

THE ROLES OF HDI AND GENDER PARTICIPATION IN CENTRAL JAVA POVERTY ALLEVIATION

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THE ROLES OF HDI AND GENDER PARTICIPATION IN CENTRAL JAVA POVERTY ALLEVIATION

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ABSTRACT: This study focused on HDI roles and gender participation in Central Java poverty alleviation. It combined descriptive and inferential studies using secondary data from Statistics Indonesia (BPS) and other sources. In addition, documentation method through writing, and analyzing data related to this study was done to collect secondary data. To analyse the data, this study used regression and panel models. The equation in this model is $Y = \beta_1GDI + \beta_2GEI + \beta_3HDI + \beta_4PWW + \beta_5WIC + \epsilon_{it}$. The result showed that there found the effects of variables (GDI, GEI, HDI, PWW, and WIC) on poverty rate in Central Java for the recent five years. Also, those variables gave positive and negative effects on poverty rate. Apparently, HDI gained the most significant effect among other variables. HDI brought negative and significant effects toward the number of poverty in Central Java. Then, gender participation in form of providing the same opportunities for women to work positively alleviated the poverty rate in Central Java.

KEYWORDS: HDI, Gender, Poverty

I. INTRODUCTION

Poverty is a condition of one's inability to meet his needs, especially in consumption and income aspects (Jacobus, et al., 2018). The dominant factors that arise poverty are education, income, location, and the limited access of health, finance, and public services (Hasibuan, et al., 2019). Poverty becomes the main problem in every country in the world, especially for developing country. Thus, the alleviation of poverty and increase in people welfare become the final goal of a country (Pratama, 2014). Many efforts surely have been conducted at the level of regional, national, and international. According to Rejekiningsih (2011), the characteristics of poverty cover: 1) low income or no income, 2) no permanent jobs, 3) low education or not educated at all, 4) no house to live, and 5) inability to meet the minimum nutritional standard. Jacob et al. (2018) add 3 factors cause poverty, namely the level of education, health, and asset ownership.

Indonesia as a developing country is inseparable from poverty issues. The poverty percentage in Indonesia in March 2019 was 9.41%. It means that there were 25,14 million Indonesian people lived under the poverty in many regions.

Poverty in Indonesia tended to decrease from 1999 – march 2019. In March 2019, poverty population in Indonesia has decreased 530 thousand people (0.25%) compared to the previous year in September 2018 (BPS, 2019). Central Java is one of provinces that gives high contribution on poverty of 3.74 million people or more than 11% of population in Central Java. Even though the poverty trend decreased for more than 1 million people for recent five years, Central Java still donates the highest poverty contribution in Java Island and Indonesia.

Several factors cause the higher number of poverty in Central Java than other provinces, especially in terms of economic structure and the geographical conditions. The poverty is often caused by cultural poverty or the absence of production factors. Another cause is the economy which still relies on primary sector and agriculture in many regions, especially those with dry geographical condition, such as south and north coast areas, especially Brebes Regency.

Another issue of this study was gender. Gender means a role formed by society and a behaviour embedded through socialization process from a generation to generation related to social roles of male and female. The biological differences certainly exist between male and female, but culture defines those differences to become a set of social demands about appropriateness in behaviour based on biological sex, rights, resources, and power (Puspitawati, 2015).

World Bank reveals that gender equality is the main issue of development, yet is able to strengthen a country to develop, get out from poverty, and manage the country effectively. Hence, government should pay more attention on issues related to gender equality to be a developed country (World Bank, 2001).

Table 1. Gender Development Index in Central Java, Year 2014 – 2018 (%)

Region	Gender Development Index (GDI)			
	2014	2015	2017	2018
Central Java Province	91.89	92.21	91.94	91.95

Source: BPS (2019)

Table 1 shows that in 2014 – 2015, GDI in Central Java increased by 0.32%. It meant that in that year, human development that covered 3 basic dimension of human achievement, namely longevity and health life, knowledge, and better life standards by 0.32%. Meanwhile in 2015 – 2017, GDI in Central Java decreased by 0.27%. In that year, human development decreased by 0.27%. In 2017 – 2018, GDI decreased 0.01%. Within 2014 – 2018, GDI in Central Java had increased 0.04%, but compared to 2015, GDI in 2018 decreased by 0.26%.

Then, the data of Human Development Index (HDI) in Central Java show that female tends to have lower HDI than male. It can be seen in the following table.

Table 2. Human Development Index (HDI) Based on Gender in Central Java Year 2014 – 2018

Region	Human Development Index (HDI) based on Gender					
	Male			Female		
	2014	2015	2017	2018	2014	2015
Central Java Province	73	73.39	74.48	75.13	67.08	67.67

Source: BPS (2019)

Table above informs that female had lower HDI than male as their opportunities to get appropriate education and jobs was hampered. Patriarchal culture still becomes a barrier. Indeed, the opportunity has not provided gender equality.

