POVERTY ALLEVIATION THROUGH EMPOWERMENT OF VILLAGE-OWNED ENTERPRISES: A CASE STUDY IN DONGGALA REGENCY

Eva Rantung[1], Muhammad Basir[2], Max Nur Alam[3] and Hadayani[4]
[1]Student of Doctoral Study Program in Agricultural Sciences, Postgraduate, Tadulako University,Palu 94118, Indonesia
[2]Department of Agrotechnology, Faculty of Agriculture, Tadulako University, Palu 94118, Indonesia
[3]Department of Agriculture Economics, Agriculture Faculty of Tadulako University, Palu 94118, Indonesia
[4]Department of Agriculture Economics, Agriculture Faculty of Tadulako University, Palu 94118, Indonesia

ABSTRACT

Accelerating economic development in order to achieve village independence is crucial. The principle and most important relationship between rural and urban areas is to utilize a village's economic resources and prioritize economic activities to the fullest. Strengthening economic organizations, such as through the establishment of Village-Owned Enterprises, is one of the phases that needs to be carried out when developing villages. This research aims to analyze poverty alleviation through the empowerment of Village Owned Enterprises. This was done in South Banawa Sub-district, Donggala Regency, Central Sulawesi Province. The number of samples used was 100 respondents. The results of the study show that the poverty line (IDR 291,011) was greater than the average income of the population in 2020 (IDR 231,000), meaning that almost all of the population was categorized as poor. The results also show that the dominant factors that affected the incidence of poverty include: household income, household consumption expenditure, and the existence of Village-Owned Enterprises. Therefore, government policies were needed to help the population solve development problems in order for income to increase.

Keywords: Poverty, Income, Consumption, Village-Owned Enterprises.

1. INTRODUCTION

Accelerating economic development in order to strengthen a village's economy or lead to independence is crucial for a village's survival and the well-being of its population [1]. The most important thing is to utilize a village's economic resources and prioritize economic activities in the village to the fullest, through increasing value-added economic activities. One of the phases that needed to be carried out while developing villages was through strengthening economic organizations (institutions).

Rural economic development was an important thing to do considering that national economic development has to start from the villages. Poverty in rural areas increased at a larger rate than urban areas, increasing from 12.82% (15.26 million) to 13.20% (15.51 million), compared to urban areas which went from 7.38% (11.16 million) to 7.88% (12.04 million) in September 2020 [2]. Therefore, one of the ways the government needed to overcome the inequality problems faced between rural and urban areas was to carry out national development plans that paid special attention to village development [3].

Currently, the government has supported the funds and authorized the village to self-regulate its development, namely through Law Number 6 of 2014 concerning villages. One of the objectives of the law in regards to village regulation was to advance the economy of rural communities and overcome national development gaps. In addition, the objective of village development was to improve the welfare of rural communities and the quality of human life. Other objectives included poverty alleviation through the fulfillment of basic needs, development of village facilities and infrastructure, development of local economic potential, and sustainable use of natural resources and the environment. With the village authority, village development needed to be prepared and planned in a participatory manner, namely by involving various elements of the village communities, consisting of community leaders, religious leaders, traditional stakeholders, heads of RT/RW, community organizations and women's organizations, as well as Non-Governmental Organizations and others [4].

Welfare was something that everyone wanted to achieve, although to achieve it one had to work hard. Welfare had many dimensions, both material and non-material. From the material side, it could be measured using the income and consumption approach [5]. The government, both central and regional, must have a goal for the welfare of its people as stated in the 1945 Constitution. One of the ways the government did this was through development [3].

Community welfare was the objective and the government attempted to achieve that through efforts such as increasing economic growth [6]. The success of development carried out by a country, including the State of Indonesia, could be seen from the condition of the welfare of its people [7].

In the development process, the highest possible economic growth was always sought after [8]. Economic growth measured the achievement of economic development during the process [9]. Nurudeen [10] stated that the government had a big role in development.

The government's role in increasing economic growth was immense, especially in regards to financing [11]. The welfare of the community in question could be seen from the economic growth and distribution of income [12]. According to Kaur [13], economic growth was also affected by technology and knowledge. Economic growth would create investments, jobs, absorb the labor force, and would in turn reduce the poverty of the population [14].

