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Table of Content

Klau H., Liliweri A., Djani W.

- INFORMATION DISSEMINATION IN DEVELOPING COMMUNITY RESILIENCE IN BORDER REGION: A STUDY AT THE MALAKA REGENCY DEPARTMENT OF COMMUNICATION AND INFORMATICS, INDONESIA; pp. 24-32
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.03
- Direct URL: http://rjoas.com/issue-2022-07/article_03.pdf
- DOAJ Record: https://doaj.org/article/5369430c2d7c4b3ca3f88457bcaba517

Susanto J., Udjianto D.W., Windyastuti

- TESTING OKUN'S LAW ON YOUTH AND ADULT UNEMPLOYMENT; pp. 33-40
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.04
- Direct URL: http://rjoas.com/issue-2022-07/article_04.pdf
- DOAJ Record: https://doaj.org/article/c41bf31d94404cbb97f780718fd8aedf

Putera I W.A.G., Ekawati N.W.

- ROLE OF BRAND IMAGE AND BRAND TRUST IN MEDIATING E-WOM ON REPURCHASE INTENTION OF CHATIME DRINK IN DENPASAR; pp. 41-49
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.05
- Direct URL: http://rjoas.com/issue-2022-07/article_05.pdf
- DOAJ Record: https://doaj.org/article/94aeb479d1734256a7fb7ea7a3fbd24d

Safitri P.G.I., Marhaeni A.A.I.N.

- ANALYSIS OF WOMEN'S QUALITY OF LIFE WITH GENDER EQUALITY DIMENSIONS IN INDONESIA; pp. 50-63
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.06
- Direct URL: http://rjoas.com/issue-2022-07/article_06.pdf
- DOAJ Record: https://doaj.org/article/88585b198f014de383d26d0a2bb94813

Endarwati M.C., Bisri M., Wicaksono A.D., Mulyadi L.

- THE EARTHQUAKE DISASTER RISK BASED-CRITERIA OF TRANSFER OF DEVELOPMENT RIGHTS SENDING AND RECEIVING AREAS IN SEMBALUN DISTRICT OF EAST LOMBOK REGENCY, INDONESIA; pp. 64-77
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.07
- Direct URL: http://rjoas.com/issue-2022-07/article_07.pdf
- DOAJ Record: https://doaj.org/article/6e8802ce6d1e4545bbbe8252c8cb5076

Kusumastuti D., Sutoyo, Sari S.M.

- BATIK WASTE PROCESSING AS AN EFFORT TO A GREEN INDUSTRY IN WONOGIRI OF CENTRAL JAVA,

INDONESIA; pp. 78-83

- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.08
- Direct URL: http://rjoas.com/issue-2022-07/article_08.pdf
- DOAJ Record: https://doaj.org/article/6c942f88749a4a239cbfbb6626512dfa

Rafa A.I., Mulyanto, Sriati

- AGROECOLOGY AS A FOUNDATION IN COMMUNITY EMPOWERMENT THROUGH ECOLOGICAL VILLAGE SCHEMES IN BANGSAL VILLAGE OF OGAN KOMERING ILIR DISTRICT, INDONESIA; pp. 84-91
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.09
- Direct URL: http://rjoas.com/issue-2022-07/article_09.pdf
- DOAJ Record: https://doaj.org/article/69562e5b7f43401cb1f5f1e39abc6260

Sari S.N., Sjarkowi F., Adriani D., Maryadi

- VARIOUS PROBLEMS OF FARMERS AND FACTORS INFLUENCING THEIR DECISIONS TO CONVERT RUBBER PLANTS INTO OIL PALM IN MAUR BARU VILLAGE OF RUPIT DISTRICT, MURATARA REGENCY, INDONESIA; pp. 92-97
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.10
- Direct URL: http://rjoas.com/issue-2022-07/article_10.pdf
- DOAJ Record: https://doaj.org/article/f1320999c0f448fc9600d5bce76f3e4b

Sarbaini, Yanti N.D., Ferrianta Y.

- FARMER RISK ANALYSIS ON SUPERIOR RICE FARMING IN TIDAL SWAMP LAND OF BARITO KUALA DISTRICT, SOUTH KALIMANTAN, INDONESIA; pp. 98-103
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.11
- Direct URL: http://rjoas.com/issue-2022-07/article_11.pdf
- DOAJ Record: https://doaj.org/article/08932d7ba02448f69ddf5f62524c4a8c

Abebele G.M., Zerihun A.A., Gure T.N., Habtemariam D.K., Hadis L.T., Belayineh F.Y.

- FIELD ASSESSMENT OF COMMERCIAL WHEAT VARIETIES, ADVANCED LINES AND TRAP NURSERIES AGAINST YELLOW RUST IN SOUTH EAST ETHIOPIA; pp. 104-110
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.12
- Direct URL: http://rjoas.com/issue-2022-07/article_12.pdf
- DOAJ Record: https://doaj.org/article/a9857164ae224763896c8c38538e75f8

Santosh B., Saurav N., Rubisha B., Bandana T., Anit P.

- ECOFRIENDLY MANAGEMENT OF CERCOSPORA LEAF SPOT, CERCOSPORA COFFEICOLA (BERK & M.A. CURTIS) DISEASE OF COFFEE IN GULMI; pp. 111-123
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.13

Abdurrachman, Djumali, Heliyanto B., Herwati A., Purwati R.D., Yulaikah S., Supriyono, Hidayat T.