From HDI data, it is known poverty factor also arises from gender equality aspect. Female are still behind male. In addition, Ministry of Women Empowerment and Child Protection (KPPPA) uses a concept of family quality which is formed from 5 components, namely the basis of legality and gender equality, physical quality, economy quality, socio-psychological quality, and socio-cultural quality.

Poverty factors also can be seen through Multi-dimension Poverty Index method that does not observe poverty only from economy factors, but also education, health, and welfare.

II. METHODOLOGY

The researchers combined descriptive and inferential studies and used secondary data from BPS and other sources. The secondary data used were in the form of number, while the analysis used statistics. The source of data was obtained from institutions related to problems of study, such as BPS on www.bps.go.id. Those were classified within a period of 2015 – 2018.

To collect the data, this study used documentation study which was performed by collecting secondary data, writing, and analyzing data related to this study. Secondary data were taken from second or secondary source (Bungin, 2013).

Meanwhile the data analyzed were poverty rate, panel data regression, and dummy variable which were supported by the quantitative data. Then the data were processed by using software reviews. The model used is elaborated as follows.

12 Panel Data Regression

This study used panel data analysis in which the panel data are a combination of time series and cross section data (Basuki, 2016). Cross section data were collected from time to time toward the number of individual, meanwhile time series data were collected from time to time toward an individual. Panel data regression

analysis is a regression analysis tool in which the data are collected individually (cross section) and followed by current time (time series).

According to Basuki (2016), this method uses 3 types of approach as follows:

a. Common Effect Model

Common effect model is the simplest data panel approach since it only combines time series and cross section data. This model does not consider either time dimension or individual, therefore it assumes that the behaviour of company's data is always same over the time. Additionally, this model may use Ordinary Least Squares (OLS) or the least squares technique to estimate panel data model. The model is elaborated as follows:

$$Y_{it} = a + X_{it}^1\beta_{it} + \varepsilon_{it}$$

Notes:

- Y : Dependent Variable (Poverty Rate)
- a : Constanta
- X¹ : Independent Variable 1 (GDI)
- X² : Independent Variable 2 (GEL)
- X³ : Independent Variable 3 (HDI)
- X⁴ : Independent Variable 4 (Level of Female Employment)
- X⁵ : Independent Variable 5 (HLS)
- β : Regression Coefficient
- ε : Error Term
- t : Time/ Year Period
- i : Cross Section

b. Fixed Effect Model

This model assumes that the differences between individual can be accommodated from the differences of intercepts. To estimate panel data, this model uses dummy variable to obtain the differences of intercepts among companies. However, the slopes are the same between observations. This model is also called as Least Squares Dummy Variables (LSDV). The model formula is elaborated as follows:

$$Y_{it} = a + ia_1 + X_{it}^1\beta_{it} + \varepsilon_{it}$$

c. Random Effect Model

This model estimates panel data in which the interruption variables may be interconnected between time or between individual. In this model, the intercepts differences are accommodated by error terms of each observation. Additionally, the advantage of using this model is able to eliminate heteroscedasticity. This model is also called as Error Component Model (ECM) or Generalized Least Square (GLS). The model is elaborated as follows (Rosadi, 2012: 273):

$$Y_{it} = X_{it}^1\beta_{it} + v_{it}$$

Notes:

- v_{it} = c_i + d_t + ε_{it}
- c_i : Dependent Constanta of i
- d_t : Dependent Constanta of t

Significance Test

This test examines the significant level of correlation between X and Y variables after r price obtained, then substituted into the following formula revealed by Nana Sudjana (2001).

$$t_{count} = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Notes:

- t-count : t count value
- r : Correlation coefficient of r_count result
- n : Test criteria on two parties test with dk = (n - 3) in significant level of 95%, the criteria is as follows:
 If t-count > t-table , so H0 is rejected and H1 is accepted.
 If t-count < t-table , so H0 is rejected and H1 is accepted.

III. RESULTS AND DISCUSSION

Poverty is a condition of one's inability to meet his needs, especially in consumption and income aspects (Jacobus, et al., 2018). In fact, poverty still becomes a serious issue in Indonesia, especially in Central Java. The following table presents the data of poverty number in Central Java obtained from BPS.

Table 3. The number of poverty in Central Java (million people)

Region	2017	2018
Central Java Province	4450.72	3897.20

Source: BPS (2019)

Central Java province is one of provinces that highly contributes on poverty nationally. Based on BPS, the number of poverty in Central Java in 2018 was 3.89 million people or more than 11% of total population in Central Java. Even though the poverty trend continuously decreased by more than 1 million people for than recent five years, Central Java still became the province that contributed highest poverty in Java Island and Indonesia.

Table 4. Gender Development Index (GDI)

Region	2014	2015	2017	2018
Central Java Province	91.89	92.21	91.94	91.95

Source: BPS (2019)

Table 4 informs that in 2014 – 2015 GDI in Central Java increased by 0.32%, it means that in that year, human development in Central Java included 3 basic dimension of human development, namely longevity and health lives, knowledge, and appropriate life standard had improved by 0.32%. Then, in 2015 – 2017, GDI of Central Java decreased by 0.27% or human development of that year has decreased 0.27%. In 2017 – 2018, GDI increased only by 0.01%. Shortly, it can be seen that from 2015 to 2018, GDI of Central Java continuously decreased.

