East African Scholars Journal of Economics, Business and Management



Abbreviated Key Title: East African Scholars J Econ Bus Manag ISSN 2617-4464 (Print) | ISSN 2617-7269 (Online) Published By East African Scholars Publisher, Kenya

Volume-3 | Issue-6 | June-2020 |

DOI: 10.36349/EASJEBM.2020.v03i06.010

Research Article

Determinants of Household Poverty in Informal Economic Sector

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Article History

Received: 08.05.2020 **Accepted:** 14.06.2020 **Published:** 21.06.2020

Journal homepage:

https://www.easpublisher.com/easjebm



Abstract: Poverty rate in Aceh is high dominated by informal labor force and it needs to be resolved. The purpose of our study is to analyze determinant of informal labor force in Aceh province using data from Survey Social Economy National (SUSENAS) 2018. The analytical method used is the Odds Ratio logistic regression. The results of the logistic regression analysis show that the significant influence in informal poverty household status, which classified by age of the breadwinners, area, education background, bank account and mobile phone ownership, whereas other variables such as marital status of the breadwinners, length of work time and gender do not display its dominance in poverty rate in Aceh informal household. In order to solve poverty issue, the government needs to take a progressive action, for instance amenity in communication and finance in remote areas, scholarship award, work training and utilization of village fund.

Keywords: Household Poverty, Informal Economic Sector, Logistics Regression.

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INTRODUCTION

One of national development dimensions is economic growth for the purpose of a long term escalation of inhabitant income per capita in one country altogether with fundamental change in economic structure and income equality for the people in one country to attain a social welfare. The goal also becomes the main purpose of *Sustainable Development Goals (SDGs)* 2030 which is the continuation of *Millenium Development Goals (MDGs)* 2015. One of seventeenth *SDGs* objectives is focusing on global poverty eradication and end of hunger, food security, improved nutrition, as well as promoting agriculture continuation.

The government continuously attempt to eradicate poverty rate to achieve SDGs goal. According to BPS (2018), poverty rate has declined for the last a few years reaching 9.8 percent in March 2018. The figure is far beyond MDGs national poverty rate expectation 7,55 percent in 2015 (Bappenas, 2015). There are several factors causing poverty. BPS (2019) in its publication stating that having many family member, age of the breadwinners, low education background, female breadwinners, high illiteracy, agriculture sector, informal labor force and uninhabitable house are among the main characteristics of poverty household.

Informal labor force drives poverty in developing countries (BPS, 2018), this factor alone should be one of the government main focus. Informal labor force is classified as a free worker, a single entrepreneur and an unpaid - part time worker who is helped by others.

In 2017, the percentage of poverty rate in Aceh province stood at 15.92 below from national figure at 10.12 percent. The number situates Aceh to be ranked at 29 or 6 at national level according to density of the country's population. The trend of poverty rate in Aceh for the last 4 years shows a sluggish progress. In Aceh province alone, this trend dominated by informal labor force. The main focus of our study will be on household with informal labor force from 2017 to 2018 reaching at 59 percent. The number proves that poverty driven by informal labor force is a major concern that needs to be resolved. Therefore, the objective of the study is to analyze determinant poverty in informal labor force as the main factor in Aceh province.

Poverty is classified based on identification and measurement of a group of people or class which defines poor or destitute (Nugroho, 1995). Each country including Indonesia has its definition of a group of people which categorized in impoverished or poverty group. This category is situated by inability to satisfy

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their basic needs due to limited income resulting incapability to ensure the continuation of life which is called poverty (Suryawati, 2004).

Kiyai, et al., (2000) emphasize that formal education, skill and capital are defining factors to boost operating revenue in informal sector in district of Tuminting, Manado. Other than that, breadwinners who work in informal sector have a bigger opportunity to fall into chronic poverty and 71 percent breadwinners work as an informal labor force (Taufiq, 2017). Furthermore, Putra and Sudibya (2018) show in their study that education background, marital status and member of family have significant influence to income worker in informal sector in district of Mardasaba in Bali. Delgado and Klasen (2018) support this argument adding that education variable, health and standard of living contribute in poverty in multi dimension and gender inequality in Nikaragua.