Sudarto, Herawati N., Susanti Y., Hidayah B.N.

Widiastuti E., Erawati B.T.R., Wangiyana W.

Ojediran T.K., Ajibade A.M., Raji M.T., Emiola I.A.

Mardjudo A., Mawar, Bhakti F.K., Djamal W.I.P.

Mardiana, Taqiuddin M., Soekardono

- SUSTAINABILITY OF KAMPUNG UNGGUL BALITBANGTAN CHICKEN RAISING BUSINESS IN CENTRAL LOMBOK REGENCY OF INDONESIA: SOCIAL CAPITAL PERSPECTIVE; pp. 160-172
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.19
- Direct URL: http://rjoas.com/issue-2022-07/article_19.pdf
- DOAJ Record: https://doaj.org/article/20e4b2b35c764d86a5d6d181db2a6553

Pusparany S., Wiksuana I G.B.

- THE IMPACT OF CSR DISCLOSURE AND FIRM SIZE ON DIVIDEND POLICY WITH PROFITABILITY AS MEDIATING VARIABLE; pp. 173-181
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.20
- Direct URL: http://rjoas.com/issue-2022-07/article_20.pdf
- DOAJ Record: https://doaj.org/article/59d3b3356dcd4ca6a45d65fc2cb11a4e

Iswara A.M.Y., Astawa I N.D., Suyasa D., Diana W.

- "SUSTAINABILITY MARKETING" TO SUPPORT SUSTAINABLE TOURISM IN BALI; pp. 182-191
- Language of article: English
- Crossref DOI: 10.18551/rjoas.2022-07.21
- Direct URL: http://rjoas.com/issue-2022-07/article_21.pdf
- DOAJ Record: https://doaj.org/article/651a49fc9841479f8de12692243b985b

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DECOMPOSING MULTIDIMENSIONAL POVERTY INDEX IN AGRICULTURAL HOUSEHOLDS OF SOUTH KALIMANTAN, INDONESIA

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ABSTRACT

Poverty is a complex and multidimensional problem, so an approach is needed to complement the unidimensional monetary measurement currently used, especially in agricultural households which have always been associated with poverty. The measurement is intended to see the condition of agricultural household poverty in South Kalimantan in various non-monetary dimensions, in multidimensional poverty. The formation of a Multidimensional Poverty Index (MPI) is carried out using the Alkire-Foster method on the Susenas 2021 data, using 3 dimensions: health, education, and living standards, with 10 indicators. Meanwhile, to analyze the socio-demographic trend towards the incidence of multidimensional poverty in agricultural households, binary logistic regression was used. From the analysis, it is found that the biggest contributor to the multidimensional poverty level is the health dimension, followed by the standard of living and education dimensions. Then from the results of testing socio-demographic factors, it was found that there were five independent variables (regional classification, age of household head, education of household head, number of household members, and business fields of household head) which significantly affected the multidimensional poverty status of agricultural households in South Kalimantan.

KEY WORDS

Agricultural households, multidimensional poverty, Alkire Foster, binary logistics regression.

Poverty is a problem and the main focus of development. Efforts to reduce poverty globally have become a commitment and have been agreed upon by every country around the world in the *Sustainable Development Goals* (SDGs) for the 2015-2030. Even the SDGs make poverty alleviation points (*No Poverty "End Poverty in all its forms everywhere*) as its first goal. Poverty is defined as a condition in which a person is unable to fulfill his basic rights to maintain and develop a dignified life (Bappenas, 2018).

The problem of poverty is always related to the agricultural sector. Todaro and Smith (2011) also make valid generalizations about poverty, that most of the poor live in rural areas, and their main activity is in the agricultural sector. This is proved by BPS data (2021) where 51.33 percent of poor households in Indonesia have the main source of income in the agricultural sector.

South Kalimantan is one of province in Indonesia which makes the agricultural sector a vital sector in its economy. The importance of the role of the agricultural sector in the economy is reflected in the value of the Gross Regional Domestic Product (GDP) in 2021, in which the agricultural sector is the second largest contributor (13.74 percent) after the mining and quarrying sector. In addition, the agricultural sector is the sector that absorbs the most labor in South Kalimantan. In 2021 the agricultural sector will even be able to absorb as much as 31.87 percent of the workforce. This is because most of the The people of South Kalimantan make agriculture their main source of livelihood.

If the poverty of South Kalimantan is seen in aggregate, the percentage of poor people has increased in the last two years, in 2020 by 4.38 percent, increasing to 4.83 percent in 2021. Among these percentages, the majority come from agricultural households. This is supported by BPS data, that there are 36.33 percent in 2020 and 38.41 percent in 2021 poor

households in South Kalimantan have the main source of income in the agricultural sector.

The poverty rate is still considered high, especially in agricultural households, even though the government has always tried to promote poverty alleviation programs including general programs such as the Smart Indonesia Program (PIP), the National Health Insurance Program (JKN-KIS), Family Hope Program (PKH), and Rastra Social Assistance/Non-Cash Food Assistance (BPNT); as well as programs specifically for the agricultural sector such as the Alsintan Program, the Development Program Food Crops and Horticulture (TPH), etc. But the program results isn't optimal because of the incompleteness of the poverty measurement system that using an unidimensional measurement (monetary/economic) even though poverty is multidimensional.