Table 5. Gender Empowerment Index (GEI)

Region	2012	2013	2014	2015	2017	2018
Central Java	69.06	71.22	74.46	74.80	75.10	74.03

Source: BPS (2019)

Gender Empowerment Index (GEI) shows whether women can actively contribute in economic and political lives or not. GEI emphasizes participation by measuring gender inequality in fields of political participation, decision making (social), and accessibility on economic resources. From table 5, it can be seen that in 2017, GEI of Central Java decreased by 1.07%, meaning that women active roles in 2017 continuously decreased till 2018.

Table 6. Human Development Index (HDI) based on Gender

Region	Gender							
	Male				Female			
	2014	2015	2017	2018	2014	2015	2017	2018
Central Java Province	73	73.39	74.48	75.13	67.08	67.67	68.48	69.08

Source: BPS (2019)

HDI informs how community is able to access the result of development in obtaining income, health, education, etc. In brief, table 6 shows that female had lower HDI than male due to female's opportunity to get access of education, appropriate job was relatively difficult. Thus, this circumstance showed the gender inequality viewed from human development in Central Java.

Table 7. Gender Empowerment Index (GEI) Female as Professionals

Region	2017	2018
Central Java Province	46.97	47.57

Source: BPS (2019)

From table above, GEI of women as professionals can be seen from its percentage of 47.57%. This percentage meant that less than half of professionals were women. It can be concluded that, gender equality has not yet been realized.

As previously mentioned, to analyze the data, this study used Panel Least Square (PLS) method by using Eviews program tool. The results are elaborated as follows:

Dependent Variable: Y

Method: Panel Least Squares

Date: 11/10/19 Time: 14:19

Sample: 2017 2018

Periods included: 2

Cross-sections included: 35

Total panel (balanced) observations: 70

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	176830.3	65705.28	2.691264	0.0115
GDI	3.854028	8.442587	0.456498	0.6513
GEI	0.782759	1.082456	0.723132	0.4752
HDI	-25.61458	4.745892	-5.397211	0.0000
GEI_TKWP	-0.285641	0.495494	-0.576476	0.5686
GEI_SPP	-8.044757	12.32916	-0.652499	0.5190

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.993013	Mean dependent var	11925.43
Adjusted R-squared	0.983929	S.D. dependent var	6971.065
S.E. of regression	883.7210	Akaike info criterion	16.70172
Sum squared resid	23428884	Schwarz criterion	17.98657
Log likelihood	-544.5602	Hannan-Quinn criter.	17.21208
F-statistic	109.3219	Durbin-Watson stat	3.888889

Based on table above, regression equation of cross section data is as follows:

$$Y = 176830.3 + 3.854028 \text{ GDI} + 0.782759 \text{ GEI} - 25.61458 \text{ HDI} - 0.285641 \text{ GEI_TKWP} - 8.044757 \text{ GEI_SPP}$$

Beta coefficient in Eviews is presented by "coefficient". It is prediction value of a variable toward response

variables. The estimation result can be described as follows: (1) constant value = 176830.3 meaning that if all of independent variables were 0, so the poverty in Central Java was 176830.3. (2) GDI coefficient value (X_1) was 3.854028 meaning that if GDI was 1, so the poverty increased by 3.854028. (3) GEI coefficient (X_2) was 0.782759 meaning that if GEI was 1, so the poverty increased by 0.782759. (4) HDI coefficient value (X_3) was - 25.61458 meaning that if HDI was 1, so the poverty decreased by - 25.61458. (5) GEI_TKWP (X_4) was - 0.285641 meaning that if GEI_TKWP was 1, so the poverty decreased by - 0.285641. (6) GEI_SPP coefficient value (X_5) was - 8.044757 meaning that when GEI_SPP was 1, the poverty decreased by - 8.044757.

Partial Test (t Test)

This test is also called as individual significant test. This test shows the extent to which the independent variables, namely GEI, GDI, HDI, TKWP, and SPP affected dependent variable of poverty rate.

From the previous output, p value from t GDI was $0.456498 > 0.05$ (crisis limit), so H_0 was accepted. It means that GDI did not partially affect in model on Y. p value of t GEI was $0.723132 > 0.05$ (crisis limit), so H_0 was accepted meaning that GEI did not partially affect Y. p value of t HDI was $-5.397211 < 0.05$ (crisis limit) so that H_1 was accepted meaning that HDI partially affected Y. p value of t GEI_TKWP was $0/-576476 < 0.05$ (crisis limit) so H_1 was accepted meaning that GEI_TKWP partially affected Y. then p value of t GEI_SPP was $0.653499 < 0.05$ (crisis limit), do H_1 was accepted meaning that GEI_SPP partially affected Y.

