

Poverty Status of Households in Urban Areas of Sumatera Island

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ABSTRACT

This study aims to analyze the effect of the sex of the head of the household (X1), the age of the head of the household (X2), the number of household members (X3), the education of the head of the household (X4), and Household Consumption Expenditures (X5) on poverty in urban areas of Sumatra Island. This research uses logistic regression method. From the research results, poverty and demographic factors for household in general have a negative relationship or relationship. Especially for households that are dominated by women. Households that are dominated by women will be considered poorer than households headed by men. Therefore it is very important special attention from the government so that poverty reduction actions prioritize women and reduce gender inequality. So that women no longer tend to be poor

Keywords: Poverty, Demographic Factors, Household, Logistic Regression.

1. INTRODUCTION

One of the very important social indicators in economic development is the reduction of the poverty rate, which will actually have a negative impact and can affect economic development. As a very multidimensional social problem, poverty cannot be seen only as a problem related to a lack of income, which makes the poor unable to fulfill their most basic needs, but more than that, poverty must also be seen as a problem of life for the community

Poverty also has a very broad meaning so that poverty can be seen from various aspects of politics, social, culture, economy, psychology, and education. As one of the most complex problems, poverty must be linked to the needs, difficulties and shortcomings in various life situations. In other words, poverty is also a condition in which the low value of the structure of life in an area, both in urban and rural areas.

In recent years the poverty rate in Indonesia has shown a decline. However, this does not mean that this decline will make the main focus of poverty eradication weak in the future. The Central Bureau of Statistics has published the rankings between provinces on the island of Sumatra with the highest percentage and poverty rate in Sumatra as of September 2018. From the results of the ranking, Aceh, which has large natural wealth and special allocation of funds, even ranks the highest in the poverty rate. The percentage of poor households was 15.68 percent, while the lowest percentage of poor households was in Bangka Belitung Province, which was 4.77 percent

The Sumatra Islands are one of the islands that have a high poverty rate for the large archipelago of Indonesia. Even though the poverty rate in Sumatra has decreased every year, the percentage of people who are below the poverty line until 2019 is still quite high,

even above the average poverty rate in Indonesia, where 9.63 percent are poor households. The cause of poverty in the islands of Sumatra may be triggered by the limited access of the community to basic necessities services, and the empowerment of the poor people. Apart from that, various other external causes also greatly affect the level of poverty in the community, such as the economic turmoil caused by inflation, the lack of focus on poverty reduction programs or activities to intervene directly

In analyzing household poverty, there are several factors that cause poverty, the first is demography consisting of household coconut sex, age of household head, number of dependents in the household. The second is social and economic status. The factors causing household poverty in terms of social and economic status are indicated by the work status of the head of the household, the work status of the spouse and the total consumption expenditure for the household. Third, namely the highest formal education sector that has been achieved by the head of the family and the highest formal education that has been achieved by the spouse in the household.

Based on the characteristics of urban and rural poverty data, urban areas on the island of Sumatra are in the category of having a fairly high number of poor households compared to other large island islands in Indonesia. In addition, the poverty rate in the last year on the island of Sumatra is still relatively high and the reduction in the poverty rate is still weak, where the poverty rate in urban areas on the island of Sumatra is still above the national average poverty rate.

The characteristics of a region will influence the government's efforts to reduce the poverty rate of an area. Identifying the characteristics of poverty in each region in the Sumatra archipelago will assist in the

planning of poverty alleviation programs in accordance with the conditions and situations of each region. Despite the fact that the poverty paradigm has resulted in an unbalanced condition between cities and villages, where the city is the center of growth, while the village is a marginal area and has a high dependence on urban areas. By making cities as centers of growth, it does not mean that urban areas are free from poverty problems. Although the level of poverty in rural areas is much greater, it is not an excuse for us to neglect the focus of poverty in urban areas, but to evaluate why in urban areas there are still households that are categorized as poor.

2. METHOD

This research was conducted on households that have poor characteristics and households that are not categorized as poor who live in urban areas in Sumatra Island that have been surveyed by Susenas 2018. Based

on Susenas data, BPS for the period of September 2018, the total number of poor people who live in Sumatera Island is 2,459.31. and the total percentage of respondents with poor household characteristics who live based on urban areas is 84.15 percent.