So far, the measurement of poverty only comes from a single dimension (unidimensional) in the form of: monetary dimension (approach to household expenditures), even though poverty has complex and multidimensional. Behind the ease of operation, monetary poverty reaps Some criticisms include Sen (1980) who considers that the poverty approach with using monetary analysis only captures a small part of the magnitude of the problem poverty. Added by Muro *et al.*, (2011) that the existence of data on economic growth at the national level, it is not in line with the decrease in poverty and unemployment rates in developing countries directly.

Therefore, this study wants to establish a multidimensional poverty measurement in order to get a broader picture of poverty conditions (multidimensional) so as to complement the monetary poverty data, especially agricultural households in South Kalimantan. The research uses the Alkire-Foster method and maps it according to the incidence of multidimensional poverty so that it can be used as a policy recommendation to reduce poverty (in general). As well as identifying the socio-demographic factors that most influence the multidimensional poverty status of agricultural households, in order to obtain information related to the characteristics of households at risk for multidimensional poverty, so that the policies implemented are more precise and targeted (specifically).

In this context, the main aim of this study is (1) analyze and map the Multidimensional Poverty Index of agricultural households in districts/cities in South Kalimantan; (2) analyze the socio-demographic factors that have an influence on the multidimensional poverty status of agricultural households in South Kalimantan.

METHODS OF RESEARCH

This research was conducted in South Kalimantan, starting from January until May 2022. This study used secondary data, Susenas KOR and Consumption Module 2021 South Kalimantan compiled by Statistic Indonesia (BPS). Susenas data is *cross section* with household unit sampling. From the total Susenas sample of 8,300 households, the households were further divided as desired, the sample of 3,676 agricultural households spread over 13 districts/cities. The concept of agricultural household was obtained from the 2013 Agricultural Indonesia Census, *Agriculture Household Survey* 2020 and *Eurostat IAHS Statistic* 2003. Agricultural household is a household in which at least one person works in agricultural sector. The scope of agriculture includes the sub-sectors of food crop agriculture, horticultural crops, plantation crops, fisheries, animal husbandry, forestry and other agriculture.

Alkire Foster's Method. This poverty measurement is formed through various aspects to see the different characteristics of poverty and the causes of poverty. MPI is formed from three dimensions: education, health, and living standard and ten indicators. This study also uses ten indicators (Figure 1). There are 3 measures commonly used in measuring multidimensional poverty: H, A, and M_0. First, the multidimensional poverty rate (H) which can be interpreted as the percentage of the population experiencing multidimensional poverty. Second, the intensity of multidimensional poverty (A), the average number of deprivation indicators experienced by the multidimensional poor. The third measure is the multidimensional poverty index (M_0). To calculate and measure multidimensional poverty is carried out by applying the Alkire-Foster method.
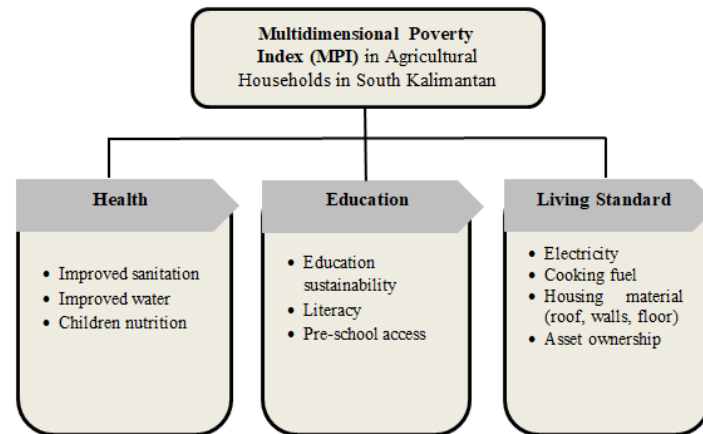
Figure 1 – Dimensions and indicators forming MPI

The stages in the Alkire-Foster method can be described into 12 steps (Alkire and Foster, 2009):

1. Choosing the unit of analysis. This study using the household unit of analysis;
2. Selecting the dimension of poverty. This study uses three dimensions, health, education, and living standard;
3. Selecting poverty indicators and determining the weight of the indicators. The method of weighting is the average of each dimension and indicator;
4. Determining the first cut-off (first poverty) for each indicator (Appendix 1);
5. Apply the first poverty line to the indicators for each household;
6. Calculating the amount of deprivation for each unit of analysis;
7. Determine *second cut-off/* second poverty line (*k*) to indicate multidimensional poor households k = 0.333 where households must be deprived at least 33 percent of the total deprivation indicators to be categorized as poor in a multidimensional manner;
8. Applying the second poverty line to obtain a multidimensional set of poor households;
9. Calculating the multidimensional poverty rate (H) which is the percentage of households categorized as multidimensional poor. $H = \frac{q}{\text{n}}$ where q is the number of households categorized as multidimensional poor, while n is the total household population;
10. Calculating the multidimensional poverty intensity (A) which is the average deprivation that experienced by multidimensional poor households. $A = \frac{\sum_{i=1}^{q} c_{ik}\, p}{q}$ where: is the total individual deprivation multidimensional poor, p is household members, q is the number of poor people (number of poor multidimensional household members);
11. Calculating the Multidimensional Poverty Index (M_0) which is a combination of H and A.

$$M_0 = H \; x \; A$$

12. Decomposing based on population groups or based on dimensions according to the needs of the analysis. In this study, the contribution of each dimension and indicator in MPI will be analyzed.

