

# Economic Development Analysis *Journal*

Nationally Accredited Grade 2  
Based on The Decision of The Minister of Research,  
Technology and Higher Education,  
Number 111/E/KPT/2018

Department of Development Economics,  
Faculty of Economics, Cirebon Pegeri Training

Issue	Volume 1	Issue 2	Year 2022	Frequency May 2022	ISSN 1118-1881	e-ISSN 2524-6460
-------	----------	---------	--------------	-----------------------	-------------------	---------------------

# Economics Development Analysis Journal

eISSN : 25022725 | pISSN : 25022725

Economy

Universitas Negeri Semarang



S2

Sinta Score



Indexed by GARUDA

22

H-Index

20

H5-Index

1756

Citations

1555

5 Year Citations

# Economics Development Analysis Journal

SINTA 2 | P-ISSN 2252-6560 | E-ISSN 2502-2725

[About](#) [Issue](#) [People](#) [Submission](#) [Announcements](#) [Focus and Scope](#)  
[Ethics Statement](#) [Contact](#) [Conference Publication Collaboration](#)

[Home](#) / [Editorial Team](#)

## Editorial Team

### Editor-in-Chief

1. [Avi Budi Setiawan](#) [SCOPUS ID: 57191409626] Economics Development Department, Universitas Negeri Semarang, Indonesia

### Editorial Board

1. [F. Fafurida](#), [SCOPUS ID: 57191417907] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
2. [Shanty Oktavilia](#), [SCOPUS: ID 57191409480] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
3. [Nurjannah Rahayu K](#), [SCOPUS ID: 57191411181] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
4. [Karsinah](#), [SCOPUS ID: 57191403349] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
5. [Andryan Setyadharna](#), [SINTA: ID 6089441] Massey University of New Zealand
6. [Muhammad Ery Wijaya](#), [SCOPUS ID: 24777658900] Kyoto University, Department of Socio-Environmental Energy Science, Kyoto, Japan
7. [Agus Dwi Nugroho](#), [SINTA: ID 6023076] Gadjah Mada University, Indonesia
8. [Diswandi](#), [SCOPUS ID: 57192651698] Murdoch University, Australia
9. [Didit Purnomo](#), [SINTA: ID 5978118] Universitas Muhammadiyah Surakarta, Indonesia
10. [Md. Shafiqul Islam](#), [SCOPUS ID: 57192651698] University of Liberal Arts, Bangladesh
11. [Dwi Rahmayani](#), [SCOPUS: ID 57196192893] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
12. [Fauzul Adzim](#), [SCOPUS ID: 57204792224] Universitas Diponegoro, Indonesia

# Economics Development Analysis Journal

SINTA 2 | P-ISSN 2252-6560 | E-ISSN 2502-2725

[About](#)   [Issue](#)   [People](#)   [Submission](#)   [Announcements](#)   [Focus and Scope](#)  
[Ethics Statement](#)   [Contact](#)   [Conference Publication Collaboration](#)

## Reviewer Team

1. [Prof. Dr. Sucihatiningsih DWP](#), [SCOPUS ID 56590011200] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
2. [Dr. Wahyu Widodo](#), [SCOPUS ID 7801685004] Economics science and Development Studies Department, Economic and Business Faculty, Universitas Diponegoro, Indonesia
3. [Dr. Firmansyah Firmansyah](#), [SCOPUS ID 57191416184] Economics science and Development Studies Department, Economic and Business Faculty, Universitas Diponegoro, Indonesia
4. [Prof. Dr. Rahim Sail](#), [SCOPUS ID: 36024325900] Universiti Putra Malaysia, Faculty of Educational Studies, Serdang, Malaysia
5. [Dr. Tetsuo Tezuka](#), [SCOPUS ID: 7102668869] Energy Economics Kyoto University Japan
6. [Dr. George Vredeveld](#), [SCOPUS ID: 57011243400] University of Cincinnati, Cincinnati, United States
7. [Prof. Dr. P. Eko Prasetyo](#), Economics Development Department, Economic Faculty, Negeri Semarang, Indonesia
8. [Prof. Dr. Ety Soesilowati](#), [SCOPUS ID: 57194207100] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
9. [Fatih Cetin](#), [SCOPUS ID: 29367460700] Omer Halisdemir Universitesi, Department of Business Administration, Niğde, Turkey
10. [Wulandari](#), University of Sussex, England
11. [Dwitya Aribawa](#), [SCOPUS ID: 57191408042] Universitas Atma Jaya Yogyakarta, Indonesia
12. [Dr. Amin Pujiati](#), [SCOPUS ID: 57196190526] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
13. [Atika Wijaya](#), [SCOPUS ID: 57189889235] Maastricht University, The Netherlands
14. [Prasetyo Ari Bowo](#), [SCOPUS ID: 57196197070] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia
15. [Djoni Hartono](#), [SCOPUS ID: 23008737100] Universitas Indonesia, Indonesia
16. [Muhammad Halley Yudhistira](#), [SCOPUS ID: 57195537061] Universitas Indonesia, Indonesia
17. [Dr. Bayu Kharisma](#), [SCOPUS ID: 57205223978] Universitas Padjadjaran Bandung, Indonesia
18. [Dwitya Aribawa](#), [SCOPUS ID: 57191408042] Universitas Atma Jaya Yogyakarta, Indonesia
19. [Agus Wibowo](#), [SCOPUS ID: 57194217286] Universitas Negeri Jakarta, Indonesia
20. [Phany Ineke Putri](#), [SCOPUS ID: 57191407255] Economics Development Department, Economic Faculty, Universitas Negeri Semarang, Indonesia