This research will use a model written in a model that is formed from the results of the logistic regression analysis, namely:

$$\ln\left(\frac{p}{1-p}\right) = \beta_1 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3 + \beta_5 X_4 + \beta_6 X_5 + u_i, \dots (1)$$

- P = Poor Household
- (1-p) = Not Poor Household
- β_1 = Constant
- β_i = Regression Coefficient ($\beta_1, \beta_2, \dots, \beta_p$)
- β_i = Regression Coefficient ($\beta_1, \beta_2, \dots, \beta_p$)
- X_i = Independent Variable (X_1, X_2, \dots, X_p)
- GnH = Gender of Head of Household
- AgeH = Age of Head of Household
- Numb = Number of Household Members
- EduH = Head of Household Education
- EXPH = Household Consumption Expenditure

3. RESULTS AND DISCUSSION

The results of the logistic regression estimation in this study were processed using STATA with a significance value of $\alpha = 0.05$. If the significance value > 0.05 , the independent variable does not have a significant effect on the dependent variable. Whereas at a significance value < 0.05 , the independent variable has a significant effect on the dependent variable. The following are the results of the logistic regression estimation.

Table 1. Estimation Results of Parameters and Odd Ratio of Logistic Regression in Household Poverty Status in Urban Areas of Sumatra Island in 2018

Variabel	Coef.	Standar Error	Sig.	Odds Ratio
Gender of Head of Household	-0.329	0.064	0.000	0.718
Age of Head of Household	-0.018	0.001	0.000	0.981
Number of Household Dependents	0.370	0.012	0.000	1.449
Head of Household Education	-0.901	0.051	0.000	0.405
Household Consumption Expenditure	0.047	0.002	0.000	1.048
Constant	-5.366	0.179	0.000	0.004

Source: Processed Data Stata14, 2021

In table 1 above, it can be seen that all variables have a significant impact at the significance level $\alpha = 5\%$. The estimated logistic regression equation obtained is as follows:

$$\ln [p/(1-p)] = -5.366 - 0.329GnH - 0.018AgeH + 0.370Num - 0.901EduH + 0.047EXP + u_i$$

From the above equation shows that the intercept value = -5.366, This means $\ln [p / (1-p)] = -5.366$.

The results of the analysis show that the variable sex of the head of the family (X_1) has a negative and significant effect on the probability of poor household status with the parameter -0.329, which means that if a

household is headed by a man it is 0.718 times smaller when compared to households headed by Women.

The results of the logistic regression are scientifically consistent with the theory put forward by [1] where they explain that the sex of the head of the household is believed to affect household poverty, more specifically, households led by women tend to be poorer than male-led households. There is a very strong relationship between poverty and households headed by women, where when a woman is in the position of head of the family, the woman will have a role to support her family or become more responsible for earning a living for family members. A woman with the responsibility of being the head of the family is a

woman who will assume the sole role of supporting her family, so that the woman head of the household is the main responsibility and also has to meet all the necessities of life for her family members.

The variable age of the head of the family (X2) has a negative and significant effect on the parameter of -0.018, which means that the opportunity for a household to be poor when the household has a head of family with a higher age is 0.981 times smaller when compared to households with a lower head of family.

Based on the hypothesis test conducted by [2], the age variable has a negative direction, which means that as the age of the head of the household increases, the possibility of the household being poor decreases. One unit increase in the age of the head of household will reduce the possibility that a family with a poor status will be even greater.

Age is a determining factor in influencing the working time of the head of the household. Where the age factor has a positive effect on income, a person's productivity at work is very much influenced by age, generally someone who is of working age will be able to produce more than those who are further away from working age. Age will also affect the level of work participation (LWP), the level of work participation will increase with increasing age and will decline again before old age or retirement, and the existing population structure in an area will affect the economic activities carried out by the population concerned.

The variable number of family members (X3) has a positive and significant effect on the parameter of 0.370, which means that the opportunity for a household to be poor when the household has more family members is 1,449 times greater when compared to households that have a smaller number of household members.

This result is very consistent with the statement of [1], that the number of household members is very important because it shows a correlation between the level of poverty and household composition. The large number of household members will have an impact on the greater the amount of income used to meet the needs of life. On the other hand, the fewer household members, the more minimal the needs that must be met by a family, so that the level of welfare is high when compared to households that have many household members.

The most important indication that becomes a determining factor in determining whether a household is poor or not is the size or number of members of the household itself. With the increasing number of family members, the family income will also be spent on consumption and non-household consumption costs. The large number of family members will result in poorer conditions.

The education variable of the head of the family (X4) has a negative and significant effect on the

chances of a household getting poor status when a head of family with a higher education than SMA is -0,901 times less likely to be a poor household than the head of a household who has SMA education below when compared to households that have a head of family with a lower education than high school equivalent.

