

ANALYSIS OF POVERTY AND SUSTAINABLE LIVELIHOODS OF HOUSEHOLDS IN BENUA LIMA DISTRICT IN EAST BARITO DISTRICT

**Wina Leluni¹, Alexandra Hukom², Pratiwi Subianto³,
Endra Rosana⁴**

¹Graduated from the Faculty of Economics and Business, Palangka Raya University, Palangka Raya, Central Borneo, Indonesia

^{2,3} Lecturer at the Faculty of Economics and Business, Palangka Raya University, Palangka Raya, Central Borneo, Indonesia

⁴Master of Economics Students, FEB, Palangka Raya University, Palangka Raya, Central Borneo, Indonesia

(E-mail: winalleluni@gmail.com)

ABSTRACT

This research aims to analyze the characteristics of household poverty and examine the factors that influence poverty within the framework of sustainable livelihoods by looking at livelihood strategies (ability to adapt) to the social environment. The research method used in this research is a combined research approach (mixed methods). The data used in this research is primary data obtained from interviews with 55 families as sources. The results of this study show from logistic regression analysis that the gender variable of the head of the household does not cause poverty in Benua Lima District. Meanwhile, the variables of age of the head of the household, income source of the head of the household, ownership of capital assets, and education of the head of the household are the causes of poverty in Benua Lima District. Based on Pentagonal Assets, where sustainable livelihoods are built, it shows that human capital, natural capital and financial capital play a more important role than physical and social capital.

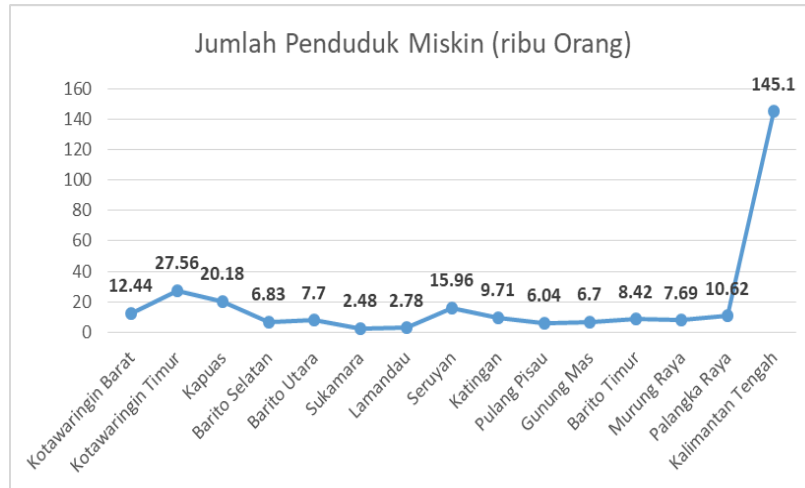
Keywords: Probability of Poverty, Sustainable Livelihood, Pentagonal Assets

INTRODUCTION

The poverty rate or the number of poor people can give an idea of the income condition of the population. Changes in poverty rates can be used as an indicator of population welfare. According to (1), poverty is a person's inability to meet the minimum basic needs to live a decent life. The poverty line set by BPS is the amount of expenditure needed by each individual to meet food needs and with 2100 calories per person per day and non-food needs such as housing, clothing, health, education, transportation, and other goods and services.

The problem of poverty in Central Borneo Province is still high poverty. Central Borneo as one of the provinces in developing countries is faced with the problem of poverty that must be overcome. According to (2), the number of poor people in March 2022 increased by 4.1 thousand people, of which during March 2022 the poverty rate in Central Borneo reached 5.28% or 145.10 (thousand people). Based on data on urban and rural poverty disparities from

September 2021 to March 2022 in Central Borneo Province, it can be seen that urban areas increased by 0.09 points and rural areas increased by 0.13 points. In understanding the problem of poverty in Central Borneo Province, it is necessary to pay attention to the poverty conditions that exist in each region, namely poverty in the Districts / City in Central Borneo Province as follows.



Source: Central Borneo Provincial Bureau of Statistics, 2022

Figure 1. Number of Poor People by District/City in 2022

Several regions in Central Borneo Province that have a fairly high poverty rate include East Barito Regency which ranks 7th (seventh) in 2022 with a total poor population of 8.42 thousand people sourced from the Central Statistics Agency (BPS) of Central Kalimantan Province. Based on data from (3), the condition of poor people in Barito Timur Regency over the past three years has improved. In 2021, the number of poor people is 6.38% or 8.02 thousand people, while in 2022 the number of poor people is 6.59% or 8.42 thousand people.