# Economics Development Analysis Journal

SINTA 2 | P-ISSN 2252-6560 | E-ISSN 2502-2725

[About](#) [Issue](#) [People](#) [Submission](#) [Announcements](#) [Focus and Scope](#)

[Ethics Statement](#) [Contact](#) [Conference Publication Collaboration](#)

## Indexing



# Economics Development Analysis Journal

SINTA 2 | P-ISSN 2252-6560 | E-ISSN 2502-2725

[About](#)   [Issue](#)   [People](#)   [Submission](#)   [Announcements](#)   [Focus and Scope](#)  
[Ethics Statement](#)   [Contact](#)   [Conference Publication Collaboration](#)

---

[Home](#) / [Contact](#)

Journal's Room, L Building, Faculty of Economics, Universitas Negeri Semarang Sekaran Gunungpati Semarang 50229, Indonesia

## Principal Contact

Economic Development Analysis Journal

[edaj@mail.unnes.ac.id](mailto:edaj@mail.unnes.ac.id)

## Support Contact

Avi Budi Setiawan

[avibs@mail.unnes.ac.id](mailto:avibs@mail.unnes.ac.id)

# Economics Development Analysis Journal

SINTA 2 | P-ISSN 2252-6560 | E-ISSN 2502-2725

[About](#)   [Issue](#)   [People](#)   [Submission](#)   [Announcements](#)   [Focus and Scope](#)  
[Ethics Statement](#)   [Contact](#)   [Conference Publication Collaboration](#)

[Home](#) / [Archives](#) / Vol 8 No 4 (2019): Economics Development Analysis Journal

Available online since 1st November 2019

**Published:** 2019-11-01

## Articles

### [Determinant on the Development of Agroecotourism](#)

Shella Monica Fatimahtuzzahra, Dyah Maya Nihayah  
243-251



### [Integration of Central, East, West Java and Jakartas Shallot Market](#)

Siti Sholihah, Karsinah Karsinah  
252-266



### [Effectiveness of E-Billing System in Tax Payments for Taxpayers](#)

Nikmatul Lailiyah, Lesta Karolina Br Sebayang  
267-280



### [The Relationship Between Institutions and Business Opportunities Toward Economic Growth](#)

P Eko Prasetyo, Andryan Setyadharma, Nurjannah Rahayu Kistanti  
281-291

 PDF

### **Economic Evaluation on the Application of Collaborative Forest Management (CFM)**

Waridin Waridin, Rizky Karunia Dhea Safira, Indah Susilowati, Kesi Wijajanti, Evi Yulia Purwanti  
292-301