Binary Logistics Regression Method. To determine what factors influence the multidimensional poverty status of agricultural households, a test was conducted using binary logistic regression. Binary logistic regression is a mathematical model that can describe the relationship between several independent variables (X) with a dichotomous/binary dependent variable (Y). The data to be analyzed in this section is related to the dependent variable (multidimensional poverty status) and independent variables

(region classification, gender of household head, age of household head, education of household head, number of household members, land ownership and business field of household head).

Likelihood ratio test is used to simultaneously test whether the explanatory variables together can affect the response variables (Hosmer and Lemenshow, 2000). The hypothesis used is $H_0 : \beta_1 = \beta_2 = \cdots = \beta_v = 0$ (There is no significant effect of the independent variable simultaneously on the dependent variable), and H_1 : there is at least one $\beta_v \neq 0$ (there is at least one explanatory variable i which has a significant effect on the response variable) with i = 1,...,v where v is the number of independent variables. The statistics used are $G = -2\ln\frac{L0}{L1}$. The test statistic will reject H_0 if $G > X^2$ (v,α) or p-value < α. In other words, there is at least one independent variable i which has a significant effect on the dependent variable.

Wald's statistic is used to partially test the effect of the independent variable. The hypotheses used are $H_0 : \beta_v = 0$ (the i-independent variable has no significant effect on the dependent variable) and $H_1 : \beta_v \neq 0$ (the i-independent variable has a significant effect on the dependent variable) with i = 1,...,v. The statistics used are $W = \frac{\hat{\beta}j}{\text{SE}(\widehat{\beta J})}$. The test statistic will reject H_0 if $W^2 > X^2$(v,α) or p-value< α. In other words, the i-th independent variable has a significant effect on the dependent variable.

To test the suitability of the model to find out whether there is a difference between the results of the observations and the predictions of the model that has been formed. To test the suitability of the statistical test used Hosmer and Lemeshow (Hosmer and Lemeshow, 2000). The hypotheses used are H_0 : Model fit and H_1 : Model does not fit. The statistic used is $\hat{C} = \sum_{h=1}^{g} \frac{(O_h - n_h\bar{\pi}_h)^2}{n_h\bar{\pi}_h(1-\bar{\pi}_h)}$. with: g the number of groups, O_h the number of values of the dependent variable, $\bar{\pi}_h$ estimated average probability, n_h the number of subjects in group h. The statistic is rejected if $\hat{C} >$ χ2 (α, v-2) or p-value < α. In this test, it is expected that the decision will fail to reject H_0 so that the model formed is fit.

Last step is the odds ratio which is a measure to determine the tendency of a certain event between categories in one variable, to see how much the independent variable tends to affect the dependent variable. The odds ratio value is obtained from the exponential value of β.

RESULTS AND DISCUSSION

Multidimentional Poverty Profile. Providing multidimensional poverty data at the national and provincial levels, multidimensional poverty measures can also be broken down by district/city to show in-depth disparities in agricultural household poverty within each area. The figure used is a multidimensional measure of poverty because comparisons can be made between regions to determine priority areas in regional development and distribution of poverty assistance.

Table 1 – Multidimensional poverty measurement of agricultural households in South Kalimantan 2021

District/city	H (%)	A (%)	MPI M0
Tanah Laut	10.53	42.88	0.045
Kotabaru	11.71	39.80	0.047
Banjar	8.42	42.05	0.035
Barito Kuala	11.76	53.00	0.062
Tapin	10.04	42.37	0.043
Hulu Sungai Selatan	14.33	40.12	0.057
Hulu Sungai Tengah	14.43	40.30	0.058
Hulu Sungai Utara	16.96	39.90	0.068
Tabalong	17.88	41.18	0.074
Tanah Bumbu	10.81	41.02	0.044
Balangan	12.53	40.11	0.050
Banjarmasin	11.04	41.00	0.045
Banjar Baru	8.54	40.68	0.035
South Kalimantan	9.20	43.52	0.040

Table 2 – *First cut-off* of MPI indicators in agricultural households in South Kalimantan

Dimensions	Indicators	First *Cut-off*
Health	Improved sanitation	Code 1: if the household does not have a public, shared, and own toilet. If alone or together but do not use a goose-neck toilet or do not use the tank as a final disposal site. Code 0: other than stated.
	Improved water	Code 1: if the household has a source of drinking water from unprotected wells/springs, rivers, rainwater and others, as well as households accessing drilled wells/pumps and protected wells/springs but at a distance to the waste collection point/feces less than 10 meters. Code 0: other than stated.
	Children nutrition	Code 1: if the household has children under five (0-5 years) with nutritional intake that is less than the standard balanced nutrition intake. Code 0: other than stated.
School	Education sustainability	Code 1: if the household has school-age children (7-18 years) but never attended school or no longer attend school. Code 0: other than stated.
	Literacy	Code 1: if there are members of the household of productive age who are unable to read and write (Latin, Arabic and other letters). Code 0: other than stated.
	Pre-school access	Code 1: if there are household members aged 3-6 years who do not have access to preschool education services. Code 0: other than stated.
Living Standard	Electricity	Code 1: if the household uses a non-PLN (State Electricity Company) and non-electricity source of lighting. Code 0: other than stated.
	Cooking fuel	Code 1: if the household uses cooking fuels other than electricity and gas, such as kerosene, charcoal, briquettes, and firewood. Code 0: other than stated.
	Housing materials (roof, wall, floor)	Code 1: if the house occupied by the household has the type of roof: bamboo, wood/shingle, palm fiber/rumbia and others; or type of floor: earth/low quality wood/bamboo and others; or the type of wall: bamboo/woven bamboo/wooden rods and others. Fulfilled if two of the three indicators above exist. Code 0: other than stated.
	Asset ownership	Code 1: If the household does not own a car or a motorboat and does not have more than one of the following assets, such as: motorcycles, boats, LCD televisions, air conditioners, water heaters, gas cylinders 5.5 kg or more, refrigerators/ refrigerator, and telephone. Code 0: other than stated.