The concept of poverty is related to the application of a sustainable livelihood approach in rural areas, focusing on improving the welfare of poor farming households. If peasant households had access to different types of capital, then they would be able to provide enough food, water, sanitation, fuel and shelter, thus achieving basic prosperity. However, in contrast to the sustainable livelihood approach in urban areas, the focus on addressing the needs of poor households can be seen from the dependence on markets (and cash economies) for the provision of labor, land and housing and organized services (for water, sanitation and energy). The interaction of urban poor households with government structures moves faster than most rural households, the level of income required to avoid poverty is higher due to the high cost of non-food goods, and the way in which markets and services operate is important.

In this study, the poor households analyzed are first, poverty is essentially a mirror of household conditions. Second, if data on poor households are found, interventions against households will be more effective than poverty interventions on individuals, which tend to lead to the view that poor people have characteristics as causes of poverty. Third, data on poor households is easier to develop than data on poor individuals (4).

Table 1. Number of Poor RTs by Village in Benua Lima District in 2022

Village	Number of Poor Households
Bagok	12
Bamban	31
Tewah Pupuh	30
Kandris	13
Kelurahan Taniran	23
Banyu Landas	11
Gudang Seng	2
Benua Lima	122

Source: Kasi Social Welfare Benua Lima District, 2022

Poverty in Benua Lima District in each village can be seen in table 1.1 there are still many poor households. In 2022, Bamban village has the highest number of poor households, namely 31 households, then Tewah Pupuh village with 30 households, Taniran village with 23 households. The village has the poorest households in Benua Lima District. Looking at the data in table 1.1, poverty is the center of attention of the Benua Lima District government. This is because, in addition to the majority of people's work as rubber farmers, Benua Lima District also has a high level of household poverty. Based on the phenomenon that in Benua Lima District has a high number of poor households. Therefore, the study tried to see what factors affect the number of poor households in relation to Sustainable livelihoods.

METHOD

Definition and Concept of Poverty

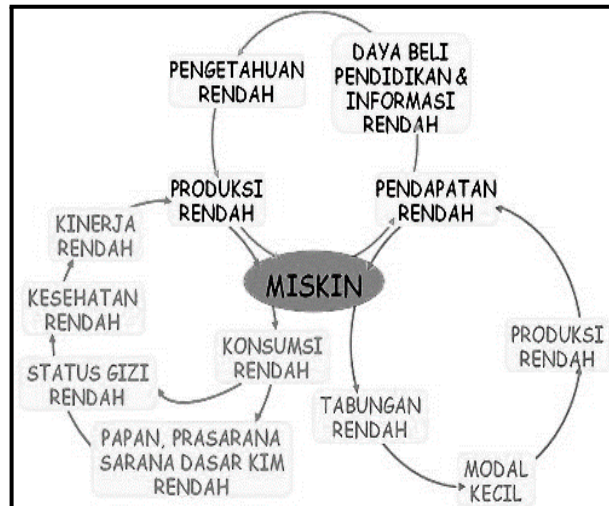
The World Bank (2000) in (5), defines that poverty is deprivation, which is often measured by the level of welfare. More complete poverty related to housing, illness and inability to see a doctor, not being able to go to school and not knowing to read and write. Poverty is when you don't have a job so you are afraid to look to the future, you don't have access to clean water sources. Poverty is powerlessness, lack of representation and freedom.

Based on the concept of poverty which is seen as a form of multidimensional problems, including 2 forms, namely absolute poverty and relative poverty. Absolute poverty is a condition in which a person's or family's income is below the poverty line so that it is insufficient to meet the standard needs for food, clothing, health, housing, and education needed to improve the quality of life. Relative poverty is defined as a form of poverty that occurs due to the influence of development policies that have not reached all levels of society, causing income inequality or inequality in welfare standards (6).

Poverty Theory

According to (7), in understanding poverty, there are several paradigms or grand theories, one of which is the Neo-Liberal paradigm theory, where poverty is a group problem caused by the weaknesses or life choices of the individual concerned. Poverty will disappear if market forces are expanded to the greatest extent and economic growth is greatly increased. In poverty alleviation must not be temporary. Not only involving families/households, non-governmental groups or religious institutions.