R Square: is the amount of effect of predictor variable simultaneous ability in explaining a response variable. If its value is more than 0.5 meaning that the predictor variable is strong in explaining the response variable. In this way, since the above R square value was 0.993013 meaning that GDI, GEI, HDI, GEI-PWW, GEI_WIC were strong in explaining Y with the percentage of 99.3013%.

Adjusted R Squared value is the value of R value that has been corrected by standard error value. According to the above output, the value of adjusted r squared was 0.983929. On the other hand, the value of standard error of regression model was 883.7210 showed by the label of S.E. of regression. Due to the smaller value than the standard deviation of response variable in "S.D. dependent var" of 23.428884, the regression model was considered valid as a predictor model.

Simultaneous Test (F Test)

According to Ghozali (2016:96) F test aims to determine whether independent variable jointly affects dependent variable.

Based on eviews silmultaneous test, the researchers gained F value of 109.3219 with p value of 0.00000. Since this value is less than 0.05, H_1 was accepted and meant that the independent variables jointly affected the dependent variable.

In terms of number, in 2016-2019 the poverty in Central Java fell. In detail, in 2016 the number of poor people which were initially 4,506.89 thousand people fell to 3,743.23 thousand people. When it comes to the regional calculation, the poor people mostly lived in rural areas. It shows that people who live in rural areas need extra attention, especially those who work in agricultural sector. Similar to the numbers, the percentage of poor people in Central Java during 2016-2019 also fall, namely from 13.27% to 10.8% in 2019. Again, in accordance with regional calculation, most of the poor people lived in rural areas (BPS, 2019)

- Effect of Gender Development Index on Poverty

Based on the results of regression analysis, GDI variable gained greater coefficient value of 3.854028. It meant that if IPG increases by 1, the number of poverty would increase by 3.854028 by assuming that other variables remained constant. In addition, this variable also obtained the probability value $>5\%$ of 0.6513 which meant that H_0 was accepted. This evidence proved that GDI variable had a positive but insignificant effect on poverty, did not correlation to hypothesis and was insignificant.

Gender development index is one the main indicators of gender representation and empowerment in Central Java. By referring to the data analysis, there found a random pattern in IPG and poverty level. Regions which had high IPG could not merely be considered to have low level of poverty. However, since the efforts done to improve economic productivity were targeted to male people due to their higher productivity, work opportunity, and production factors, the random pattern showing high level of gender development index was solely significant to poverty alleviation. It meant that poverty remains a burden which alleviation requires a direct treatment from production side.

- Effect of Gender Empowerment Index on Poverty

The results of regression analysis showed that GEI variable obtained a coefficient value of 0.782759, meaning that whenever GEI increased by 1, the poverty level would also increase by 0.782759 by assuming that other variables remained constant. In addition, this variable also obtained the probability value $>5\%$ of 0.4752 which meant that H_0 was accepted. This evidence proved that GEI variable had a positive effect on poverty rate, but did not correlate to the hypothesis and was insignificant.

Gender empowerment index on the analysis of this correlation also showed a random pattern. It meant that of 35 regencies and cities in Central Java there found a tendency that higher gender empowerment index did not merely gave a significant effect on poverty alleviation and even tended to be the converse. This finding surely confirmed the findings on the previous variables which stated that gender empowerment generally has not been able to significantly alleviate poverty in a short term.

- Effect of Human Development Index on Poverty

The results of regression analysis showed that HDI variable obtained a coefficient value of -25.61458, meaning that whenever HDI increased by 1, the poverty level would also decrease by 25.61458 by assuming that other variables remained constant. In addition to the regression analysis, this variable obtained the probability value <5% of 0.000 which meant that H₀ was rejected. This evidence proved that HDI variable had a negative effect on poverty rate, had a correlation with hypothesis and significant.

HDI had a negative and significant effect on the poverty rate in Central Java, meaning that higher HDI would result in the fall of poverty rate in Central Java. This is in line with the findings of Sulistyowati's study (2017) about the analysis of poverty determinants in Central Java that Human Development Index (HDI) and Unemployment Rate significantly affect poverty.

The variable of HDI greatly contributed significant effect on the poverty alleviation in Central Java. HDI as the reduction of education and health variables currently becomes a benchmark of regional development. The current study also provided information that whenever HDI unit increased by 1, there would be poverty alleviation of 256,145 people. In this way, a region which had high level of HDI would have low level of poverty. Thus, the quality of regional development is reflected by HDI which further is followed by lower poverty rate.

In association with the above descriptions, HDI became one of indicators and efforts that can be fostered to trigger poverty rate fall. With this result, if Central Java province wants to alleviate 1 million of poor people, the HDI score of this province should increase by 3 to 3.5. Also, if the government would like to maximize the efforts, they can empower women in the field of education quality and health.

