square correlation value of 94.3%, which means that the influence of the variable number of poor people, open unemployment, APBD of the food sector and poverty line on HDI is 94.3%, and the remaining 5.7%, influenced by other variables. Durbin-Watson statistical data = 2.44658, which means that the material of the independent variable in this study was not disturbed or influenced by the disrupting

Table 3. Result of Multiple Linear Regression Analysis

Predictor	Coef	SE	Coef	T	P
Constant	75,010	1,967	38,14	0,000	
the number of poor population is	-0.00000703	0.00000973	-0.72	0.522	
open unemployment	-1.6502	0.4468	-3.69	0.034	
APBD of Food	0.1153	0.1104	1.04	0.373	
poverty line	-0.00000192	0.00000283	-0.68	0.547	

variable. so it can be said there are no symptoms of autocorrelation in this study between variables.

Standard error estimate, used to find out whether the regression model is declared valid as a prediction model. At Minitab can be seen with the value of S at the output of the session 1 where in this test of 0.62, which means p enyimpangan between dependent regression equation with real value for small 0 62.Semakin Std value. Error of the Estimate, the better the regression equation as a prediction tool. In general, SE < Std. There is also a deviation that states SE < 4.00 (Table 3).

The significance value of the variable number of poor population (X1) is 0.522. Because the significance value is $0.522 > 0.05$, it can be concluded that H1 is rejected. This means that there is no influence between the number of poor people and HDI. The significance value of the open unemployment variable (X2) is 0.034. Because the significance value is $0.034 < 0.05$, it can be concluded that H0 is rejected. H1 is accepted. This means that there is an influence between open unemployment and HDI. Because the significance value is greater than 0.05 ($0.373 > 0.05$), it can be concluded that H1 is rejected H0 is accepted, meaning that there is no influence between the APBD of the food sector with HDI. The significance value of the poverty line variable (X4) is 0.547. Because the significance value is $0.457 > 0.05$, it can be concluded that H1 is rejected H0 is accepted, which means there is no influence between the poverty line and HDI. From these results it can be said that those who have a direct influence on HDI are open unemployment, while those who do not have direct influence on HDI are the number of poor people, the food sector budget and the poverty line.

However, for all variables, based on the hypothesis test, the analysis of variance results for the P regression value is indicated by 0.033 where < 0.05 , which means that simultaneously, the total number of poor population, open unemployment, the food sector budget and line poverty has a significant influence on the HDI variable in Lampung Province. Which means H0 is rejected and H1 is accepted. To find out the regression model that was made is correct, namely by using the value of F in F Table. From the results of regression calculations it is known that the calculated F value is obtained at 12.39. If compared to the F table obtained at 9.12 (DF1, 5-1 = 4 and DF2, 8-5 = 3), then the calculated F is more greater than the F table with the decision-making criteria hypothesis testing results, namely:

If F arithmetic > F table, then H₀ is rejected, H₁ is accepted.

If F arithmetic < F table, then H₀ is accepted and H₁ is rejected (Table 4).

Table 4. Statistical Test Results F

Source	DF	SS	MS	F	P
Regression	4	19.0861	4.7715	12.39	0.033
Residual Error	3	1.1549	0.3850		
Total	7	20,2410			

The results of calculations with minitab 15 obtained the calculated F value of 12.39 > F table of 9.12. Thus H_0 is rejected, and H_1 is accepted. This means that there is a linear relationship between the variables of the number of poor people, open unemployment, food budget and poverty line on the Human Development Index. With this value Sig 0.033 < 0.05. So that there is a significant positive effect between the independent variables (the number of poor people, open unemployment, APBD in the food sector and the poverty line) simultaneously on the dependent variable (HDI) at the 95% confidence level. Then the conclusion is the regression model above is feasible and correct.

4 Discussion

Based on the multiple linear regression analysis jumla poverty, unemployment, and poverty has a negative correlation with the HDI. While the budget sector of Pang 's have a positive relationship to the HDI. If the number of poor people decreases by 1%, then HDI rises 0 0007%. If open unemployment falls by 1%, then HDI rises by 165%. If the food sector budgetary budgeted by the Lampung Provincial Government from 2011–2018 turns out to have a positive and significant effect on HDI at the level of 5%. That is, the higher the food sector budget APBD issued, it will increase the HDI of Lampung Province. Based on the coefficient value that is positive, it can be concluded if the food sector APBD increases by 1%, then the HDI will increase by 11.5%. If the poverty line goes down 1%, the HDI rises by 0 0002%. If the poverty line falls by 1%, the HDI will rise by 0 0002%. The number of poor people is closely related and also determines the development process that prioritizes community participation. The development paradigm that has now shifted from the dominance of the role of the state to the role of society will not be realized if the number of poor people is still significant enough. This is because in general, poor people spend more energy and time available to fulfill basic needs. They are not interested in engaging in activities that are not directly related to meeting basic needs. The results of these studies make it clear that the higher the population of the poor will depress human development rates, because the poor have low purchasing power [10]. The lower the number of poor people in Lampung Province, the HDI will increase.

Relatively open unemployment in Lampung Province shows a decrease from 4.43% in February 2017 to 4.33% in August 2017. When compared to August 2016 (4.62%), unemployment is down 0.29 points. Lampung's unemployment rate is still below the national unemployment rate. In August 2017 the national Open Unemployment Rate (TPT) was 5.50%. If you look closely this number continues the downward trend

of 5.61%. With the decrease in unemployment, the HDI of Lampung province also increased. Relation to the human development index, if the human development index shows good condition, at least a lot of workers are absorbed in employment and the reduction in the number of unemployed people of productive age [11].

HDI negatively affects the poverty line, meaning that the higher the HDI level in Lampung Province, the lower the poverty line in Lampung Province. This is consistent with what has been explained by Kanbur and Squire that improvements in education and health will be able to reduce poverty. Whereas the food sector budget has a positive influence on HDI. if the food sector APBD increases by 1%, the HDI will increase by 11.5%. In the context of increasing food security, the Lampung Province government is trying to provide appropriate APBD budget funds for increasing food security. What is the aim? Namely, to meet the food needs of the people of Lampung can be met so as to create a safe, quality, nutritious, diverse and sufficiently available food, so as to provide health security and play a role in improving the prosperity and welfare of the people of Lampung so that the HDI also increases.

5 Conclusion

The number of poor people, open unemployment and poverty lines with Lampung Province HDI has a negative effect. The food sector budget has a positive effect on the HDI of Lampung Province. However, for all variables, based on the hypothesis test, the analysis of variance results is shown for the value of P regression that is equal to 0.033 where < 0.05 , which means that simultaneously (overall), the variable number of poor people, open unemployment, APBD of the food sector and the poverty line has a significant influence on the HDI variable in Lampung Province. Which means that H_0 is rejected and H_1 is accepted.

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