Below is a picture of the circle of poverty popularized by Ragnar Nurkse which will explain about how the culture of poverty is passed from one generation to the next as follows (8):



Source: Ragnar Nurkse (1953) in Kuncoro (2000)

Figure 2. Poverty Circle

The circle of the poverty paradigm is a picture of infinite causality relationships, so it can be explained as follows; Low domestic income due to low productivity results in increasing poverty, increasing poverty causes low domestic savings rate, low domestic savings rate will cause low level of domestic investment, low domestic capital flow in a region resulting in an area lack of capital. This results in a decrease in the level of domestic productivity to be low, low domestic productivity results in low domestic income, and so on, thus forming a circle of poverty paradigms as shown above.

According to (9), people become poor due to low human capital, such as education, training, or the ability to build. They also have a very small amount of physical capital. Furthermore, if they have the opportunity to work because of discrimination.

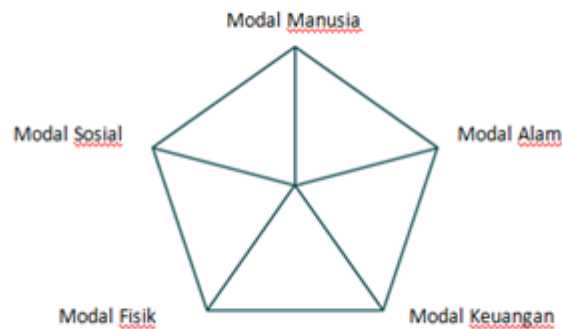
Poverty at the Household Level

According to (10) the main or most related causes of poverty include three characteristics, namely the characteristics of the region, society, and households and individuals. The characteristics of the territory include vulnerability to floods or typhoons, remoteness, the quality of government, as well as the right to own and implement it. While community characteristics include the availability of infrastructure such as (roads, water, and electricity), services (health and education), proximity to markets, and social relations. Furthermore, household and individual characteristics are seen from demographic aspects such as (number of household members, age structure, dependency ratio, and gender of the head of household), economic aspects such as (employment status, working hours, and property owned), and social aspects such as (health and nutrition status, education, and residence).

Sustainable Livelihoods Theory

Chambers and Conway in "Sustainable rural livelihoods: Practical concepts for the 21st Century" (11) define livelihood based on people with abilities and ways of life including food, income and assets (both tangible assets in the form of resources and supplies, and intangible assets in the form of claims and access). A livelihood is environmentally sustainable, when it can be managed or improved both locally and globally and can benefit the livelihoods of others. The livelihood framework identifies 5 (five) main asset categories or types of capital on which livelihoods are built, referred to as The Pentagonal Assets. The Pentagon was

developed to allow information about community assets to be presented visually, which can illustrate the relationships between these assets (12).



Source: translated from DFID, "Sustainable Livelihoods Guidance Sheets," 1999

Figure 3. Diagram Pentagon Assets

The five assets include human capital, such as skills, experience, knowledge and creativity; natural capital, such as resources such as land, water, pasture, and minerals; physical capital, such as houses, tools and machinery, food or livestock stocks, jewelry and agricultural equipment; financial capital, such as money in savings accounts or old socks, loans or credit; and social capital, covering the quality of relationships between people, for example, whether one can count on support from one family or help from neighbors (mutual).

The type of research according (13–17) mix methods is a research method by combining two research methods at once, qualitative and quantitative in a research activity, so that more comprehensive, valid, reliable, and objective data will be obtained. This study uses primary data, obtained directly from original sources (not through intermediaries) which can be in the form of opinions of subjects (people) individually or in groups, observations, events or activities (18). The data used in this study are gender, age, source of income of the head of household, ownership of capital assets, and education of the head of household obtained from interviews with resource persons (heads of households) limited only to those in Benua Lima District, Barito Timur Regency with a population of 122 poor households in 2022 sourced from the Social Welfare Office of Benua Lima District based on data from the Village Community Empowerment Office and Social (DPMD SOS) Barito Timur Regency. Samples were taken using the Yamane technique quoted by Rakhmat in Akdon (2008) as many as 55 households below the poverty line domiciled in 5 villages (Bamban, Tewah Pupuh, Taniran, Kandris, and Bagok) in Benua Lima District, Barito Timur Regency.