Source: UNDP-OPHI, Prakarsa, and BPS.

The first poverty indicator is the multidimensional poverty rate (H) which shows the large percentage of the poor. Of the total population in agricultural households in South Kalimantan spread across 13 districts/cities in 2021, it is estimated that 9.20 percent of them live in multidimensional poverty. The number of multidimensional poor people in agricultural households in South Kalimantan by district/city has quite diverse values. Tabalong (17.88 percent), Hulu Sungai Utara (16.96 percent), and Hulu Sungai Tengah (14.43 percent) are the regions with the third highest number of multidimensional poor people in South Kalimantan.

The second multidimensional poverty measure is the intensity / severity of multidimensional poverty which shows how much percentage of a person's indicators are deprived of the selected poverty indicators. The larger A value indicates the greater the number of indicator deprivations experienced by the poor. The intensity of multidimensional poverty in agricultural households in South Kalimantan by district/city has a value in the range of 39 percent to 43 percent for almost all districts/cities. This indicates that each poor resident in an agricultural household in South Kalimantan, on average, is deprived of 3 to 4 indicators out of a total of 10 indicators that make up the MPI.

The third multidimensional poverty measure is the multidimensional poverty indicator (M_0) which shows the multidimensional poverty level that has been adjusted for the multidimensional poverty severity level (A). The Multidimensional Poverty Index (MPI) shows

the typology of poverty in terms of the number of poor people and the severity of poverty experienced. From the calculation of the multidimensional poverty index by district/city, almost all of them have a multidimensional poverty index of agricultural households which is much higher than the provincial poverty index of 0.040. The poverty index value of 0.040 indicates that the multidimensional poor in agricultural households in South Kalimantan experienced 4.00 percent of the total deprivation that would be experienced if all residents were deprived in all indicators making up the MPI.
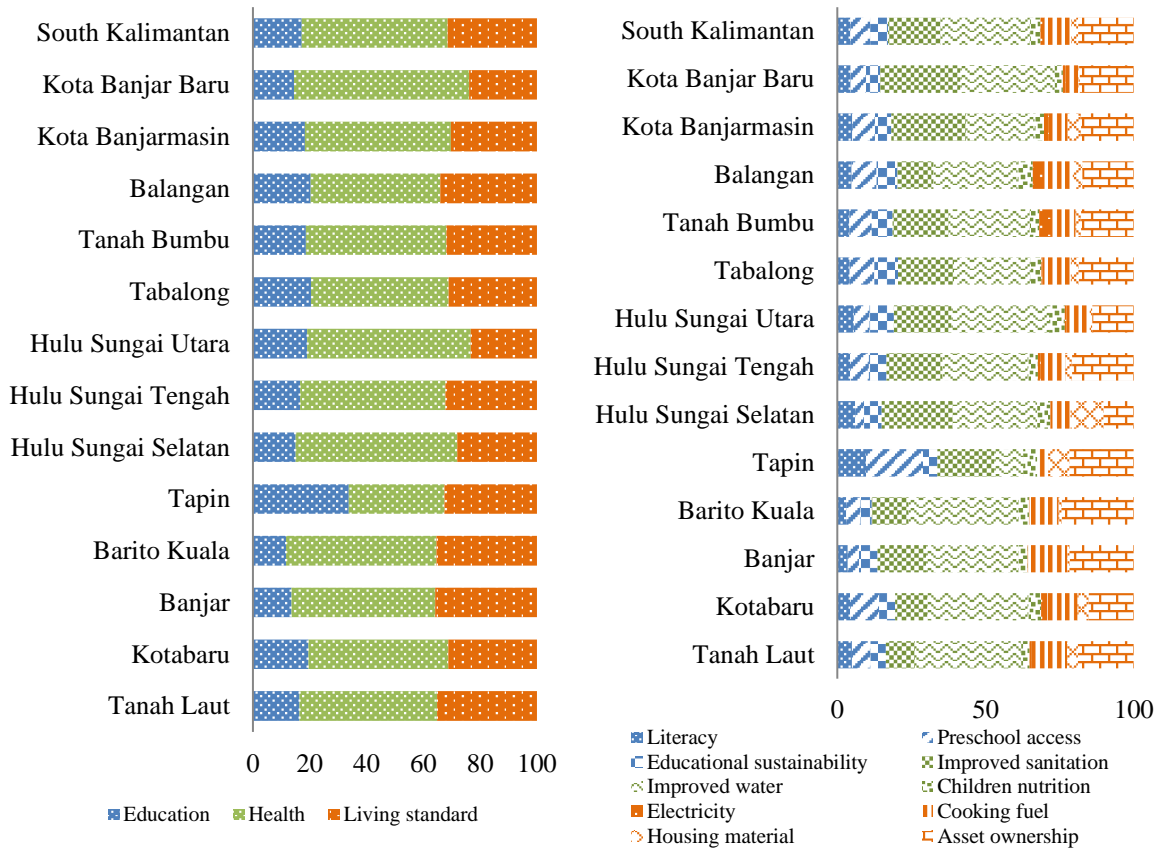

Figure 2 – Contribution of dimensions and indicators to MPI agricultural households
in South Kalimantan, 2021

Deprivation Multidimensional Poverty (Dimensions and Indicators). The multi-dimensional poverty index can be used to determine the role of each dimension and indicator in poverty and to identify priority areas for sustainable poverty alleviation. To achieve this goal, the contribution of each dimension and indicator was calculated and the regional classification of South Kalimantan, especially in agricultural households, was carried out as a focus for poverty alleviation.