Some aspects to increase HDI score are reducing the risk of maternal mortality, increasing the life expectancy of newborn babies, reducing the risk of stunting and malnutrition, especially for babies and pregnant and breastfeeding mothers, as well as increasing health awareness for mothers and children. For the poor, these attempts will certainly become a burden. Nevertheless, the government can facilitate the procurement of basic health facilities.

In the field of education, women empowerment needs to be improved in order to get a good education access. For many days, women have not yet gained a recognition to get good education, particularly in the culture of patriarchal society.

Astonishingly, a patriarchal culture is deeply practice by the poor communities by having women to do domestic work, no chance to process production factors, and empower family economy. This implementation surely places men as a single worker in a family.

Education is an effective way to end poverty. It is because education will give wider access to be away from poverty. Therefore, there is a need for education that does not discriminate gender and discusses feminism to motivate and improve the education awareness of women in agrarian areas.

Based on statistical data of BPS regarding gross participation rates, it is known that large cities, such as Salatiga, Semarang, and Magelang have high educational participation rates. On the other hand, regencies like Wonosobo, Pekalongan, Banjarnegara, Pemasang, and Rembang have low participation indicated by the numbers of children who dropped out of school. Specifically, BPS in 2017 released some information telling that 73% of the twelfth grade students dropped out with Klaten Regency as the largest contributor, namely 91.82% followed by Sragen and Pemasang Regencies of 90.92 and 86.72% respectively.

Another thing that should be educated is the marriageable age. Communities should prioritize work and study first prior to marriage. It is aimed at avoiding the risk of premature birth and a baby boom which may be experienced by a settled family given child marriage is usually practiced by rural areas and poor communities. Therefore, by holding back the rate of population growth in the poorest groups at least the conditions of poverty in heredity and culture can be slightly suppressed.

- The Effect of Professional Women Workers on Poverty

Regression analysis results showed that PWW variable obtained a coefficient value of -0.285641, meaning that whenever HDI increased by 1, the poverty level would also decrease by 0.285641 by assuming that other variables remained constant. In addition to the regression analysis, this variable obtained the probability value >5% of 0.5686 which meant that H₀ was accepted. This evidence proved that PWW variable had a negative effect on poverty rate, had a correlation with hypothesis, but insignificant.

The above data indicated that in every 1000 professional women workers increase, poverty would fall 285. As

said earlier, the women workers affected poverty alleviation in Central Java and by the increase in their numbers, the poor people in Central Java can be reduced.

According to the findings, the number of women workers affected on poverty alleviation, meaning that the women who added income to their family eventually contributed to the fall of poverty. This is in contrast to the custom of people in agrarian areas who set women to babysit and do household matters, while, in fact this leads to poverty. The findings asserted that women who had a chance to work professionally seem to be able to cut the poverty. It is proved by the data showing that regions who had many women workers tended to have low level of poverty.

Table 8. The Average of Job Vacancies for Women in Central Java in 2015-2016

No	Regencies/ Cities	2015	2016	Total	Average
		Jobs	Jobs		
1	Rembang Regency	1,130	661	1,791	896
2	Magelang City	2,440	691	3,131	1,566
3	Wonogiri Regency	8,592	11,444	20,036	10,018
4	Grobogan Regency	5,712	15,814	21,526	10,763
5	Semarang City	17,859	9,895	27,754	13,877
6	Semarang Regency	10,478	11,041	21,519	10,760
7	Sukoharjo Regency	3,343	1,583	4,926	2,463
8	Kudus Regency	3,981	3,296	7,277	3,639
9	Karanganyar Regency	2,283	1,463	3,746	1,873
10	Wonosobo Regency	3,604	4,022	7,626	3,813
11	Blora Regency	1,890	2,564	4,454	2,227
12	Klaten Regency	3,042	954	3,996	1,998
13	Magelang Regency	1,517	838	2,355	1,178
14	Sragen Regency	3,301	449	3,750	1,875
15	Kendal Regency	5,166	3,632	8,798	4,399
16	Batang Regency	2,683	2,281	4,964	2,482
17	Surakarta Regency	3,085	550	3,635	1,818
18	Pekalongan Regency	3,037	1,781	4,818	2,409
19	Banyumas Regency	6,947	4,355	11,302	5,651
20	Cilacap Regency	12,770	5,048	17,818	8,909
21	Pati Regency	3,120	14,070	17,190	8,595
22	Pemalang Regency	6,008	5,115	11,123	5,562
23	Banjarnegara Regency	3,888	2,654	6,542	3,271
24	Temanggung Regency	2,435	3,758	6,193	3,097
25	Purbalingga Regency	5,117	5,293	10,410	5,205
26	Purworejo Regency	3,239	1,554	4,793	2,397
27	Brebes Regency	7,370	5,733	13,103	6,552
28	Jepara Regency	1,442	10,447	11,889	5,945
29	Boyolali Regency	9,042	11,603	20,645	10,323
30	Kebumen Regency	4,545	2,643	7,188	3,594

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31	Salatiga City	1,043	151	1,194	597
32	Pekalongan City	1,094	301	1,395	698
33	Demak Regency	2,130	1,047	3,177	1,589
34	Tegal Regency	3,284	574	3,858	1,929
35	Tegal City	974	458	1,432	716
Average		4,503	4,221.8		4,362

It is seen that the job vacancies provided by Salatiga City, namely 597 was the least, meaning that the number of professional women workers was small. The second city with lowest job vacancies was Pekalongan City with 698 vacancies. It also meant that the number of women workers in that area was also small. After that, there was Tegal City with 716 vacancies followed by Rembang Regency with 896 vacancies. These numbers indicated that the women workers in those areas were few.