There were many strategies that have been carried out by the government to overcome the problem of poverty, but unfortunately, these strategies have not been able to reduce the poverty rate [15]. The role of regional and central governments was indeed very necessary in increasing the welfare of the people in the regions since 2015, as the government provided Village Funds to villages sourced from the State Budget, which was transferred through the Regency/City Regional Revenue and Expenditure Budget. The village then has the right to manage its authority and funding.

Some people considered that poverty was only from an economic perspective, namely because of lack of capital and access to economic resources, even though the problem of poverty was very multi-dimensional. Because of such an assessment, poverty reduction efforts did not directly involve the poor when it came to solving the problem, so the programs offered were biased, did

not achieve the targets, and did not solve the real problems faced by the poor community. As a result, the utilization of the Regional Revenue and Expenditure Budget (APBD) in regions which were very limited in number became ineffective.

With the priority of this village fund, each village had to carry out their own development through the development of local economic potential. One of the ways villages developed their economy was through village entrepreneurship, which could be used as a strategy in the development and growth of the welfare of rural communities [16]. Then Prabowo [17], added that village entrepreneurship could be developed through the establishment of Village Owned Enterprises. This research aimed to analyze poverty alleviation through the empowerment of Village-Owned Enterprises in Donggala Regency.

2. RESEARCH METHOD
2.1 Area and number of samples
This research was done in Donggala Regency, Central Sulawesi Province, specifically the South Banawa Sub-district. The selection of this location was done with the following considerations: (1) having active Village-Owned Enterprises, (2) having Village-Owned Enterprises that manufactured products, and (3) having Village-Owned Enterprises that used the potential of local natural resources.

The samples in this research are listed in Table 1.

Table 1. Respondents Distribution

Number	Village Name	Population	Respondents
1	Tolongano	323	32
2	Tanamea	220	22
3	Mbuwu	459	46
	Total		100

Source: Primary Data Analysis, 2021

2.2 Data Analysis
The *Gini Ratio* was used to determine the distribution of household income as in the equation, namely:

$$G = 1 - \sum_{i=1}^{k} f_i \ (Y_i + Y_{i-1}) \qquad (2)$$

Logistics Regression was an analytical method that aimed to explain the relationship between variables (dependent or response) which had two or more categories (binary or dichotomy), with one or more independent variables (predictor or explanatory) on a category or interval scaled [18]. Aggresti [19] explained that logistic regression was a non-linear regression that aimed to explain the relationship between X and Y, Y distribution abnormality, however, response diversity was not constant, and therefore not explained by the usual linear regression model.

Test decision rules:

If $\Delta G_{rice\ income}$ and $\Delta G_{household\ income} \leq 0$, then Ho is accepted, there is no inequality of income distribution.

If $\Delta G_{rice\ income}$ and $\Delta G_{household\ income} > 0$, then Ho is rejected, there is an inequality of income distribution.

To analyze the factors that affected household poverty, the Logit model was used.

$$Y = \alpha + \beta_1 PRT + \beta_2 UP + \beta_3 PKRT + \beta_4 JAR + \beta_5 JAR + e \quad (1)$$

Description:

Y= Probability P1 = P(Y=0) for poor

Probability P2 = P(Y=1) for non-poor

α = Intercept

β_i = regression coefficient (estimated parameter) (i=1 until 7)
X_1= Household Income (IDR)
X_2= Farmer's Age (years)
X_3= Household consumption expenditure (IDR)
X_4= Number of Household Members (people)
X_5 = know Village-Owned Enterprises = 1, do not know Village-Owned Enterprises = 0
e= *random error*