The data analysis technique (19) used is logistic regression analysis with the help of data processing SPSS Software (Statistical Package For Social Science) version 25. According to (20), logistic regression analysis is a regression that tests whether there is a probability that the occurrence of the dependent variable can be predicted by the independent variable. The logistic regression analysis (logit model) used can be formulated as follows:

$$Li = \ln \left(\frac{P_i}{1 - P_i} \right) = \beta_0 + \beta_1 G + \beta_2 A + \beta_3 S + \beta_5 C + \beta_6 E + \varepsilon$$

Information:

Li = Logit

\ln = Natural logarithms

P_i = Probability of Poverty

β_0 = Intercept
 $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8$ = Regression parameters (coefficients)
 G = Gender of head of household
 A = Age of the head of household
 S = Source of Income of the head of household
 C = Capital Asset Ownership
 E = Education of the head of the household

Logistic regression analysis has three tests including, namely the test together (simultaneous), partial test (respectively), and the Goodness of Fit Test (20).

MAIN RESULT

Characteristics of poor households in Benua Lima District

The characteristics of poor households in this study are viewed from the gender of the head of household, age of the head of household, number of household members, source of income of the head of household, ownership of capital assets, education of the head of household, fuel for cooking, and income of the head of household. The data from this variable was obtained from the interview results as follows.

Probability of Poor Households

The probability of poor households is indicated if the household income is lower than the poverty line (Rp.500,000/month), then there is a tendency for the household to be poor. The expenditure of poor households in Benua Lima District is presented in the following table.

Table 2. Probability of Poor Households in Benua Lima District

Village	Poor Household Income (monthly)		Total
	>Rp.500.000	<Rp.500.000	
Taniran	5	6	11
Tewah Pupuh	5	6	11
Bamban	6	5	11
Kandris	8	3	11
Bagok	2	9	11
Benua Lima	26	29	55
Percentage	47,3%	52,7%	100%

Source: Questionnaire (Processed Data from Research Results) June 2023

Based on table 2. above, household income below the poverty line is 52.7% or 29 Family Heads (KK), while households above the poverty line are 47.3% or 26 Heads of Families (KK).

Gender of Head of Poor Household

The gender of the head of poor households in Benua Lima District obtained the results as presented in the following table.

Tabel 3. Gender of Poor Head of Household in Benua Lima District

Village	Gender of Head of Household		Total
	Man	Woman	

Taniran	3	8	11
Tewah Pupuh	2	9	11
Bamban	2	9	11
Kandris	0	11	11
Bagok	4	7	11
Benua Lima	11	44	55
Percentage	20%	80%	100%

Source: Questionnaire (Processed Data from Research Results) June 2023

Based on table 3 above, the gender of the head of a poor household headed by a man is 20% or 11 Heads of Families (KK), while poor households headed by women are 80% or 44 Heads of Families (KK).

Age of the Head of Poor Household

If the older a head of household increases, there will be a possibility of the household becoming poor. For this reason, the age of the head of poor household in Benua Lima District can be seen in the following table.

Table 4. Age of Poor Head of Household in Continent Lima District

Village	Age of Head of Household		Total
	20-49	50-80	
Taniran	2	9	11
Tewah Pupuh	3	8	11
Bamban	4	7	11
Kandris	8	3	11
Bagok	3	8	11
Benua Lima	20	35	55
Percentage	36,4%	63,6%	100%

Source: Questionnaire (Processed Data from Research Results) June 2023

Based on table 4 above, it is known that the age of heads of households from the age of 50-80 years is 63.6% or 35 families while those from the age of 20-49 years are 36.4% or 20 families in Benua Lima District.

Source of Income for the Head of Poor Household

The source of income for the head of poor households in Benua Lima District is obtained as shown in the following table.

Table 5. Source of Income of Poor Head of Household in Benua Lima District

Village	Source of Income of the Head of Household		Total
	Formal	Informal	
Taniran	2	9	11
Tewah Pupuh	3	8	11
Bamban	4	7	11
Kandris	8	3	11

Bagok	3	8	11
Benua Lima	20	35	55
Percentage	36,4%	63,6%	100%

Source: Questionnaire (Processed Data from Research Results) June 2023

Based on table 5 above, it is known from the data that the source of income for the head of poor households is informal (not working) which amounted to 63.6% or 35 households dominating in Benua Lima District. Meanwhile, the source of poor household heads is formal (rubber farmers) by 36.4% or 20 households.