All of the above four regencies with small number of professional women workers were actually good at the agricultural sector, both plantation and fisheries. However, the small number of women workers proved that the active role of women in a professional work has not yet been optimally empowered to reduce poverty level. As a result, the level of poverty in agrarian areas was high.

Regions who had many women workers gained low level of poverty. Based on the above table, Semarang City had the highest average of women job vacancies of 13,877, meaning that the number of professional women workers in that area was large and the poverty rate of the area was low. The second regency with the highest women workers job vacancies was Grobogan Regency with 10,763 vacancies, while Semarang Regency was in the third place with 10,760, followed by Boyolali Regency with 10,323 in the fourth place, and Wonogiri Regency of 10,018 in the fifth place. Those city and regencies had the average number of job vacancies for women workers more than 10,000, meaning that each 10,000 increase in professional women workers would result in the poverty reduction of 2,856 people. Therefore, it showed that the women workers surely could contribute to poverty alleviation.

In association with the above data, it was concluded that of 35 regencies/ cities in Central Java, there were five regencies which provided more than 10,000 job vacancies for women workers and there were four regencies/ cities which had below 10,000 job vacancies for the women. It meant there were still 26 Districts / Cities had an average number of more than 1000 but less than 10,000 professional job vacancies and should be encourage to increase the number to reduce poverty levels especially in agrarian regions.

Once the regions provided the jobs, the next step to do is to prepare the women to be professional workers. The preparation can be done by providing trainings and skills education to expand the scopes of their future career.

The preparation of professional workers is the responsibility of related offices, especially manpower and education offices. They should map the surplus of working age population, especially female in regions with low economic development. If the preparation results in the excessive labours of women workers supply, the government can give them better education and trainings in public vocational training center and professional training institutions. The trainings that can be given include the preparation of working at textile and garment industry which obviously absorb a large number of women workers. Besides, training in other industry that absorbs a large number of women worker are also possible, such as the industry of food processing, pharmacy, and handicrafts.

Through trainings, the excessive number of women workers in a particular area can be distributed to other areas whose industry requires more labour. For that reason, women would have high competitiveness and productivity.

Other than the above offices, the office of industry, trade, agriculture, communication informatics, National Family Coordinating Board (BKKBN), universities, and cooperative and Small Medium Enterprises office. Women workers can have technical trainings to carry out production activities and the formation of joint business groups consisting of women or housewives from these offices. Specifically, the women who need these trainings are those coming from farmer and fisherman family. Apart from the trainings, the training design and assistance are needed to be provided given the poverty rate can be reduced by increasing the number of professional women workers. The following is a table showing the capacity of classroom and workshop of Central Java public vocational training center (BLK) in 2017.

Table 9. The Capacity of BLK classrooms and workshops in Central Java in 2017

No	BLK/UPT	Classroom		Workshop	
		Quantity	Capacity	Quantity	Capacity
1	UPTD Disnaker Sragen Regency	2	32	11	128

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2	BLK Batang Regency	1	20	1	20
3	BLK Blora Regency			6	80
4	BLK Brebes Regency			1	20
5	BLK Demak Regency	4	110	4	86
6	BLK Dinnakerkopukm Banyumas Regency	6	104	6	206
7	BLK Dinsosnakertrans Karanganyar Regency	4	48	2	32
8	BLK Disnakertranssos Kebumen Regency	1	16	10	112
9	BLK Dinsosnakertrans Jepara Regency	3	44		
10	BLK Grobogan Regency	1	17	3	34
11	BLK Pekalongan Regency	8	140	7	136
12	BLK Pemalang Regency	2	32	3	48
13	BLK Semarang regency			5	80
14	BLK Dinsosnakertrans Pekalongan City			15	107
15	BLK Kudus Regency	8	100	6	252
16	BLK Disnakertrans Kendal Regency	4	140	2	20
17	BLK Purbalingga Regency	8	120	4	120
18	BLK Disnakersostrans Magelang Regency	3	40	11	140
19	BLK Rembang			10	112
20	BLK Sragen Techno Park	1	18	2	16
21	BLK Sukoharjo	1	16	7	112
22	BLK Tegal Regency	2	16	9	12
23	BLK Temanggung	2	48	15	112
24	BLK UKM Wonosobo	1	16	5	72
25	BLK Wonogiri	1	160	6	120
26	BLK Dispernaker Purworejo Regency	5	64	8	80
27	BLK UKM Pati	9	118	9	200
28	BLK Boyolali	2	3	5	35
29	BLK Disnaker Semarang City	6	48	1	
	Total	95	1470	174	2492

Source: disnakertrans.jatengprov.go.id

Overall, BLK had 95 classrooms with the total capacity of 1470 people and 174 workshops with the total capacity of 2492 people. These data showed that in 2017, Central Java BL has not yet provided enough facilities given there were some regions having no class for BLK.