In Figure 2 it can be seen that in 2021, the health dimension is the main deprivation of multidimensional poverty that is dominant in agricultural households in South Kalimantan. Then there is the standard of living dimension, and the last dimension is education which gives the smallest contribution to multidimensional poverty.

Indicators of improved water (clean water), improved sanitation, and asset ownership are the main deprivations indicators of the causes of multidimensional poverty in almost all districts/cities. Great contribution the clean water indicator in the poverty index shows the lack of household access to get clean water. The problem of clean water is still a major problem since the first. Even clean water is set in one of the SDG's goals for efforts to eradicate poverty and transforming the economy through sustainable development, with one of the main focuses being on the availability of clean water which is the basis of life (Bappenas, 2019).

Comparison monetary and multidimensional poverty measurement. In multidimensional poverty measure, the poverty rate shows the percentage of the number of multidimensional poor people or people who are deprived in the dimensions of health, education, and a decent standard of living to the total residents in agricultural households. Meanwhile, the monetary poverty rate shows the percentage of the number of poor people, especially agricultural households that fall into the food and non-food poverty line set by BPS. The difference between these two methods lies in the calculations carried out, BPS looks at the expenditures made to meet the needs of a multidimensional household, while the Alkire Foster method looks at the ability of households to access education, health, and living standards. Comparing the results of the calculation of the multidimensional poverty rate with the monetary poverty rate is useful to see the phenomenon of poverty in agricultural households in more depth.
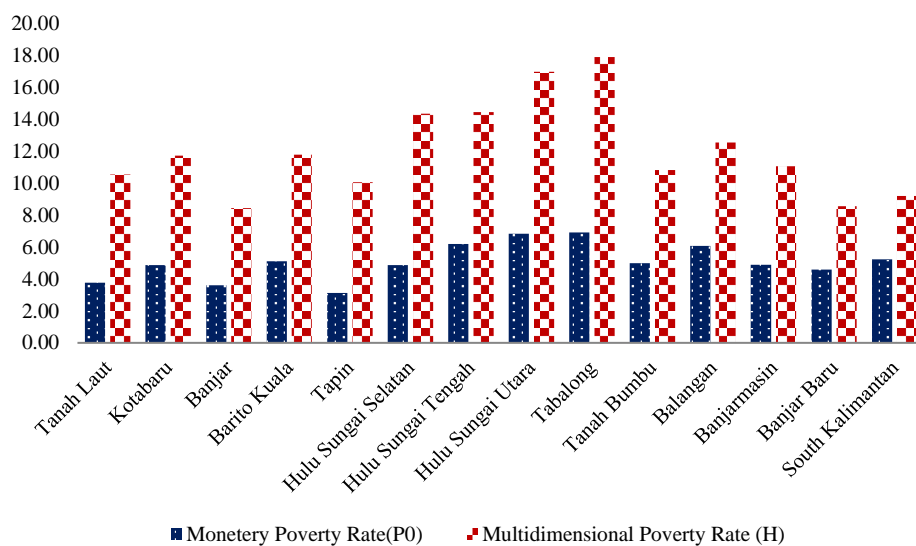

Figure 3 – Multidimensional and monetary poverty rate of agricultural households in South Kalimantan, 2021

Analyzed by area in Figure 3, the overall percentage of multidimensional poverty in 13 districts/cities is always higher than the monetary poverty rate. This indicates that there are people who are not identified as poor in monetary terms but are still experiencing deprivation in various other dimensions of poverty. Tabalong has the first rank as the highest poverty rate (percentage of poor population) both in the monetary poverty category of 6.90 percent and multidimensional poverty 17,88 percent. Tabalong also has the largest gap between monetary poverty and multidimensional poverty. This means that even though the condition of poor people in these areas is better in terms of income, there are still problems of multidimensional poverty where the poor have not yet obtained basic rights such as education, health and a decent standard of living. The next district that has the second highest poverty rate is Hulu Sungai Utara. These two areas can become the main focus areas in the poverty alleviation program in South Kalimantan.