3.RESULTS AND DISCUSSION
3.1 Income Distribution
The Lorenz curve graph described the income distribution of the population in South Banawa Sub-district which can be seen in Figure 1.
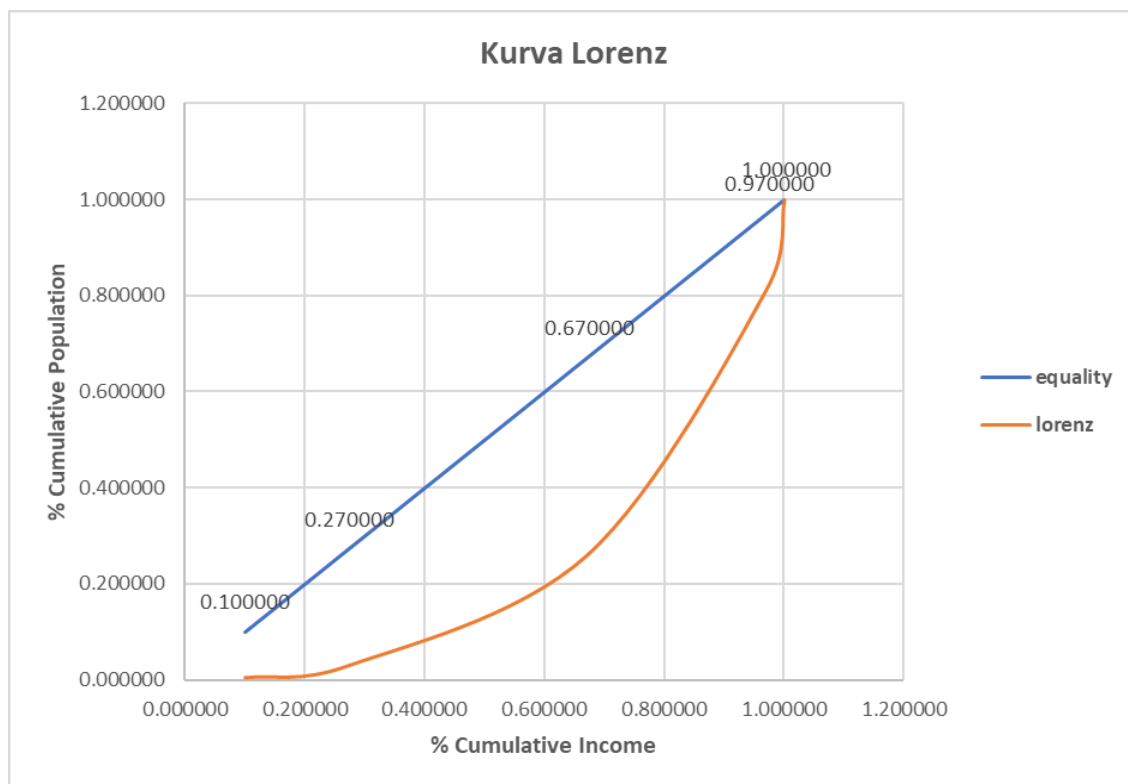
Figure 1. Lorenz Curve in South Banawa Sub-district

Figure 1 shows the Gini coefficient value (Gini Ratio) for the income distribution of the community in South Banawa Sub-district in 2019 to 2021, which was 0.50; This means that the level of income inequality of the sample farmers was in the High category. The analysis of the poverty line and the poverty number of the community in South Banawa Sub-district is shown in Table 2.

Table 2. Poverty Lines and Poverty Number in South Banawa Sub-district in 2019 until 2020

Regions	Poverty Line (IDR/ Capita / Month)	Poverty Number
South Banawa Sub-district	291,011	14.32
Donggala Regency	291,011	18.40

Source: Primary Data Analysis, 2021

Table 2 illustrates that the poverty line was greater than the average income of the sample population in 2020 (IDR 231,000). This shows that almost all of the population was categorized as poor.

Since the construction was carried out up until now, it has been proven that development has failed to improve the welfare of the population. Poverty was not just a series of numbers, but involved the lives of millions of poor people, particularly people who lived in rural and underdeveloped areas. The problem of poverty directly touched the values of humanity, equality and justice. There were still many rural communities who have not been able to move from the crush of poverty. This was because the poverty that occurred was not only due to low incomes, limited facilities and infrastructure, but also the vulnerability and susceptibility of people or groups of people, both men and women, to become poor in the event of an economic shock. Therefore, the problem of poverty was closely related to the needs for facilities and infrastructure not properly being fulfilled. Unfortunately, at that time, development was still difficult to be carried out efficiently at the population level. Therefore, government policies were needed to help populations solve development problems so that income could increase.