Ogwumike and Ozughalu (2017) in their study analyzing the number, depth and severity of child poverty in Nigeria. It shows that 23.22 percent children are vulnerable to fall into poverty whereas 70.31 percent already in poverty. Moreover, the study displays less children who engage in education, health, nutrition, water and sanitation. In remote areas, poverty and deprivation of right are prominent compare to cities including South and North Nigeria.

In addition, Thorat (2017) investigates about characteristic causing poverty in indian household using panel data from 2005 – 2012. Using *odds ratio* regression, the study shows that each variables are interconnected which cause poverty household. Furthermore, Goncalves & Machado (2015) support these variables such as demography, socio-economy, labor force market gives a significant impact for poverty household in Brazil.

However, Giovanni (2018) in his study shows a different result. His assessment demonstrates that unemployment rate and education background do not give a significant impact into poverty in West Java province, Central Java, East Java and Jogyakarta in year 2009-2016, In fact, gross regional domestic product (PDRB) affects to poverty rate in those areas. Handayani *et al.*, (2018) also support this idea stating education and health decline in poverty household. Yet property ownership shows positive influence in poverty rate.

Research study by Vijayakumar and Olga (2012) in Srilanka display industry worker, education, access to market and road facility negatively influence poverty rate in real sector. Predominant main characteristic as prosperity dominant is social, demography and economy. Member of family is one of demography characteristic used to measure poverty rate and many research prove that it has a strong relation with poverty

status. On the other hand, the size of household can be the cause of decreasing income (Tambo & Wunscher, 2017).

In addition to that, Sekhampu (2013) studies in Bophelong, South Africa show that the increasing age of breadwinners tend to decrease poverty rate assuming that elder breadwinners have more property of household, whereas maturity of housemaid in household will contribute in family income.

Characteristic of socio household such as education of family member also gives a massive influence into prosperity. This can be seen from study by Seleka & Lekobane (2016) in Botswana using revenue survey, household expenditure 2002/2003 as well as survey indicator in core prosperity 2009/2010. Moreover, Education background and employment status of breadwinners are highlighted as one of main determiner. Wekke & Cahaya (2015) in their study using Indonesian fisherman also support the idea that the higher education, the lower the risk to fall into poverty.

Saidatulakmal & Riaz (2012) study about the characteristic of poverty in Pakistan. The objective of their study is to discover factors related to poverty household using variables such as gender, type of family, the number of family member, gender of breadwinners, occupation and education of breadwinners. The study concludes that education of breadwinners is one of a significant factor related to poverty household.

Researchers previously looked at the determinants of poverty status with variables such as number of household members, household head education, age of household head, assets owned by the household and the sex of the household head. Whereas in this study the researchers wanted to see whether the working hours per week of the head of the household, access to financial services as seen from the possession of passbooks and access to information and communication services (ownership and use of mobile phones) affect the poverty status of a household and by using odds The ratio wants to be seen how big the tendency of a household to be poor.

RESEARCH METHODS

The study utilizes qualitative raw data with questioner done by Survei Sosial Ekonomi Nasional (SUSENAS) VSEN18.K Aceh province 2018 using household which engage in informal sector as a sample of the study. The variables to determine our research is gender of breadwinners, marital status, age, living area, education, length of work time per week, access to bank account and mobile ownership.

Descriptive analysis is used to depict the connection of two variables -independent and

dependent which will be displayed on table of cross tabulation between poverty and each variable determines poverty. Therefore, coding parameter is practised to identify both variables – independent and

dependent. In descriptive analysis, there is no distinction between these two variable as shown below in Table 1.