Capital Asset Ownership of Poor Households

Ownership of household capital assets becomes one that determines the presence or absence of savings (money or gold). See the following table.

Table 6. Capital Asset Ownership of Poor Households in Benua Lima District

Village	Household Capital Asset Ownership (Savings)		Total
	Have	Don't Have	
Taniran	5	6	11
Tewah Pupuh	5	6	11
Bamban	3	8	11
Kandris	5	6	11
Bagok	3	8	11
Benua Lima	21	34	55
Percentage	38,19%	61,81%	100%

Source: Questionnaire (Processed Data from Research Results) June 2023

Based on table 6. From the data it is known that what dominates is the absence of ownership of capital assets such as savings (money or gold) in poor households in Benua Lima District. On average, poor households do not have savings of 61.81% or 34 households. Meanwhile, poor households have savings of 38.19% or 21 households.

Education of Poor Household Heads

Education of the head of the household is one that determines whether or not a household is poor or not poor. The number of poor households in Benua Lima District is presented in the following table.

Table 7. Education of Poor Heads of Households in Benua Lima District

Village	Head of Household Education		Total
	SMA	Low from SMA	
Taniran	0	11	11
Tewah Pupuh	1	10	11
Bamban	1	10	11
Kandris	3	8	11
Bagok	0	11	11
Benua Lima	5	50	55

Percentage	9,1%	90,9%	100%
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Source: Questionnaire (Processed Data from Research Results) June 2023

Based on table 7 above, the education of the head of poor households who took the last high school education was 9.1% or 5 Heads of Families (KK), while the heads of poor households who took the last education were low from high school by 90.9% or 50 Heads of Families (KK). Logistic regression analysis, namely by looking at the influence of Gender of Head of Household (Gender), Age of Head of Household (Age), Source of Income of Head of Household (SIHH), Ownership of Household Capital Assets (Assets), and Education of Head of Household (Education) on the Probability of Poverty (Poverty) of households in Benua Lima District.

Table 8. Results of Logistic Regression Analysis

Variable	Coefficient	S.E.	Wald	Sig.	Odds Ratio
Gender	-0,900	0,970	0,861	0,354	0,407
Age	0,336	0,112	8,985	0,003	1,400
SIHH	-4,109	1,705	5,808	0,016	0,016
Assets	1,641	1,057	2,409	0,121	5,158
Education	-3,323	2,219	2,243	0,134	0,036
Constant	-12,475	4,191	8,859	0,003	0,000
Number of Observations		50,210			
Likelihood Ratio		25,872			
LR (prob)		0,000			
Pseudo R2		0,501			
N=55, Significant 0.05 or 5%					

Source: Results of Data Processing with SPSS 25

Based on table 4.8. which is the result of the analysis of logistic regression can be formulated logistic regression equation as follows:

$$Li = \ln \left(\frac{P_i}{1 - P_i} \right)$$

$$= -12,475 - 0,900 G + 0,336 A - 4,109 S + 1,641 C - 3,323 E + e$$

Logistic regression analysis has four model tests, namely, Assessing the overall Model (Overall Model Test), Testing the Feasibility of the Regression Model (Goodness Fit Test), Coefficient of Determination (Nagelkerke R Square), and Classification Matrix. In the test together obtained a calculated value greater than t_{table} ($25.872 > 2.404375$) with a significance level ($0.000 < 0.05$), then H_0 is rejected and H_1 is accepted. That is, all independent variables (gender of head of household, age of head of household, source of income of head of household, ownership of capital assets, and education of head of household) together are statistically significant in influencing variation of the dependent variable (probability of poverty). While partial testing is based on table 8. Test results can be obtained using logistic regression analysis, as follows:

The gender of the Head of Household from the results of the wald test (t) shows that the calculated value is smaller than t_{table} ($0.861 < 2.009575$) and the probability value is greater than its significant level ($0.354 > 0.05$) with a negative coefficient value of 0.900. Based on

the results of the test stated that H_0 was accepted. This means that the gender variable of the head of household does not affect and is not significant to the variable probability of poverty with a negative coefficient value.