 PDF

### **Competitiveness Analysis of Regencies and Cities in West Java Province**

Bayu Kharisma, Sutyaastie Soemitro Remi, Yudha Hadian Nur  
303-314

 PDF

### **Economic and Non-Economic Factors Effect Per Capita Income in Indonesia**

Rizqi Ulfa Nurlaili, Malik Malik Cahyadin  
315-323

 PDF

### **Village Fund Transfer and Rural Poverty in Indonesia**

Muhammad Amir Arham, Bobby Rantow Payu  
324-334

 PDF

### **Street Vendor in Semarang: Structuring, Empowerment, and Welfare**

Eko Handoyo, Iwan Hardi S  
335-344

 PDF

### **THE The Nexus Between Poverty, Education and Economic Growth in Indonesia**

Amaluddin Amaluddin  
345-354

 PDF



# Economics Development Analysis Journal

SINTA 2 | P-ISSN 2252-6560 | E-ISSN 2502-2725

About Issue People Submission Announcements Focus and Scope  
Ethics Statement Contact Conference Publication Collaboration

[Home](#) / [Archives](#) / [Vol 8 No 4 \(2019\): Economics Development Analysis Journal](#) / [Articles](#)

## Village Fund Transfer and Rural Poverty in Indonesia

**Muhammad Amir Arham**

Faculty of Economics, Universitas Negeri Gorontalo

**Boby Rantow Payu**

Faculty of Economics, Universitas Negeri Gorontalo

DOI: <https://doi.org/10.15294/edaj.v8i4.31698>

### Abstract

The model of government policy has been somewhat over-oriented to the efficiency (development); this is especially in the urban areas. As a result, rural areas are left behind and the urbanization rates are continuously growing since the life supports in a city are more varied rather than the homogenous supports in a village. This results in inequality and the poverty within the village. To resolve this problem, the government has constituted the Regulation No. 6 of 2014 Considering Rural Areas in advancing the development of rural areas. The objective of this present study is to find out the effectiveness of the transfer of village funds in solving the issue of poverty in all villages within all the provinces in Indonesia during the period of the implementation of the program. Furthermore, this research was conducted by using econometric method through the equation of panel data in 2015 to 2016 in 33 provinces. The result reveals that the transfer of village funds is not significant in alleviating the issue of poverty in rural areas. By that, it is recommended to increase the amount of the fund of the program to reduce the rate of poverty in all villages in Indonesia.

---

Published  
2020-02-11

---

How to Cite

Arham, M., & Payu, B. (2020). Village Fund Transfer and Rural Poverty in Indonesia. *Economics Development Analysis Journal*, 8(4), 324-334. <https://doi.org/10.15294/edaj.v8i4.31698>

More Citation Formats

---

Issue

[Vol 8 No 4 \(2019\): Economics Development Analysis Journal](#)

Section  
Articles





## Village Fund Transfer and Rural Poverty in Indonesia

Muhammad Amir Arham<sup>1✉</sup>, Bobby Rantow Payu<sup>2</sup>

Faculty of Economics, Universitas Negeri Gorontalo

### Article Info

#### History of Article

Received July 2019

Accepted September 2019

Published November 2019

#### Keywords:

Village Fund, Village Development and Poverty

### Abstract

For decades, rural areas development tends to be poorly taken into account, leading to increasing urbanization. Since Indonesia owns various urban life sources, yet relatively homogeneous in rural areas, it causes acute poverty. Accordingly, Act Number 6 of 2014 on Village has been stipulated to accelerate the development of rural areas. This study devotes to investigating the extent to which the Village Funds transfer has been effective and influenced rural poverty in Indonesia during the transfer period. By employing econometrics method through panel data equation in 2015 – 2016 within 33 provinces in Indonesia with Fix Effect approach, this study used the secondary data obtained from the Ministry of Finance for Village Funds and from Statistics Indonesia for macroeconomics. The result shows that Village Funds transfer has a significant influence on lowering the poverty rate of rural areas, meaning that a consistent increase of Village Funds is able to reduce the case mentioned earlier. This policy has met the expectation because rural poverty arrives at a high rate over the years.

## INTRODUCTION

Rural poverty is a serious problem in Indonesia. The government of Indonesia has launched many programs to eradicate rural poverty. However, these programs seem to have not been able to solve this poverty problem as the number of the poverty rate in the rural area in 2016 was still high (13.96%). Economic performance growth in several areas, regardless of having considered as to have high growth, yet have less effect in reducing this poverty level. Regardless of the fact, the economic growth is generally the main contributor for reducing poverty level. The assumption is that the economy is growing, indicating per capita income has increased. Economic growth shows the extent of national output, where it is assumed that more people have proper jobs. Thus, it should be able to reduce unemployment as well as reduce the poverty level. In other words, according to Dollar and Kray (2004), Muloka, Kogida, Asida dan Lilya (2012), an increase in economic growth is a reference of average proportional increase in poor people's income.