Table 1. Variable, Variabel Name and Category

Variable	Variabel Name Category			
(1)	(2)	(3)		
Y	Status of Poverty	1 = Poor		
		2 = Not Poor		
\mathbf{X}_1	Gender of breadwinners	1 = Female		
		2 = Male		
\mathbf{X}_2	Marital Status of	1 = Divorce / Death Divorce		
	breadwinners	2 = Married		
		3 = Unmarried		
X_3	Age of breadwinners	1 = up to 50 years old		
		2 = below 20 years old		
X_4	Living area	1 = District		
		2 = City		
X_5	Education	$1 = \leq Secondary school$		
		$2 = \ge \text{High school}$		
X_6	Length of work time per	1 = 0-34 hour		
	week	2 = up to 35 hour		
X_7	Bank Account	1 = Not have		
		2 = Have		
\mathbf{X}_8	Mobile ownership	1 = Not have		
		2 = Have		

Nominal data is displayed for both variables – independent and dependent, yet dependent variable is classified by poor household (Y=1) and not poor household (Y=0) so that biner logictic regression is demonstrated in the study.

There are two examinations in logistic regression which are simultaneous examination for all explanatory variables and partial examination for each explanatory variable. Logistic regression is used to examine all variables or for simultaneous assessment called *G test* (*Likelihood Ratio Test*), whereas *Wald test* is used to examine partial significance examination.

The function of logistic needs to be transformed into linier format and one of the format called logit transformation as shown below.

Referring to 1 equation and variable above resulting logistic regression shown below:

$$Z = \beta_0 + \beta_1 D_1 + \beta_2 D_2 + \beta_3 D_3 + \beta_4 D_4 + \beta_5 D_5 + \beta_6 D_6 + \beta_7 D_7 + \beta_8 D_8 + \varepsilon \dots (2)$$

Y refers to poverty household, β_0 constants, β_1 , β_2 ... β_8 coefficient parameter, D_1 gender of breadwinners (female), D_2 marital status (divorce), D_3 age of breadwinners (up to 50 years old), D_4 living area (district), D_5 education (\leq secondary), D_6 work length of time (0-34 hour), D_7 bank account (not have), D_8 mobile ownership (not have), dan ϵ is error.

RESULT AND DISCUSSION

Descriptive Analysis

Table 2 shows that informal household with male breadwinners distribution stands at 82.90 percent while the figure for informal household with female breadwinners reaches 17.10 percent. From the figures above, 82 percent are unmarried/married breadwinners whereas divorce/death divorce stands at 18 percent.

In addition, the number of breadwinners aged below 50 years old is greater at 56.90 percent, whereas informal household with age above 50 years old stands at 43.10 percent. Age below 50 years old is considered more productive with more options in informal and formal sector especially informal sector does not required specific skills. On the other hand, in terms of living area, 79.70 percent lives in district whereas 20.30 percent inhabits in city. For those who live in city prefers to work in formal sector due to sufficient stipend.

Table 2. A number of Household Distribution in Informal Sector characterized by household

Characterist	Characteristic		Percentage
Gender	Male	5,016	82.90
	Female	1,037	17.10
Marital	Married	4,963	82.00
Status	Divorce	1,090	18.00
A 30	Below 50 years old	3,447	56.90
Age	Above 50 years old	2,606	43.10
Living Area	City	1,230	20.30
	District	4,823	79.70
Education	Up to High School	1,776	29.30
Education	<= Secondary	4,277	70.70
Length of	>=35	4,388	72.50
work time	0-34 hour	1,665	27.50
Bank	Have	1,623	26.80
Account	Not Have	4,430	73.20
Mobile	Have	4,650	76.80
Ownership	Not Have	1,403	23.20
•	Not Poor	5,253	86.80
Poverty	Poor	800	13.20
•	Total	6,053	100.00

Furthermore, informal household dominated by low education background of breadwinners (below secondary school) at 70.70 percent while another 29.30 breadwinners have a higher education background (above high school). Informal occupation often can recruit low education labor force or without education.