The age of the Head of Household from the results of the wald test (t) shows that the calculated value is greater than ttable ($8.985 > 2.009575$) and the probability value is smaller than its significant level ($0.003 < 0.05$) with a positive coefficient value of 0.336. Based on the test results, it states that H_0 is rejected. This means that the age variable of the head of household affects and significantly the variable probability of poverty with a positive coefficient value.

Source of Income of Head of Household from the results of the wald test (t) shows that the calculated value is greater than ttable ($5.808 > 2.009575$) and the probability value is smaller than its significant level ($0.016 < 0.05$) with a negative coefficient value of 4.109. Based on the test results, it states that H_0 is rejected. This means that the variable source of income of the head of household affects and significantly the variable probability of poverty with a negative coefficient value.

Capital Asset Ownership from the results of the wald test (t) shows the results that the calculated value is greater than ttable ($2.409 > 2.009575$) and the probability value is greater than its significant level ($0.121 > 0.05$) with a positive coefficient value of 1.641. Based on the test results, it states that H_0 is rejected. This means that the variable of ownership of capital assets affects and does not significantly variable the probability of poverty with a positive coefficient value.

Education of the Head of Household from the results of the wald test (t) shows the results that the calculated value is greater than ttable ($2.243 > 2.009575$) and the probability value is greater than its significant level ($0.134 > 0.05$) with a negative coefficient value of 3.323. Based on the test results, it states that H_0 is rejected. This means that the education variable of the head of the household affects and does not significantly the variable of poverty probability with a negative coefficient value.

Next Test Goodness of Fit, Based on Table 4.8. obtained from the results of regression analysis shows that the value of pseudo value R^2 or Nagelkerke R Square is limited to only 0.501. This means that the independent variables in each model are only able to account for the variation of the dependent variable only 50.1%. While the rest is explained by other variables outside the model of this study, which is 49.9%.

Overview of Sustainable livelihoods in Benua Lima District, Barito Timur Regency

The results of the sustainable livelihoods analysis, the concept where sustainable life can be built refers to the maintenance or increase of resource productivity in the long term. How a household secures a sustainable livelihood in various ways such as through ownership of land, livestock or crops; the right to graze, fish, hunt or gather (gather); through well-paid work; or through a diverse mix of activities" (11).

Based on the above data from 5 (five) main asset categories or types of capital on which livelihoods are built, which is referred to as The Pentagon Assest (Pentagonal Assets) it is very clear that human capital and natural capital play an important role. Based on the processed questionnaire data, it shows that most household incomes below the poverty line are 52.7% or 29 households in Benua Lima District. And most of the ages of poor heads of

households range from 50-80 years, which is 63.6% or 35 families in Benua Lima District. Which is seen from the results of observations where the heads of poor households in the age group of 50-80 years have decreased their productivity levels when compared to the heads of poor households who are younger.

This can be seen from the results of observations where some household income that is below the poverty line does not work because of old age and income obtained from their children or relatives, while household income above the poverty line is 47.3% or 26 households where the main job is as rubber farmers. This indicates that human capital seen from the productive age has better probability than the non-productive age (elderly) in sustainable livelihoods, because it has good health, which is also supported by skills, experience, knowledge and creativity. Similarly natural capital is considered very important in rural areas, while in urban areas it is considered less relevant compared to shelter and labor wages. In addition, in the study of urban livelihoods, basic infrastructure such as transport, water and energy are largely included in physical capital together with shelter and production equipment (21,22).

Based on the processed questionnaire data, it shows that most of the sources of income for poor household heads are informal (not working), which is 63.6% or 35 households in Benua Lima District. This can be seen from the results of observations where the average head of poor households who are elderly so that they are not productive to work so that their income is from their children or relatives. Meanwhile, the source of income for the formal head of poor households (rubber farmers) is 36.4% or 20 households, this is due to uncertain income as a farmer plus fluctuating rubber price. Physical capital and influential financial capital can be seen from the processed questionnaire data showing that most poor households do not have capital assets in the form of savings (money or gold), which is 61.81% or 34 households in Benua Lima District. This can be seen from the observation that the income obtained by poor households is only enough to meet basic household needs. While poor households that have capital assets in the form of savings (money or gold) amounted to 38.19% or 21 households, this is because although these households have savings, these poor households have capital loans or often called debt. Furthermore, social capital based on field analysis is not enough to help, because relying on support from one family or assistance from neighbors (mutual) is limited and unsustainable.