It has to be acknowledged that the poverty rate is steadily decreasing. However, rural poverty decrease determines small scale economic growth. Therefore, the reducing of poverty is not only influenced by economic growth as, after the crisis period, the number of poor people significantly decreases due to the improvement of economic stability and the decrease in food prices. Afandi, Wahyuni dan Sriyana (2017) found that the level of poverty depends on the instability of the macroeconomy, especially at the price level. This condition is also similar to the finding by Ahluwalia, Carter and Chenery (1979), Yusuf and Sumner (2015) that regardless of the impressive economic growth in developing countries, the benefit of this growth for the poor is still limited. Thus, a policy combination is needed.

Currently, about 40% of the Indonesian population is within the border of the national poverty line with the income of no more than US\$2/day. When there is a slight fluctuation of price, a decrease in income and disturbance to the

public service access, this group will topple down to below poverty line. This group of people becomes the target for social protection such as in education (Program Indonesia Pintar, Bidik Misi programs), health programs (JKN bagi warga miskin/national healthcare service for the poor), people's welfare (subsidy/food grants subsidy), community empowerment (village fund and ultra-micro financing) and subsidy funds for under welfare families (Program Keluarga Harapan/PKH). These social protection programs are policy combining efforts from the government to reduce the poverty rate. Especially for social protection in community empowerment sector which comes from Village fund, the amount is quite significant, each year the amount is increased in addition to the Village Fund Allocation from the Regency Government.

Village Fund Transfer is urgently needed to accelerate rural development; as currently, many development programs are heavily insisted on efficiency. Thus more substantial budget proportion is allocated to developed economic areas (city). This has accelerated the urbanization process. The urban area becomes more developed, while the gap with the rural area (village) are becoming wider. The welfare of the city dwellers has vastly increased, while the welfare of the village dwellers is still far behind (poor). Based on this fact, a new fiscal transfer design is needed as it influences the efficiency and equity of public goods and services provision from the local government (Arham, 2013).

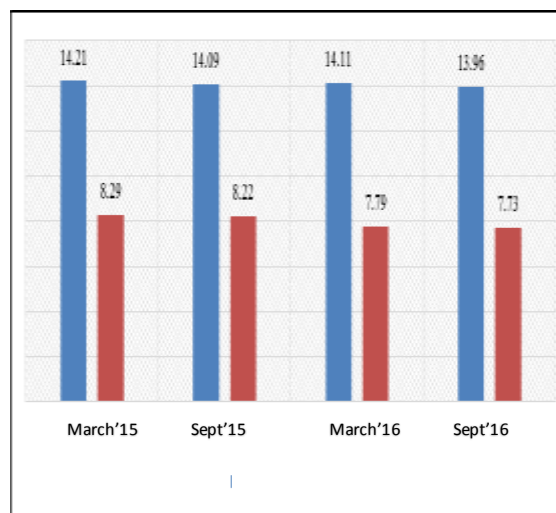
Fiscal transfer currently operated by the government is divided into grants and revenue-sharing. These two types of transfer the have been implemented since 2001 and had yet significantly contributed to reducing poverty in the remote area; instead, it tends to increase poverty condition, as poverty is significantly influenced by income gap (Nanga, 2006). Regardless to the empiric findings and theories which showed that transfer to the region could improve the economic welfare of the people in the region (Rao, 2000: Heng, 2008). The high poverty rate in the rural area and the wider the welfare gap between rural and urban area need specific intervention for rural/village development.

Therefore, since 2015, types of transfer to the region are added, in addition to specific autonomy fund (Dana Otonomi Khusus) for provinces such as Aceh, Papua, and Papua Barat, another type of transfer called Village Fund Transfer (Transfer Dana Desa) as the consequence of the issuance of UU No. 6 of 2014 (Law No. 6 of 2014). Based on the types and criteria of transfer, this Village Fund Allocation (ADD) transfer is categorized as a transfer with general purposes as it is unconditional. Therefore, its purposes are not specified by the central government. It was only described that the Village Fund should be used for funding all village authority with the priority of supporting the village development program and empowerment of village community. In reference to the Law above, Village Fund has a formula that is similar to General Fund Allocation (DAU).