Measurement of poverty based on the level of income could be grouped into absolute poverty and relative poverty [20]. The factors that cause poverty include: low level of education, low health status, limited employment opportunities, and isolated conditions [20]. In a report issued by the World Bank (200) it was known that there were five factors that were considered to affect the occurrence of poverty, namely: education, type of job, gender, access to basic health services, infrastructure, and geographic location.

As stated by Nazara [21] said that first, poverty was always associated with the inability to achieve higher education, and was related to the high cost of education, even though the Indonesian government had issued a policy to waive fees at the Elementary School and Junior High School levels. However, other expenses that had to be spent were still quite high, such as money for books and school uniforms. The costs that the poor had to incur to send their children to school must also include the cost loss of income if their child went to school instead of worked [21].

Poverty was also always associated with certain types of work. In Indonesia, poverty was always related to the employment sector, in agriculture for rural areas, and the informal sector in urban areas. The relationship between poverty and lack of access to various basic infrastructure services was also prevalent, and a good infrastructure system would increase the income of the poor directly and indirectly through the provision of health services, education, transportation, telecommunications, as well as access to energy, water and better sanitation conditions [22].

These factors were interrelated with each other to form a cycle of poverty. Poor households in general had low education and were concentrated in rural areas, and because of low education, their productivity was low. Due to this, the rewards to be obtained were not sufficient to meet the needs of food, clothing, health, housing, and education. As a result, poor households would produce poor families in the next generation and this cycle continued for many generations.

3.2 Factors Affected Poverty
To know the factors that affected farmer households' poverty in South Banawa Sub-district, a logistic regression analysis method was used. The results of data analysis are presented in Table 3.

Table 3. Estimation Results of Factors Affected Household Poverty

Variables	*Expected Sign*	*Coefficient*	*Prob.*	*Odd Ratio*	**Description**
Household Income (X1)	(+)	-2.90E-05	0.0001	-4.036165	S
Age (X2)	(-)	0.041600	0.4225	0.802147	NS
Household consumption expenditure (X3)	(-)	0.000109	0.0000	4.445971	S
Number of household members (X4)	(-)	0.456107	0.2076	1.260117	NS
The existence of village-owned enterprises (X5)	(+)	2.181886	0.0009	3.314454	S
C		-15.51110	0.0000		-
McFadden R-squared				**0.417902**	

Primary Data After Processing, 2021

 Description:

 S: Significant

 NS: Not Significant

Based on the results of logistic regression analysis using the e-views 10 application, it was found that from 5 independent variables, only 3 variables had a significant effect on poverty. The variables that had significant effects were household income, household consumption expenditure, and the presence of village-owned enterprises. Variables that had no effect on poverty were age and number of household members. Significant or not, the effect of an independent variable is seen from the value of Prob. $< \alpha$. The McFadden R-squared value in this analysis was 0.417902, showing that only 41.79% of poverty that occurred in South Banawa Sub-district was affected by household income variables, household consumption expenditures and the existence of village-owned enterprises, while the remaining 58.2 % was affected by other variables not researched. In this research the value of Prob F statistic = 0.0000008 < 0.05, meaning that the variables x1, x2, x3, x4, and x5 together could explain the related variables.

The household income variable had a Prob value of 0.0001 which means that this independent variable had a significant effect on the probability of a household leaving poverty at a level of α = 1% (0.0001 < 0.01). The coefficient of the output obtained was positive (+), and the value of Exp (β) or the odds ratio (statistical test of risk factors) was -4.036165 which shows that the chances of households getting out of poverty were decreasing. This shows that the lower the household income, the higher the chance the household would not get out of poverty. Household

income owned by farmers affected the purchasing power of households in meeting the needs of daily life. Large needs such as wedding expenses, children's school fees, pilgrimages, or other household needs were the reasons for households' desire to increase their ability to manage their business. Rasyid, et al. [23], concluded that income could affect poverty, and even Janjuan and Kamal [24] stated that increased income could reduce the number of poor people because with increased income people could meet their needs.