- Effects of Women's Income Contributions on Poverty

By referring to the results of regression analysis, WIC variable obtained a coefficient value of -8.044757, meaning that whenever WIC increased by 1, the poverty rate would also decrease by 8.044757 by assuming that other variables remained constant. In addition to the regression analysis, this variable obtained the probability value >5% of 0.5190 which meant that H₀ was accepted. This evidence proved that WIC variable had a negative effect on poverty rate, had a correlation with hypothesis, but insignificant.

This coefficient informed that in every one percent of women's income, there would be poverty alleviation of one percent. Indeed, it is in line with the previous variables stating that women chance to work would reduce poverty.

WIC had negative, but insignificant effects on the poverty rate in Central Java. It meant that the higher WIC is, the more poverty alleviation would be.

At this rate, women should be given access and opportunity to work and earn income, given their contribution to the poverty alleviation. Inevitably, most of poor families were born and develop with just one source of income. This assumption is opposite to what this study found that women income could directly alleviate poverty.

The key is women empowerment to work. Not only work in a formal situation, but women can also wok as an

entrepreneur by developing joint business groups. Within groups, the business will be solid. Thus, there is a need to provide assistance to women to have competitiveness.

If women prefer formal sectors to work, they need to be given the same chance to have a proper job with no gender discrimination.

IV. CONCLUSION AND RECOMENDATIONS

All of the above-mentioned findings and discussion leads to a conclusion that the variables tested (GDI, GEI, HDI, PWV, and WIC) have effects on and relationships with Central Java poverty in the past five years. In detail, the effect and relationship of each variable are presented as follows:

The estimation results are explained below:

- Constant value (C) = 176830.3 means that if all independent variables are considered equal to 0, then the Central Java poverty rate is 176830.3
- GDI coefficient value (X1) was 3.854028. It means that when GDI is 1, it will increase the poverty rate by 3.854028.
- GEI coefficient value (X2) was 0.782759. It means that when GEI is 1, it will increase the poverty rate by 0.782759.
- HDI coefficient value (X3) was - 25.61458. It means that when HDI is 1, it will reduce poverty rate by - 25.61458.
- GEI_PWW (X4) coefficient value was - 0.285641. It means that when GEI_PWW is 1, it will reduce poverty rate by - 0.285641 .
- GEI_WIC (X5) coefficient value was - 8.044757. It means when IDG_SPP is 1, it will reduce poverty by - 8.044757.

The effects of each variable are explained as follows:

- The p value of GDI t was $0.456498 > 0.05$ (critical limit), so H_0 is accepted. It means GEI has no partial effect in the model on Y. This result shows that GEI variable has a positive but insignificant effect on poverty rate, does not correlate to the hypothesis and is insignificant. High GEI does not significantly guarantee a low poverty rate or poverty reduction.
- The p value of t GDI was $0.723132 > 0.05$ (critical limit), so H_0 is accepted. It means that GDI has no partial effect in the model on Y. This finding indicates that GDI variable has a positive effect on the poverty rate, does not correlate to the hypothesis and is insignificant. The gender empowerment index also shows a tendency that higher the gender empowerment index does not actually has a significant effect on poverty reduction. The tendency is somehow wrong. Of course this confirms the findings of the previous variable which state that when poverty occurs, gender empowerment approach in general has not yet been able to significantly reduce poverty in the short term.
- The p value of HDI t was $-5.397211 < 0.05$ (critical limit), so H_1 is accepted. It means HDI has a partial / significant effect on Y. This result shows that HDI variable has a negative effect on the poverty rate, is correlated to the hypothesis and significant. Since HDI has a negative and significant effect on the poverty rate in Central Java, the higher HDI the less the number of poor people in Central Java. In other words, HDI variable has a very significant effect on poverty reduction in Central Java.
- The p value of GDI_PWW t was $-0.576476 < 0.05$ (critical limit), so H_1 is accepted and GDI_PWW has a partial / significant effect in the model on Y. This result shows that PWV variable has a negative effect on the poverty rate, is correlated to the hypothesis, but insignificant. In this way, an increase in the women workers has an impact on poverty reduction in general. PWV has a negative but insignificant effect on the poverty rate in Central Java, meaning that the higher the TKWP, the less the number of poor people in Central Java.
- The p value of GDI_WIC t was $-0.652499 < 0.05$ (critical limit) and makes H_1 accepted. It means GDI_WIC has a partial effect in the model on Y. The test result shows that the WIC variable has a negative effect on the poverty rate, is correlated to the hypothesis, but insignificant. Thus, 1 percent increase in women income will reduce one percent poverty. It is in line with the previous variables mentioning that the increase in women work opportunities will reduce the poverty. WIC has a negative effect, but insignificant to the reduction of Central Java poverty, meaning that the higher WIC the less poor people in Central Java will be.