ADD formulations are calculated based on the variable score calculation (BDi) is as follow: village area (20%), number of village population (30%), village poverty rate (50%) and level of village geographical difficulty (based on village geographical difficulty index issued by the Central Statistic Bureau) as multiplier/adjustment. This formula is used to avoid gap among villages, either in one regency or among regencies or provinces. This formula will surely result in the distribution of the Village Fund (ADD) that are different for each village, as each village will have a different score and different types of needs.

Periodically, the village fund transfer will be increased by the central government by adding the Village Fund Allocation from each regency. The increase of village fund transfer is expected to reduce rural poverty in Indonesia. Currently, the rural poverty rate is relatively high as seen in Figure 1. Therefore, poverty in Indonesia is generally a phenomenon that is strongly related to a socio-economic condition in the village and related explicitly to the agricultural sector. To fully understand poverty phenomenon, Indonesia needs an understanding of poverty phenomenon in the rural area or the agricultural sector as most provinces in Indonesia

to seem to have higher rural poverty rate than urban poverty rate.



**Figure 1.** Comparison of Rural and Urban Poverty Rate in Indonesia

Source: Processed data from Statistical Bureau (2017).

This indicate expenditure of the rural community to fulfill the needs is higher than that of urban communities. Several factors that caused the number of poor people in the agricultural sector is higher than in other sectors, including a) imbalance land distribution, b) low education level of farmers and workers, c) difficult access to capital, and d) the farmers' exchange rate that is steadily decreasing (Kementan RI, 2013). Based on the study and development of Regional Poverty Reduction Strategy, i.e., in Gorontalo province, poverty is still high in the rural area due to several factors, such as (Arham, 2016a); 1) the agricultural sector as the main contributor of non-processed economy which followed by low level of productivity; 2) high economic growth in the non-tradeable sector which caused disparit;, 3) cultural and social factors inhibit changes and slow shift of mindset; 4) low and uneven Endowment factor (natural and human resources); 4) political problems and high rent seekers attitude which caused ta he price of community needs to become high.

In addition, according to Arham and Naue (2015), there are various dimensions which

caused high poverty in the rural area, such as 1) low level of education which caused limited information to access the knowledge, which at the same time have impact on low level of productivity; 2) low level of quality and nutrition intake among poor children which have an impact on their brain development, this is due to the lack of access to health care; 3) limited land ownership and production resources which caused low income for the farmers; 4) structure of economic production is unsuitable with the community ability and condition.

In addition, poverty as a condition where an individual or groups of individuals are unable to fulfill their basic needs to survive and develop a dignified life. Those basic rights are 1) fulfillment of food needs; 2) health, education, and jobs. In principle, poverty is a phenomenon or a multidimensional process, which means that it is caused by many factors (World Bank, 2000). However, in Indonesia, poverty is a phenomenon that is strongly related to a socio-economic condition in the rural area and agricultural sector (Arham, 2016b). In addition, accessibility toward basic services such as education and health care are also costly, as most of these poor people residing in areas that are far from the center of services. Interventions like social grants and compensation given by the government to the poor community in the rural area which is usually in the form of production facilities are often not on target. Provision of agricultural production facilities, calves, or other production facilities necessitates the availability of having land for grazing ground. Meanwhile, most of the poor community does not have land.

Therefore, BPS (2008) defined poverty as the inability to fulfill basic needs (basic needs approach). Through this approach, poverty is seen as the inability from an economic perspective to fulfill the basic needs of food and non-food which measured from the expenditure. One is said to be poor when the basic food intake contains less than 2100 calories per capita per day or equal to 320 kg/capita/year in rural area and 480 kg/ capita/year in urban area, and minimum non-food needs calculated in Rupiah spent to fulfill those basic needs of housing, clothing,

education, health, transportation, and others. BPS each year determine the poverty line based on a national survey on consumption model which extent is different for each province, depending on the minimum living cost in each province. Meanwhile, the World Bank's measure is incapability or called poor when a person's income is less than US\$ 2 per day.

Based on basic needs, the indicator used Head Count Index (HCI), that is number and percentage of poor people living under the poverty line which calculated based on the average food and non-food expenditure per capita in an established reference group. This poverty line is divided into two, food poverty line (FPL) and Non-Food Poverty Line (NFPL). The FPL is calculated based on minimum calories intake as explained above, whereas, the non-food poverty line is calculated based on Rupiah spent for non-food items to fulfill minimum basic needs such as housing, clothing, health, education, transportation, etc. The FPL and NFPL are dynamic and therefore, adjusted, as in addition to different standard of fulfillment in the village and city, poverty percentage is also categorized as rural and urban poverties.