The household consumption expenditure variable had a Prob. value of 0.0000 which means that this independent variable had a significant effect on the probability of households moving out of poverty at a significant level of $\alpha = 1\%$ (0.0000 < 0.01). The coefficient of the output obtained was positive (+) and the value of Exp (β) or the odds ratio (statistical test of risk factors) obtained was 4.445971, which shows that the chances of farmers not getting out of poverty would be even greater. This shows that the higher the household expenditure, the greater the opportunity for the household to get out of poverty. This greatly affected the purchasing power of households towards household consumption needs. The higher the price was for household consumption needs, the lower the purchasing power of households, to the extent that households were willing to reduce consumption of their daily needs.

Another independent variable that had a significant effect on the occurrence of poverty was the existence of Village-Owned Enterprise institutions. The variable existence of Village-Owned Enterprise's institution had a value of Prob. 0.0009 which means that this independent variable had a noteworthy effect on the chances of households moving out of poverty at a significant level of $\alpha = 5\%$ (0.0009 < 0.01). The coefficient of the output obtained was positive (+) and the value of Exp (β) or the odds ratio (statistical test of risk factors) obtained was 3.314454 showing that the opportunity for households to get out of poverty would be greater. This shows that the better the village-owned enterprises institutions, the chances of households to get out of poverty were improved 3.314454 times.

Based on the results of the research, it could be said that the factors causing poverty were very complex and affected each other, meaning that poverty was not caused by one factor alone, but by multiple factors. However, broadly speaking, the dominant factors that affected the incidence of poverty include: household income, household consumption expenditure, and the existence of village-owned enterprises. This finding was in accordance with the opinion of Nurwati [22] where he stated that education, income, location, limited access, including access to health, finance and public services, as well as the existence of institutions and others affected household poverty. According to Remi and Tjiptoherijanto [25], the main cause of poverty in a household was the low income they received.

4. CONCLUSION

The results of the research show that the poverty line (IDR 291,011) was greater than the average income of the population in 2020 (IDR 231,000), meaning that almost all of the population were categorized as poor. Poverty was not just a series of numbers, but involved the lives of millions of poor people, especially people who lived in rural and underdeveloped areas. Therefore, a policy from the government was needed in helping the population solved development problems so that income could increase. The results also show that the factors causing poverty were very

complex and affected each other, meaning that poverty was not caused by one factor alone, but by multiple factors. Having said that, the dominant factors that affected the incidence of poverty included: household income, household consumption expenditure, and the existence of village-owned enterprises.

REFERENCES

[1] Qosjim, 2017. Analisis Kinerja Bumdes di Kabupaten Lumajang. *Journal Ekuilibrium*, 2 (1) : 10-17.

[2] BPS Indonesia, 2021. Badan Pusat Statistik (BPS) Indonesia. bpshq@bps.go.id

[3] Putra and Budhi, S. 2015. Efektivitas Dan Dampak Program Nasional Pemberdayaan Masyarakat Mandiri Perdesaan (Pnpm-Mpd) Terhadap Peningkatan Kesejahteraan Dan Kesempatan Kerja Rumah Tangga Sasaran Di Kecamatan Abiansemal Kabupaten Badung. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana,* Hal: 183-196.

[4] Nurcholis, H. 2011. *Pertumbuhan dan Penyelenggaraan Pemerintah Desa*. Jakarta: Erlangga.

[5] Hukom, A. 2014. Hubungan Ketenagakerjaan Dan Perubahan Struktur Ekonomi terhadap Kesejahteraan Masyarakat. JEKT. 7(2): 120-129.

[6] Edogbanya, A. 2013. *Revenue Generation: Impact on Government Developmental Effort (A Study of Selected Local Council in Kogi East Senatorial District). Global Journal of Management and Business Research.*

[7] Marhaeni, A.A.I.N. 2014. Evaluasi Program-Program Pengentasan Kemiskinan di Provinsi Bali. *Piramida Vol. X No. 1: 8 – 18.*

[8] Dayuh, R. and Nyoman. 2012. Pertumbuhan Ekonomi Dan Kegiatan Ekonomi Angkatan Kerja Di Provinsi Bali. *Piramida*, 6(2): 1918 – 1923.