Based on the findings, the following suggestions are given:

- The government can participate in providing basic health facilities. Assisting nutrition fulfilment to prevent stunting and infectious disease.
- Women empowerment as an effort to alleviate poverty through human development index improvement can be started by socializing family health awareness to prevent the risk of maternal mortality, increase newborn

babies' life expectancy, reduce the risk of stunting and malnutrition, especially for babies and pregnant and lactating women, increase health awareness for women and children. Further, community movement needs to be strengthened by empowering farmers and fisheries' wives in the socialization of family health awareness. It is recommended to be carried out in agrarian, coastal and rural areas.

- The government needs to implement education with no gender discrimination. In addition, feminism ideas should be socialized to poor people in agrarian areas to increase education awareness. The 12-year compulsory education program needs to be continually voiced especially in areas where gross enrolment ratio (GER) is still low and the dropout rate is still very high. Again, these phenomena mostly occur in agrarian areas whose patriarchal culture is still deep-rooted. A talent scouting program for Vocational High School in form of scholarship is supposed to be targeted to rural communities, especially those whose education awareness is low.
- There is a need to give education about marriage age, prioritize work and study rather than have child marriage with the aim of reducing the risk of premature birth, increase the birth rate in families whose economic condition is not settled yet.
- The provision of access to employment and women empowerment to be professional workers: a) clear information source about job vacancies, b) trainings and skills education to give women a lot of opportunities to enter jobs. Trainings can be done by cooperating with BLK or universities to give suitable materials based on women workers needs.
- A job market for women workers needs to be held because most of developing industries that are about to relocate to Central Java are labour intensive and involve many female workers. Hence, related offices should be the facilitator for companies who need skilled women workers by meeting them in a job market. In this way, the women workers from agrarian areas can be absorbed by industrial sectors.
- Women should be empowered to get jobs and incomes. They can work both in formal and informal settings such as by being entrepreneurs through developing joint business groups. This way will make their business solid and have competitiveness. Moreover, when the women choose working in formal settings they should be given the same chance to have a proper position.
- Potential women business groups need to be mapped, especially in poverty enclaves so that the groups will have clearer directions and be empowered by central and regional government programs.
- Cultural poverty condition and lack of production factors which prolong the poverty need to be cut with women empowerment programs, especially those who are the wives of farmers and fisheries. Mapping and forming a group of fishermen and farmers' wives need to be carried out in the form of a joint venture by providing factors of production and assistance. The aim is to cut the poverty chain.
- Joint business group assistance can be in the form of assistance, soft credit assistance with the People Business Credit (KUR) scheme by simplifying and providing production and marketing equipment as well as assistance to run a business based on local potential and market share.

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V. REFERENCES

- [1] Azizah, E. W., Sudarti, S., & Kusuma, H. (2018). Effects of Education, Per capita Income and Population on Poverty in East Java Province. *Journal of Economics*, 2 (1), 167-180.
- [2] Hastanti, B. W., & Noya, J. (2018). Characteristics, Poverty, Gender and Masoi Seekers' Perceptions. *Faloak Journal*, 2 (1).
- [3] Indraswari. (2009). Women and poverty. *Journal of Social Analysis*, 14 (2), 40-52.
- [4] Meriyanti, N. K. (2015). The Effect of the Human Development Index (HDI) Program on Poverty Alleviation in Buleleng District in 2011-2014 /. *Journal of Economic Education*, 5 (1).
- [5] Mukhtar, S., Saptono, A., & Arifin, A. S. (2019). Analysis of the Effects of the Human Development Index and Open Unemployment Rate on Poverty in Indonesia. *Ecoplan Journal*, 2 (2), 77-89.
- [6] Putra, I. K. A. A., & Arka, S. (2018). Analysis of the Effect of Open Unemployment Rate, Job Opportunities, and Education Level Against Poverty Rate in Regencies / Cities in Bali Province. *Journal of Development Economics*, 7 (3), 416-444.
- [7] Rahman, A., & Alamsyah, M. F. (2019). The Effects of Education, Income and Consumption on the Poverty of Migrant Communities in Makassar City. *Journal of Ecces*, 6 (1), 111-129.
- [8] Septiadi, M., & Wigna, W. (2013). The Effect of Gender Inequality on the Poor Household Farmers' Survival Strategy in Cikarawang Village. *Sodality: Journal of Rural Sociology*, 01 (02), 100-111.
- [9] Suliswanto, M. S. W. (2010). Effects of Gross Domestic Product (GDP) and Human Development Index

(HDI) on Poverty Rate in Indonesia. Journal of Development Economics, 8 (2), 358–366.

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