CONCLUSION

1. The characteristics of poor households in Benua Lima District can be seen from the probability of poor households whose income is mostly below the poverty line, which is 52.7% or 29 households from 55 respondents' households, the gender of poor households headed by women is 80% or 44 households from 55 respondents' households, the age of the head of poor household, mostly in the age group of 50-80 years, which is 63.6% or 35 households from 55 respondents' households, the source of income for the heads of poor households who are mostly informal (not working) is 63.6% or 35 families from 55 respondents' households, most poor households do not have capital assets such as savings (money or gold), which is 61.81% or 34 families from 55 respondents' households, and the education of poor heads of households who mostly took the last education was low from high school, which was 90.9% or 50 families from 55 respondents' households.
2. The gender variable of the head of household is not the cause of poverty in Benua Lima District. Meanwhile, the variable age of the head of household, the source of income of the head of the household, ownership of capital assets, and education of the head of the

household are the causes of poverty in Benua Lima District.

3. Factors that play a role in Sustainable livelihoods seen from Pentagonal Assets show that human capital, natural capital and financial capital factors play a role more than physical and social capital.

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REFERENCES

1. Agency CBPS. Number of Poor People and Percentage of Poverty 2020-2022 [Internet]. 2022. Available from: <https://kalteng.bps.go.id>
2. of Statistics of East Barito Regency CB. Number of Poor People and Percentage of Poverty 2020-2022 [Internet]. 2022. Available from: <https://bartimkab.bps.go.id>
3. Haris MS, Khudori AN, Kusuma WT. Perbandingan Metode Supervised Machine Learning untuk Prediksi Prevalensi Stunting di Provinsi Jawa Timur. *J Teknol Inf dan Ilmu Komput*. 2022 Dec 29;9(7):1571.
4. et al. EHJ. Analysis of factors affecting household poverty in Sulawesi. *J Reg Econ Financ Dev*. 2018;19(07).
5. Maipita I. Measuring Poverty and Income Distribution. Yogyakarta: UPP STIM YKPN; 2014.
6. Suryawati. Micro Economic Theory. Yogyakarta: UPP AMP YKPN; 2004.
7. Suharto E. Looking at Indonesia's Poverty Criteria: Considering Rights-Based Poverty Indicators. Bandung: Yayasan Akatiga; 2009.
8. Kuncoro M. Development Economics: Theory, Problems, and Policy. Yogyakarta: UPP AMP YKPN; 2000.
9. Dowling JM, Valenzuela R. Economic Development in Asia. Second. Singapore: CENGAGE Learning; 2010.
10. Haughton J, Khandker SR. Guidelines on Poverty and Inequality. Jakarta: Salemba Empat; 2012.
11. Chambers R, Conway GR. Sustainable rural livelihoods: practical concepts for the 21st century [Internet]. 1991. Available from: http://publications.iwmi.org/pdf/H_32821.pdf
12. Ashley C, Carney D. Sustainable Livelihoods: Lessons from Early Experience. London: DFID; 1999.
13. Sugiyono. Quantitative, Qualitative and R&D Research Methods. Bandung: Alfabeta; 2011.
14. Sugiyono. Combination Research Methods (Mix Methods). Bandung: ALFABETA; 2015.
15. Sugiyono. Quantitative, Qualitative, and R&D Research Methods. Bandung: ALFABETA; 2016.
16. Sugiyono. Quantitative, Qualitative, and R&D Research Methods. 2018;
17. Tashakkori A, Teddlie C. Mixed Methodology (Combining Quality and Quantity Approaches). Yogyakarta: Pustaka Pelajar; 2010.
18. Sarwono J. Quantitative and Qualitative Research Methods. Yogyakarta: Graha Ilmu; 2006.
19. Sugiyono. Quantitative, Qualitative, and R&D Research Methods. Bandung: ALFABETA; 2017.
20. Ghozali I. Application of multivariate analysis with IBM SPSS 25 program. Semarang: Diponegoro University Publisher Band; 2018.
21. Haan J De, Sturm JE. On the relationship between economic freedom and economic growth. *Eur J Polit Econ*. 2000 Jun;16(2):215–41.
22. Dent D, Dubois O, Dalal-Clayton B. Rural Planning in Developing Countries: Supporting Natural Resource Management and Sustainable Livelihoods. 2013.