[9] Odhiambo, N. M. 2009. Savings and economic growth in South Africa: A multivariate causality test. *Journal of Policy Modeling*, 31(5), 708–718.

[10] Nurudeen, A. and Usman, A. 2010. Government expenditure and economic growth in Nigeria, 1970-2008: A disaggregated analysis. *Business and Economics Journal*, 4: 1-11

[11] Dalamagas, B. 2010. Publik Sektor and Economic Growth: The Greek Experience. *Bulletin of Indonesian Economic Studies*, 32. Hal:277-288.

[12] Artana Y.K.O, Arka S., 2015. Pengaruh Pertumbuhan Ekonomi Dan Disparitas Pendapatan Antar daerah Terhadap Kesejahteraan Masyarakat Provinsi Bali. *Jurnal Ekonomi Kuantitatif Terapan,* [S.1.], nov. 2015. ISSN 2303-0186

[13] Kaur, M. and Singh, L. 2016. Knowledge in the economic growth of developing economies. *African Journal of Science, Technology, Innovation and Development*, 8(2), 205–212.

[14] Seran, S. 2017. Hubungan Antara Pendidikan, Pengangguan, dan Pertumbuhan Ekonomi dengan Kemiskinan. *JEKT* 10 (1): 59-71

[15] Dariwardani, N.M.I. 2014. Analisis Dinamika Kemiskinan Poverty Dynamics) Di Bali Berdasarkan Data Susenas Panel 2008 – 2010. *JEKT.*, 7(1): 7-15.

[16] Ansari, B., (2013). Sustainable Entrepreneurship in Rural Areas. *Research Journal of Environmental and Earth Science*, 5(1): 26-31.

[17] Prabowo, T.H.E. (2014). *Developing BUMDes (Village-owned Enterprise) for Sustainable Poverty Alleviation Model Village Community Study in* Bleberan-Gunung

Kidul-Indonesia. *World Applied Sciences Journal 30 (Innovation Challenges in Multidiciplinary Research & Practice): 19-26.*

[18] Hosmer, D.W. and Lemeshow, S. 2000. *Applied Logistic Regression.* Second Edition. A Wiley-Interscience Publication JOHN WILEY & SONS, INC. New York • Chichester • Weinheim • Brisbane • Singapore • Toronto

[19] Agresti, A. and Franklin, C. 2007. *Statistics: The Art and Science of Learning from Data.* Prentice Hall, New Jersey.

[20] Kartasasmita, G. 1996. *Pembangunan untuk Rakyat Memadukan Pertum buhan dan Pemerataan.* PT. Pustaka Cidesindo ; Jakarta

[21] Nazara, S. 2007. Pengentasan Kemiskinan : Pilihan Kebijakan dan program yang Realistis. Dalam Warta Demografi tahun ke 37. No 4 tahun 2007. Jakarta. Lembaga Demografi Universitas Indonesia. Pengangguran, Kemiskinan, dan Pertumbuhan Ekonomi Indonesia

[22] Nurwati, N. 2008. Kemiskinan: Model Pengukuran, Permasalahan dan Alternatif Kebijakan. *Jurnal Kependudukan Padjadjaran*, 10(1): 1-11.

[23] Rasyid R, Agustang A.,Bastiana dan Najamudin., 2020. Faktor Yang mempengaruhi Status Kemeskinan Rumahtangga pada Wilayah Central Bussiness District (CBD) di Wilayah Kota Makassar. *Majalah Geografi Indonesia Vol 34 (1) : 43-52.*

[24] Janjua, P.Z and Kamal, U.A, 2011. *The Role of Education and Income in Poverty alleviation*: A Cross – Country Analysis, The Lahore Journal of Economics.

[25] Remi, S.S. and Tjiptoherijanto, P. 2002. *Kemiskinan dan Ketidakmerataan di Indonesia.* Jakarta: Rineka Cipta.