Spatial Poverty Analysis. The use of maps as a spatial analysis of poverty makes it easy to observe the incidence of poverty between regions. The making of this spatial map is based on multidimensional poverty index data in 13 districts/cities in South Kalimantan. The index categorization will range from 0 to 1, which also refers to the concept of index category division by BPS. The category of multidimensional poverty index in agricultural households is divided into five categories. The details of the categories are very low (< 0.050), low (0.050-0.149), moderate (0.150-0.249), high (0.250-0.349), and very high (≥ 0.350).
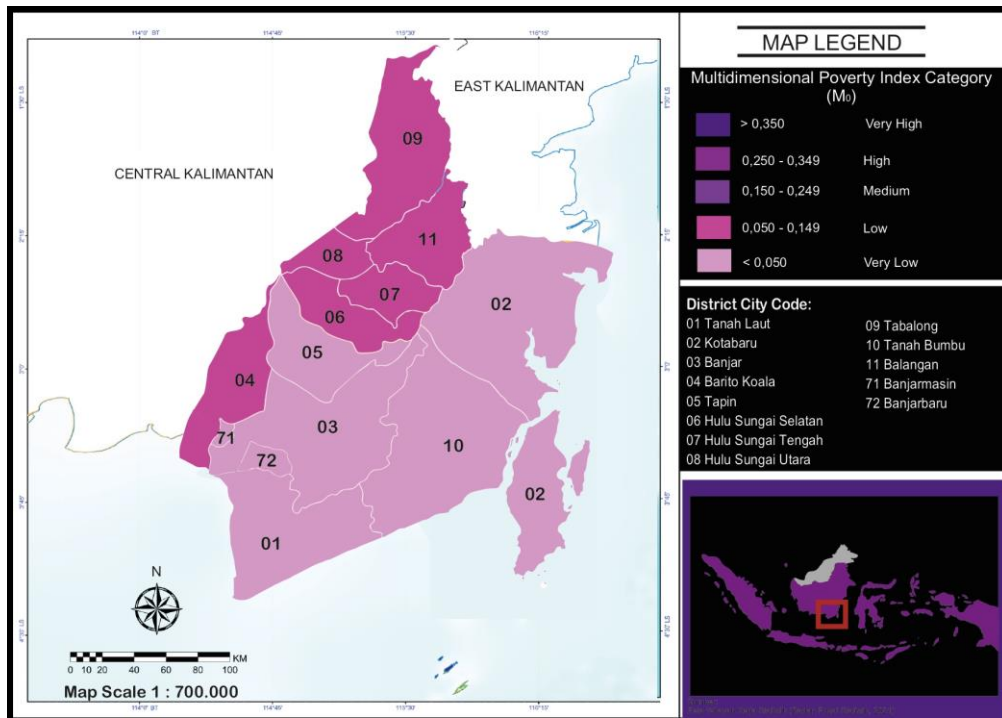
Figure 4 – Map of the distribution of the Multidimensional Poverty Index (MPI) in South Kalimantan, 2021

In Figure 4 regarding the multidimensional poverty index in agricultural households, the majority of districts have a multidimensional poverty index level in the very low category or at values less than 0.050. Several districts that have a low poverty rate category with a value of 0.050 to 0.149 include: Barito Kuala, Hulu Sungai Selatan, Hulu Sungai Tengah, Hulu Sungai Utara, Tabalong and Balangan. This indicates that the multidimensional poor in agricultural households in the 6 districts experienced 5.00 to 14.99 percent of the total deprivation that would be experienced if all residents were deprived in all indicators making up the MPI.

The Socio-Demographic Factors on Multidimensional Poverty. Binary logistic regression was used to analyze socio-demographic trends towards the incidence of multidimensional poverty in agricultural households. The independent variables (region classification, gender of household head, age of household head, education of household head, number of household members, land ownership and business field of household head) were tested to see its effect on the dependent variable (multidimensional poverty status) of the agricultural household. The results of the binary logistic regression test are in Table 3.

Table 3 – Partial significance test

Variable	β	Wald	P-value (Sig)	Exp(β)	Conclusion
Constant	-3.43	255.0	0.00	0.03	Reject H_0
Region classification	1.75	66.2	0.00	1.17	Reject H_0
Gender of household head	0.31	2.2	0.13	1.36	Failed to reject H_0
Age of household head	0.31	4.4	0.03	1.37	Reject H_0
Education of household head	0.57	12.7	0.00	1.77	Reject H_0
Number of household members	1.65	108.6	0.00	5.22	Reject H_0
Land ownership	0.17	0.7	0.38	1.19	Failed to reject H_0
Business field of household head	2.66	303.85	0.00	14.30	Reject H_0

From the results of the wald statistical test above, the value of the wald statistic test is greater than χ^2 (0.05, 1) = 3.481 or p-value less than α = 0.05 is in the area classification (X_1), the age of household head (X_3), the education of household head (X_4), the number of household members (X_5), and the business field of household head (X_7), so that these five independent variables have a reject H_0 decision, this indicates that there are five variables

that significantly influence the incidence of multidimensional poverty in agricultural households. Meanwhile, the gender of household head (X_2) and land ownership (X_6) have no significant effect on the incidence of multidimensional poverty.

The first variable, classification of the area of residence, has a positive effect on multidimensional poverty status. This is similar to the research of Murti and Kurniawan (2015) which states that there are more poor households in rural areas than in urban areas. The value odds ratio of the variable with the reference category is rural at 1.173. This means that agricultural households living in rural areas have a 1.173 times higher risk of becoming multidimensional poor than agricultural households living in urban areas. Because the availability of economic facilities and rapid economic growth in urban areas is a means of easy access to employment as a source of household income, so that differences in access due to residence affect the existence of poor households in an area.