Most of informal household works up to 35 hours per week or 72.50 percent and only 27,50 percent

work in normal hour. In terms of financial access, most of breadwinners do not have bank account or stands at 73.20 percent while the other 26.80 percent of informal household have bank account. In addition to that, most breadwinners have access to technology, communication and information by using and owning a mobile phone at 76.80 percent, however 23.20 percent of household do not own and use a mobile phone.

Table 3. Poverty household Distribution Status in Informal Sector characterized by household

Chana stanistia	•	Poverty Status			T-4-1	0/	
Characteristic		Not Poor	%	Poor	%	- Total	%
Marital Status	Married	4,295	86.50%	668	13.50%	4,963	100.00%
	Divorce	958	87.90%	132	12.10%	1,090	100.00%
Age	Below 50 years old	2,943	85.40%	504	14.60%	3,447	100.00%
	Above 50 years old	2,310	88.60%	296	11.40%	2,606	100.00%
Living Area	City	1,117	90.80%	113	9.20%	1,230	100.00%
	District	4,136	85.80%	687	14.20%	4,823	100.00%
Education	Above High School	1,618	91.10%	158	8.90%	1,776	100.00%
	<= Secondary	3,635	85.00%	642	15.00%	4,277	100.00%
Length of	>=35 hours	3,816	87.00%	572	13.00%	4,388	100.00%
work time	0-34 hour	1,437	86.30%	228	13.70%	1,665	100.00%
Gender	Male	4,345	86.60%	671	13.40%	5,016	100.00%
	Female	908	87.60%	129	12.40%	1,037	100.00%
Bank Account	Have	1,506	28.70%	3747	71.30%	5,253	100.00%
	Not Have	117	14.60%	683	85.40%	800	100.00%
Mobile	Have	4,118	78.40%	1135	21.60%	5,253	100.00%
Ownership	Not Have	532	66.50%	268	33.50%	800	100.00%

In addition, consumption level is another indicator to determine informal poverty level and it is used as level of income approach in household. Poverty household is determined if the consumption level is higher than poverty level is classified as not poor, whereas consumption lower than poverty level is classified by poor.

Referring to table 3 of total research sample stated that the percentage of informal household with married breadwinners is likely classified as poor household stands at 13.50 percent, on the other hand informal household with status of divorce/death divorce is classified poor at 12.10 percent.

The study also shows that informal household with breadwinners aged above 50 years old is classified poor at 11.40 percent, whereas poor breadwinners below 50 years old stands at 14.60 percent. The number of poor productive breadwinners is greater compare to those aged above 50 years due to not having property or other classified assets, yet the government already takes a progressive action and attention for unproductive household by delivering aid for elders or house construction.

Furthermore, most of informal household living in district area reaches at 14.20 percent, yet those who live in city stands at 9.20 percent. In terms of education background, informal household with less than secondary school pictured in figure 15 percent, whereas some with above high school at 8.9 percent. Breadwinners with skill - higher education likely to opt a formal sector compare to those with lower education background.

In terms of length of work time, there is no significant difference in percentage between breadwinners with normal working hour and less than normal. In gender perspective, poorfemale breadwinners who work in informal sector stands at 12.40 percent while male group at 13.40 percent.

In financial access, poor breadwinners in informal sector who do not have bank account reaches 85.40 percent, whereas those who are poor but enjoy their financial access with bank account at 71.30 percent. This circumstance is due to lack of awareness of the importance having savings for future or emergency situation. In information technology and communication, poor breadwinners in informal sector with mobile phone at 33.50 percent, yet those who are

poor and not having mobile phone 21.60 percent. In spite of the fact to these figures, there are areas which unreachable in information technology facility and limited communication due to poor infrastructure.

Inferential Analysis

The effect of the explanatory variables on household characteristics on poverty status can be seen by performing simultaneous calculation of parameter testing so that it can be seen whether all the independent variables in the simultaneous model affect the dependent variable. The hypothesis in this test is:

H0 is all independent variables simultaneously have no effect on the dependent variable and H1 is all independent variables simultaneously affect the dependent variable or at least there is one independent variable that influences the dependent variable. H0 will be rejected if the Likelihood ratio $< \alpha$ and H0 will not occur if the Likelihood ratio $> \alpha$.