Consequently, poverty based on its definitions and measurement are varied, thus, Yao (2007) wrote that the meaning and definition of poverty have progressively broaden, poverty concept has evolved from the concept of "level of minimum subsistent" into "relative deprivation" which defines poverty as a failure to maintaining a standard applied in particular community. Therefore, poverty measure has broadened into many things in addition to income; it also broadens into non-income, such as basic education, health service, and access toward social services. Even, other elements have also been added to poverty measurement, including autonomous ability, rights to vote, empowerment, and participation.

Various causes of rural poverty in Indonesia cannot be separated from the economic structure of the region, where regions whose economic structure are not dominated by one sector outside agricultural sector tend to have low poverty level. This is entirely different from

the region that heavily relied on a primary commodity whose poverty rate is high. There are policies (programs) implemented by the government to overcome this poverty problem, both rural and urban poverty, either in the past or in the present. Such as Program Penganggulangan Kemiskinan Perkotaan (P2KP/urban poverty eradication program) or Program Nasional Pemberdayaan Masyarakat (PNPM/national community empowerment program) Mandiri. In provincial and regency/city level, these programs have to be implemented in their respective area. However, at the same time, local government should also formulate different policies that are different from the central government policy other than P2KP and PNPM Mandiri. The local government also has a big responsibility to solve the poverty problem, especially rural poverty. One of them is by increasing the government expenditure in each level, as it is believed that government expenditure in each level can reduce poverty rate (Renzio and Levy, 2006), or that government expenditure for development of rural facilities can reduce rural poverty rate (Fan and Zhang, 2008). Empirically, it is also proven that disbursement of fund transfer to the region can reduce poverty (Steiner, 2007), (Lithe tschig and Morrison, 2013), or in reverse, that fiscal transfer to the region did not influence the reduction of poverty level (Sepulveda and Martines-Vazquez, 2011; Anderson, Orey, Duvendack dan Esposito, 2018).

The existence of development policy with emphasis to the village level which also followed by fiscal transfer (Village Fund) is expected to become motor for village economy, as such, village allocation fund will be annually increased. Even, some regional government development orientation is on strengthening village development, which is proven by their commitment in their local budget (APBD) allocation. The Village Allocation Fund itself has been implemented for two years, where this Village Allocation Fund is expected to become a stimulant for the village economy through empowerment and physical development activities. The long-term effect of this Village

Fund is expected to boost the village economy. Hence, the gap between city and village development would not become wider. In addition, it is expected to reduce rural poverty level. It has to be acknowledged that the objectives of this village fund transfer are ideal for village development. However, its effectiveness to improve the condition of the village community is yet to be seen, even more on its effectiveness to reduce the poverty rate. Therefore, this study will investigate to which extent the effectiveness of village fund transfer on rural poverty in all provinces in Indonesia for the period of 2015 – 2016.

## RESEARCH METHODS

This study uses panel data processing from 33 provinces in Indonesia for two years. The empiric model in this study adopts the model from which modified to suit the need of the study as follow:

$$POV_{it} = \beta_0 + \beta_1 LnPDRBCap_{it} + \beta_2 LnPop_{it} + \beta_3 InvAgri_{it} + \beta_4 HDI_{it} + \beta_5 Unemp_{it} + \beta_6 LnADD_{it} + \beta_7 Inf_{it} + \epsilon_{it}$$

Where:

POV	: Level of Village/Rural Poverty Level (Percent)
PDRB Cap	: Gross Domestic Regional Product per capita on constant price (Rupiah), Basic Price in 2000.
INAGRIF	: inancing/Agricultural Investment Sector (Rupiah)
POP	: Number of Population
HDI	: Human Development Index
UNEMP	: Unemployment Rate (Percent)
ADD	: Village Fund Allocation (Rupiah)
Inflasi	: Regional Inflation Level (Percent)

The data used in this study are secondary data. The data obtained from the State Budget

and Expenditure (APBN) from the Ministry of Finance of the Republic of Indonesia for Village Fund Transfer (ADD) and Region in all provinces in Indonesia from the Central Statistical Bureau (BPS) for macro-economic data of the region. All these data are quantitative data. The approach used to estimate the poverty parameter level is data panel approach (2015-2016 with 33 provinces). The test to select technique in data panel processing is statistically done through Hausman test and Chow test to determine the processing model, to determine whether to use random effect or fix effect. To obtain a *Best, Linear, Unbiased Estimator (BLUE)*, the estimator should be free from the transgression of classical assumption, such as multicollinearity, autocorrelation, and heteroscedastic. In addition, a statistical test is also carried out to test the goodness of fit by t-test, F-test and R<sup>2</sup>.