The second variable, age of household head, has a positive effect on multidimensional poverty status. Based on the results of research conducted by Sugiyono and Sriningsih (2018) that the age of household head is very influential on the poverty status of the household, because the age of household head who is too young (<15 years) or too old (>64 years) is considered to have no productivity, enough work, so they are more likely to not be able to provide sufficient income for their household. The value odds ratio of the variable with the reference category is non-productive age of 1.371. Agricultural households with non-productive household heads (fewer than 15 years or above 64 years) have a 1.371 times higher risk of becoming multidimensional poor than agricultural households with productive household heads (between 15-64 years).

The third variable is the education of household head which has a positive effect on multidimensional poverty status. This is similar to Pane's (2013) study which revealed that household heads with low education tend to be poorer than those with higher education. The value odds ratio of the variable with the reference category is junior high school and below of 1.773. This means that agricultural households with low education of household head (junior high school and below) have a 1.773 times higher risk of becoming multidimensional poor than agricultural households with high school education (high school and above). Indirectly explaining that the higher a person's education level will differentiate the capacity and capability in social life, including business and income matters.

The fourth variable is the number of household members which has a positive effect on multidimensional poverty status. This is similar to the study by Sadiyah (2012) which concluded that the number of family members had a significant positive effect on household poverty. The value of the odds ratio of the variable with the reference category is more than four people at 5,222. This means that agricultural households with a large number of household members (more than 4 people) have a tendency to be 5,222 times higher risk of becoming multidimensional poor than households, agricultural ladder with a small number of household members (maximum 4 people). This is because the greater the number of household members will affect consumption or household expenditure will increase the tendency of poverty to be higher.

The last variable is business field of household head that has a positive effect on multidimensional poverty status. This is similar to the results of research by Miftahuddin (2011) which found that household heads who work in the agricultural sector have a greater tendency to be poor than household heads who work in the non-agricultural sector. The value odds ratio of the variable with the reference category is the agricultural sector of 14,303. Agricultural households with household heads who work in the agricultural sector have a 14,303 times higher risk of becoming multidimensional poor than agricultural households with household heads who worked in the non-agricultural sector.

CONCLUSION

The health dimension is the largest contribution dimension to multidimensional poverty in agricultural households in South Kalimantan. The indicators of clean water, asset ownership, and sanitation are the main deprivation indicators causing multidimensional

poverty in agricultural households in almost all districts/cities in South Kalimantan. This makes these dimensions and indicators a priority in efforts to reduce multidimensional poverty in South Kalimantan. The percentage of multidimensional poor population is always higher in all districts/cities in South Kalimantan, indicating that there are still residents in agricultural households who are not identified as poor in monetary terms but experience deprivation in various other dimensions of poverty. Areas that need to be the top priority in reducing poverty program are Tabalong, Hulu Sungai Utara and Barito Kuala Regencies, all of which have the highest multidimensional poverty index values.

The relationship between socio-demographic factors and the incidence of multidimensional poverty in agricultural households in South Kalimantan can be described as: there is an influence of several socio-demographic variables (regional classification, age of household head, education of household head, number of household members, and household business field) on multidimensional poverty of agricultural households in South Kalimantan. Business field household head is the variable that has the most influence on the multidimensional poverty status of agricultural households, because it has highest odds ratio.

The South Kalimantan government should not only focus on monetary (economic) programs, but also integrate programs to fulfill health, education and living standards. Because poverty alleviation is not only related to economic welfare but also to increase household capability in accessing vital dimension. The government can adopt a multidimensional poverty measure in order to be able to see the poverty deeply in each district/city, in order to complement the monetary poverty measure. Considering that each region has a different nature and type so that the poverty deprivation (indicator-dimension) will be different, and the poverty alleviation policies needed are also different. In order for the poverty program to be faster and more targeted, a list of identification related to the characteristics of agricultural households that are prioritized to receive assistance is required. The character of this agricultural household can be from the classification of the area, the age of household head, the education of household head, the number of household members, and the business field of household head who has a risk tendency to be poorer.

REFERENCES

1. Alkire, S., & Foster, J. (2009). Counting Multidimensional Poverty: The Poorest and Hungry: Assessments, analyzes, and Actions. International Food Policy Research Journal, 77-89.
2. Amalia, RR, & Kadir. (2019). Multidimensional Poverty Index (MPI) in Agricultural Households in Indonesia. Poverty and Social Protection Conference (pp. 52-66). Bangkok: Tomorrow People Organization. National
3. BPS. (2021). Calculation and Analysis of Indonesia's Macro Poverty in 2021. Jakarta: Central Bureau of Statistics.
4. Budiantoro, S., & et al. (2013). Multidimensional Poverty Index (MPI) Concept and Measurement in Indonesia. Economic Policy Working Paper Initiative, 1-35.
5. Indriani, L., & Setiyono. (2018). Multidimensional Poverty Analysis in Central Java 2011-2013. Journal of Statistical Applications & Computational Statistics V.10.2.2018, 13-24.
6. Murti, SA, & Kurniawan, R. (2019). Analysis of Socio-Demographic Trends in Multidimensional Poverty in Bengkulu 2015. National Conference on Mathematics Research and Learning (KNPMP) IV (pp. 74-86). Surakarta: Muhammadiyah University of Surakarta.
7. Initiative. (2020). Indonesia's Multidimensional Poverty Index 2015-2018. Jakarta: Initiative. UNDP. (2019). How to Build a National Multidimensional Poverty Index (MPI): Using the MPI to inform the SDGs. New York: UNDP.
8. Windria, Y. (2020). Multidimensional Poverty Mapping and Analysis of West Sumatra. Journal of Optimum Volume 10;1, 24-31.