Statistics test : $G^2=-2 \ln[L_0/L_1]$

The level of significance used in the test of significance of the model and the significance of the coefficient is 5 percent. Means in the significance test of the model, if the significance level in the model is smaller or equal to 5 percent then the model is correct. In the coefficient significance test if the significance level of a variable is smaller or equal to 5 percent then the variable significantly affects the model.

The results of data processing obtained the value of -2 log likelihood with a significance value of 0.030 which is smaller than $\alpha = 0.05$, as shown in Table 4.

 Table 4. Model Significance Test Values

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
4543.589	0,030	0,055

Thus it can be concluded that all explanatory variables in this study statistically at 95 percent confidence level, can be used together in forming the model.

The effect of each variable on poverty status can be seen in Table 5. The variable is proven to have a significant effect on poverty levels if the significance value is less than 0.05.

Table 5. Poverty Household in Informal Sector with Logistic Regression Model

Variable	В	Sig.	OR
Marital Status (Divorce)	-0,243	0,220	0,784
Age (≥ 50 years old)	-0,543	0,000	0,581
Living Are (District)	0,237	0,031	1,268
Education (≤ Secondary school)	0,450	0,000	1,569
Working hour (0-34 hour)	0,066	0,453	1,068
Bank Account (Not Have)	0,651	0,000	1,918
Gender (Female)	-0,001	0,995	0,999
Mobile ownership (Not Have)	0,632	0,000	1,881
Constant	-2,859	0,000	0,057

Age of breadwinners variable displays a significant influence to informal poverty household status. Breadwinners who are above 50 years old likely to have possibility 0.581 percent lesser than those who are below 50 years old. Sekhampu also supports this idea by choosing South Africa as a sample of his study stating that the older of breadwinners the less chance they fall into poverty.

Status of living area also shows a significant impact into poverty household in informal sector. For household living in remote areas tend to fall into poverty 1.268 possibility compare to those who live in city. The same result also shows in the study of Ogwumike & Ozughalu in Nigeria stating that poverty is higher in district areas than city.

In addition to that, education statistically shows significant influence into poverty household status in informal sector. Breadwinners who have secondary school likely to fall into poverty at 1.569 compare to those who have higher education up to high school. Saidatul Akmal & Riaz in their study in Pakistan, Wekke & Cahaya in Indonesia prove that education plays a significant role into poverty status of household.

Bank account also shows positive image for household which have it compare to household that do not have bank account. Poverty household likely does not seem to have bank account 1.918 greater than those who have it.

Furthermore, mobile ownership gives influence to poverty household status in informal sector, whereas those which do not have seems to fall into poverty 1.881 times.

In table 4, we can see that marital status, working hour and gender of breadwinners likely do not show a significant impact into poverty level in informal sector stands above 0.05.

Propensity of informal household aged above 50 years old, living in district area, secondary school, not having a bank account and mobile phone tend to fall into poverty at 0.057 times. The study also shows that there is positive correlation between living area, education, working hour per week, bank account and mobile ownership with poverty household status in informal sector.

CONCLUSION

Build upon analysis and discussion on sample data cultivation of household in informal sector from SUSENAS Aceh 2018, we can conclude that distribution of poverty household status displays more on male. Most of married breadwinners aged below 50 years are classified as poor, live in district area and have secondary school background. On the other hand, length of work hour does not show a significant difference

between breadwinners with normal and irregular working hour.

Regression analysis shows that only 5 variables out of 8 which shows significant influence on poverty household status in informal sector classified as age of breadwinners, living area, education background, bank account and mobile ownership. Another 3 variables which are gender, marital status and length of work hour do not display significant influence.

Odds ratio shows that characteristic household with bank account (financial access), mobile ownership (access to information and communication) and education has a bigger possibility to fall into poverty.