## RESULTS AND DISCUSSION

Indonesian poverty condition in the period covered in this study can be explained as follow:

in September 2015, a number of poor populations (a population with expenditure per capita below the poverty line) were 28.51 million people (11.13 percent). The number has decreased by 0.08 million people compared to the condition in March 2015 where the poor population was 28.59 million people (11.22 percent). The percentage of the urban poverty level in March 2015 was 8.29 percent and decreased to 8.22 percent in September 2015. Meanwhile, the percentage of the poor population in the rural area decreased from 14.21 percent in March 2015 to 14.09 percent in September the same year. During the period of March-September 2015, the number of poor populations in the urban was reduced by 0.03 million people (from 10.65 million people in March 2015 to 10.62 million people in September 2015). In addition, the number of poor populations in the rural area was reduced by 0.05 million people (from 17.94 million people in March 2015 to 17.89 million in September 2015). The detail is presented in Table 1 below:

**Table 1.** Number and Percentage of Poor Populations According to the Region, March and September 2015 – March and September 2-16

Region/Year	Number of Poor Populations (Million People)	Percentage of Poor Populations
<b>Urban/City</b>		
March 2015	10,65	8,29
September 2015	10,52	8,22
March 2016	10,34	7,79
September 2016	10,49	7,73
<b>Rural/Village</b>		
March 2015	17,94	14,21
September 2015	17,89	14,09
March 2016	17,67	14,11
September 2016	17,28	13,96
<b>Urban + Rural</b>		
March 2015	28,59	11,22
September 2015	28,51	11,13
March 2016	28,01	10,86
September 2016	27,76	10,70

Source: Processed Data from Statistic Bureau, 2015



The role of food commodity toward poverty line is far more significant than a non-food commodity (housing, clothing, education, and health). The contribution of the food-poverty line toward the poverty line in September 2015 was 73.07 percent. This condition was not so different from the condition in March 2015 where food commodity contribution to poverty line was 73.23 percent. Food commodities which have substantial contribution on the Poverty line in an urban area are relatively similar to those of rural areas such as rice, filtered cigarette, eggs, chicken, instant noodle, sugar, Tempe, and tofu. Meanwhile, non-food commodities who contributed to the poverty line were housing, gas, electricity, education, and toiletries. On March – September 2015, the Poverty Depth Index ( $P_1$ ) and Poverty Severity Index ( $P_2$ ) tended to decline (BPS, 2015).

In September 2016, a number of poor populations (a population with expenditure per capita below poverty line) in Indonesia were 27.76 million people (10.70 percent), decreased by 0.25 million people compared to March 2016 who was 28.01 million people (10.86 percent). The percentage of the poor population in the urban area in March 2016 was 7.79 percent, decreased to 7.73 percent in September 2016. Similarly, the percentage of the poor population in the rural level decreased to 14.11 percent in

March 2016 and further decreased to 13.96 percent in September 2016. Regardless, to this decrease of poor population percentage in 2-16, the number of poor population in the urban area increased by 0.15 million people (from 10.34 million people in March 2016 to 10.49 million people in September 2016), meanwhile, the poor population in village/rural level decreased by 0.39 million people (from 17.69 million people in March 2016 to 17.28 million people in September 2016).

The role of food commodity toward food poverty line is more significant than another non-food commodity (housing, clothing, education, and health). The contribution of Food Poverty Line toward the poverty line in September 2016 was 73.19 percent. This condition is not far different from the condition in March 2016 where food poverty line contribution toward the poverty line was 73.50 percent. Types of food commodity that have significant contribution toward poverty line value either in the city and the village are rice, beef, cigarette, sugar, instant noodle, onion, and tofu. The emergence of beef as one of the poverty line contributors was due to that September period coincided with the celebration of Ied Al Adha. Meanwhile, for a non-food commodity, the more significant contributors were housing, electricity, gas, and education (BPS, 2016).