The results of the logistic regression analysis are in accordance with the research conducted by [3] where they found that education has a positive effect on household poverty, where each additional 1 year of education will increase income. A household where the education level of the head of the household is low, the tendency to be poor will be greater than the high level of education.

The characteristics of the higher education level of the head of family in urban areas on the island of Sumatra provide the opportunity to get a more decent and appropriate job, so that the opportunity for families to be released from poverty status is because in obtaining greater income or income to fulfill the need for clothing and food So it is hoped that with an increase in education, gradually the desire of the community to have a more decent life can also be realized.

Consumption Expenditures (X5) have a positive and significant effect on household opportunities to obtain poor status with the parameter for the variable total family consumption expenditure is 0.047 with an odd ratio value of 1.048, which means that the household's opportunity to obtain poor status when the household has more consumption expenditure. high is 0.9999 times greater when compared to households having a lower total consumption expenditure.

The logistic regression results are in accordance with the research conducted by [4] where based on the regression analysis model, it is found that if there is an increase in the level of income, it will increase the level of consumption by the value of the coefficient. This shows that if there is an increase in consumption it will reduce poverty with the assumption that the variables of education level and income are considered constant.

Most households in urban areas may be food insecure due to the low income received by poor families amid the high living needs and consumption costs in urban areas. This situation is thought to be due to the relatively narrow opportunities in urban areas and limited family access to fulfill consumption expenditure needs when compared to rural areas, so that households have limitations in terms of sources of income. It can also be stated that the relatively higher cost of living is not proportional to the income received from work.

The results of the analysis show that together the variables of the Gender of the Head of the Household, the Age of the Head of the Household, the Number of Household Members, the Education of the Head of the Household, the Working Status of the Wife, the

Education of the Wife and the Household Consumption Expenditures have a significant influence on the opportunities for the Poverty Status of the House. Stairs in Urban Areas on the Island of Sumatra.

Based on the Pseudo R2 (Goodness of fit) value of 0.1424%, it can be said of the dependent variable (poverty status) has been explained by the variation of the independent variable where the contribution of the variable is Gender Head of Household (X1), Age of Head Household (X2), Number of Household Members (X3), Education of Head of Household (X4) and Household Consumption Expenditures (X5) on Opportunities for Household Poverty Status (Y) amounted to 14.24%, while the remaining 85.76% was explained by other variables not examined.

4. CONCLUSION

The sex of the head of the family (X1) has a negative and significant effect on the chance of household poverty in urban areas in the Sumatra Islands (Y) at the real level of 5%, which means that if a family is led by a male, the household is classified as poor. become smaller, and vice versa.

The age of the head of the family (X2) has a negative and significant effect on the chances of household poverty in urban areas in the Sumatra Islands (Y) at the real level of 5%, which means that if a family is led by a family head who is more mature and productive, the household opportunity is classified as status. the poor become smaller, and vice versa.

The number of household members (X3) has a positive and significant effect on the chance of household poverty in urban areas in the Sumatra Islands (Y) at the real level of 5%, which means that if a family has a higher number of dependents, the chances of a household being classified as poor bigger, and vice versa.

The education of the head of the household (X4) has a positive and significant effect on the opportunity for household poverty in urban areas in the Sumatra Islands (Y) at the real level of 5%, which means that if a family has a head of family with a small education from high school or equivalent, the household opportunity is classified as poor status becomes greater, and vice versa.

Consumption expenditure (X5) has a negative and significant effect on the opportunity for household poverty in urban areas in the Sumatra Islands (Y) at the real level of 5%, which means that if a family has higher consumption expenditure, the opportunity for households to be classified as poor becomes more small, and vice versa.

REFERENCES

- [1] J. Houghton and S. R. Khandker, *handbook On Poverty and Inequality*. Washington, DC: The World Bank, 2009.
- [2] A. S. Rini and L. Sugiharti, "Faktor-Faktor Penentu Kemiskinan di Indonesia: Analisis Rumah Tangga," *J. Ilmu Ekon. Terap.*, no. 1, pp. 17–33, 2016.
- [3] Y. H. Sa'diyah and F. Arianti, "Analisis kemiskinan rumah tangga melalui faktor-faktor yang mempengaruhi di kecamatan tugu kota semarang," *Diponegoro J. Econ.*, vol. 1, no. 1, pp. 1–11, 2012.
- [4] A. Rahman and M. F. Alamsyah, "Pengaruh Pendidikan, Pendapatan dan Konsumsi Terhadap Kemiskinan Masyarakat Migran Di Kota Makassar," *Ecces (Economics, Soc. Dev. Stud.*, vol. 6, no. 1, p. 111, 2019, doi: 10.24252/ecc.v6i1.9546.