Finally, the study suggests that the government should focus their poverty elimination program on district areas. Thus, the government's surveillance on program of Keluarga Harapan (PKH) is essential so that there will not be a misplaced receiver. Village fund should be used not only for infrastructure but also on creating business entity for the sake of people by employing poor locals. Financial access for poverty household in informal sector is also considered as important and need to expand by building up new micro finance in remote areas such as corporation and bank branches.

REFERENCES

- Badan Perencanaan Pembangunan Nasional (Bappenas). (2015). Strategi nasional penanggulangan kemiskinan. [National poverty reduction strategy] Bappenas: Jakarta-Indonesia.
- 2. Badan Pusat Statistik (BPS). (2009). Analisis dan Penghitungan Tingkat Kemiskinan Tahun 2008. [Poverty Rate Analysis and Calculation in 2008] *Jakarta: Badan Pusat Statistik*.
- 3. Badan Pusat Statistik (BPS). (2017). Data dan Informasi Kemiskinan Kabupaten/Kota Tahun 2016. [Data and Information Poverty in District/City Poverty 2016] *BPS: Jakarta-Indonesia*.
- Badan Pusat Statistik (BPS). (2017). Pedoman Pencacahan Survei Sosial Ekonomi Nasional 2017.
 Guidelines for Enumerating the 2017 National Socio-Economic Survey] BPS: Jakarta-Indonesia.
- 5. Badan Pusat Statistik (BPS). (2018). Data dan Informasi Kemiskinan Kabupaten/Kota Tahun 2017. [District / City Poverty Data and Information for 2017] BPS:Jakarta-Indonesia.
- 6. Chambers, R. (1998). Pembangunan Desa-Mulai Dari Belakang.[Village Development Starting from the Back] Jakarta: LP3ES.
- 7. Delgado, J. E., & Klasen, S. (2018). Gender and multidimensional poverty in Nicaragua: An individual based Approach. *World Development*, 110 Hal 466-491.
- 8. Giovanni, R. (2018). Analisis Pengaruh PDRB, Pengangguran dan Pendidikan terhadap Tingkat

- Kemiskinan di Pulau Jawa Tahun 2009 2016. [Analysis of the Effect of GRDP, Unemployment and Education on Poverty Rates in Java in 2009 2016]. *Economics Development Analysis Journal 7* hal 23 31.
- Goncalves, S., & Machado, A. (2015). Poverty dynamics in Brazilian metropolitan areas: An analysis based on Hulme and Shepherd's categorization (2002-2011). Economia 20 hal 376-394
- Gujarati, D. N. (2003). Basic Econometrics (Fourth edition ed.). Singapore: McGraw-Hill Higher Education.
- Handayani, E. J., Kindangen, P., & Walengwangko, E. N. (2018). Analisis Faktor-Faktor yang Mempengaruhi Kemiskinan Rumah Tangga di Sulawesi Utara. [Analysis of Factors Affecting Household Poverty in North Sulawesi] Jurnal Pembangunan Ekonomi dan Keuangan Daerah, 19 (7), 1-16.
- 12. Hosmer, D., & Lemeshow. (2013). Applied Regression Logistic (Thirded). *New York: John Wiley & Son.*
- 13. Hudori, H. A. (2016). Determinan dan Probabilitas Status Kemiskinan di Provinsi Aceh. [Determinants and Probabilities of Poverty Status in Aceh Province] *Banda Aceh: Universitas Syiah Kuala*.
- 14. Jarnasy, O. (2004). Pemberdayaan dan Penanggulangan Kemiskinan. [Poverty and Empowerment] *Jakarta: Belantika*.
- 15. Kartasasmita, G. (1996). Pembangunan untuk Rakyat : Memadukan Pertumbuhan Dan Pemerataan. [Development for the People: Integrating Growth and Equality] *Jakarta: Pustaka CIDESINDO*.
- 16. Khaufelo, Lekobane. R., & Tebogo, Seleka. B. (2016, February). Determinants of Household Welfare and Poverty in Botswana, 2002/2003 and 2009/2010. *Journal Poverty*, 21 (1), hal 42-60.
- 17. Kiyai, Monolalu, Ruru (2000) Studi Peranan Sektor Informal Dalam
- 18. Meningkatkan Pendapatan Keluarga Berpenghasilan Rendah di Kecamatan Tuminting Kota Manado.[Study of the Role of the Informal Sector in Increase Low Income Family Income In Tuminting District, Manado City] Hal 1-16
- 19. Nachrowi, D., & Usman, H. (2005). Penggunaan teknik ekonometri (edisi revisi). [Use of econometrics techniques (revised edition)] *Jakarta: P.T Raja Grafindo Persada*.
- 20. Nugroho, H. (1995). Kemiskinan, Ketimpangan dan Kesenjangan. [Poverty and Inequality] Yogyakarta: Aditya Media.
- 21. Ogwumike, F., & Ozughalu, U. (2017). Desember). Empirical evidence of child poverty and deprivation in Nigeria. *Child Abuse & Neglect*, 77 Hal 13-22.
- 22. Putra, IMS, & Sudibia, IK (2018). The influence of social, economic and demographic factors on

- informal sector business income in Darmasaba Village. *PYRAMID*, *14* (1), 49-58.
- Ravallion, M. (1998). Poverty Lines in Theory and Practice: Living Standards Measurement Study. 26.
- Ritonga, H. (2003). Kemiskinan dan Kesenjangan Ekonomi Antar Wilayah. [Poverty and Economic Gap Between Regions] Kepulauan Riau.
- 25. Saidatulakmal, & Riaz, M. (2012). Characteristic of Poverty in Pakistan. Developing Country Studies 2 hal 67-77.
- Sekhampu, T. (2013). Determinants of poverty in a South African township. *Journal Social Science*, 34 hal 145-153.
- Siegel, S. (1986). Statistika non parametrik untuk ilmu sosial (edisi revisi) . [Non-parametric statistics for social science (revised edition)] Jakarta: Gramedia.
- 28. Sumodininggrat. (1999). Kemiskinan, Teori, Fakta dan Kebijakan. [Poverty, Theory, Facts and Policy] Jakarta: IMPAC.
- 29. Supriatna, T. (1997). Administrasi Birokrasi dan Pelayanan Publik. [Bureaucratic Administration and Public Services] Jakarta: PT.Nimas Multima.
- 30. Suryawati. (2004). Teori Ekonomi Mikro. [Microeconomic Theory] Yogyakarta: Jarnasy.
- 31. Tambo, J., & Wunscher, T. (2017). Farmer-led innovation and rural household welfare: evidence from Ghana. *Journal of rural studies* 5, 263-274.
- 32. Taufiq, Nuri (2017). Pengaruh Dinamika Sektor Pekerjaan Terhadap Dinamika Kemiskinan (Poverty Dynamics) di Indonesia,[The Influence of Work Sector Dynamics on Poverty Dynamics in Indonesia] *SOSIO KONSEPSIA 7* hal 1-14.
- 33. Thorat, A. (2017). Escaping and Falling into Poverty in India Today. *World Development*, 93 hal 413-426.
- 34. Todaro, P., & Smith, C. (2006). Economic development ninth edition. United Kingdom: Pearson Addison-Wesley Education Limited.
- 35. United Nations. (2012). The United Nations human rights treaty system. United Nations: New York and Geneva.
- 36. United Nations. (2015). Transforming our world: the 2030 agenda for sustainable development. General Assembly 4th plenary meeting.
- 37. Usman, H., & Akbar, S. P. (2003). Metodologi Penelitian Sosial (3 ed.). [*Social Research Methodology] Jakarta*: Bumi Aksara.
- 38. Vijayakumar, S., & Olga, B. (2012). Poverty Incidence and its Determinants in the Estate Sector of SriLanka. *Journal of Competitiveness*, *4*(1) hal 44-55.
- 39. Wekke, I, & Cahaya, A. (2015). Fishermen poverty and survival strategy: research on poor household in Bone indonesia. *Procedia economics and finance*, 26 hal 7-11.