**Table 2.** Summary of Estimation Result of Rural Poverty Equation

Variable	Coefficient	Value	Statistic
Pov	-	-	-
C	-2330.734	-6.462841	0.0000
LnPDRB/Cap	-0.376925	-0.234214	0.8167
LnPop	26.62367	3.872061	0.0007***
LnInvAgri	81.44500	6.509785	0.0000***
a HDI	0.897583	3.070161	0.0050***
Unemp	0.114308	1.945033	0.0627*
Inf	0.048736	2.415077	0.0231**
LnDD	-10.69500	-6.908304	0.0000***
Adj. R-Squared	0.899918		
F – Stat	20369.01		
DW- Stat	3.882353		

Note : Significant \*) 10 %, \*\*) 5 % and \*\*\*) 1 %.

Source: Data Processing Result (2017)

Further, the Hausman test revealed that the appropriate model to be used was Fix Effect Model (FEM). The estimated model was Income Per Capita (Gross domestic regional product Cap), Number of Population (POP) factors, all of those factors above are strongly related to the dynamic of economy, with the assumption that productive population number is potential for economic movement including increase of consumption level which will encourage economic improvement, investment and financing in agricultural sector (Inv/Agri), ability of resources and human resources which reflected by Human Development Index (HDI), level of unemployment (UNEMP), inflation at provincial level (Inf), and Village Fund Transfer (LnDD) toward poverty in the village level.

The simultaneous tests showed that the Village Fund Transfer policy influenced the decrease of rural poverty in Indonesia and that the changes in determinant coefficient showed that this model is able to describe the phenomenon by 89.99 percent. The rest can be described by other variables outside the formulated model. The estimation result from these parameters is presented in Table 2.

Following series of calculation of the equation model by a using the *Fixed Effect Model*, it showed that income per capita factor does not influence rural poverty in Indonesia, regardless that theoretically, the impact of economic growth and income per capita can the contribute to poverty reduction. The increase in income per capita does not necessarily reduce poverty rate as there are many factors that influence poverty problem. According to Tahir, Perveen, Ismail and Sabir (2014), the minimum effect of output toward poverty reduction is due to the failure of government policies and programs for poverty eradication.

Meanwhile, a number of the population has a positive effect on the poverty rate; this means that an increase in the number of population will increase the rural poverty rate in Indonesia. This, according to Headey and Hodge (2009), Gupta, Bongaarts and Cleland (2011) is

due to fast population growth can inhibit economic growth, especially in low-income countries with bad environmental policy. High population growth also worsens natural resource management and environment as a public source of livelihood due to lack of control and competition to utilize available resources. On the other hand, an increasing number of populations, without appropriate skill and meeting the demand of the job market will create new poverty. This is worsened by jobs available in the agricultural sector is steadily decreasing. Meanwhile, the number of workforce in this sector is vastly increasing. In addition to this, the agricultural product almost in all area in Indonesia has yet to have additional value. Thus, the rural/village community income is still low.

Further, financing in the agricultural sector has a significant influence on poverty. However, the relationship is positive. Therefore, each increase in cost in the agricultural sector will encourage the increase in the poverty rate in the rural area. This finding is contrary to the result from the previous study which found that increase of financing in the agricultural sector will increase agricultural output and has an impact on the increase of income per capita, which in turn will reduce the poverty rate (Christiaensen, Demery and Kuhl, 2011, Sertoğlu, Ugural and Bekun, 2017, Rusliyadi and Libin, 2018). Mapfumo, Mushunje and Chidoko (2012) had also found an almost similar result in Zimbabwe that increases of agricultural sector budget allocation can increase the GDP output, hence have an impact in the reduction of the poverty rate. Financing in the agricultural sector affects the increase of poverty as most of the landowners who obtained fiscal stimulant are not poor farmers. Referring to the simulation carried by Gaiha, Imai, Thapa and Kang (2012) poverty reduction will be more significant if the fiscal stimulant is directed toward social spending in health and education sectors.

Also, a positive correlation between financing in the agricultural sector and poverty can indicate that the model of financing in the

agricultural sector in several regions in Indonesia is less effective, as most farmers are not landowners. Where stimulants in agricultural sector required that the recipients are landowners, while most farmers in the rural area are only sharecroppers. Ideally, financing in the agricultural sector is not only to strengthen the agricultural food sub-sector but also other sub-sector such as animal husbandry and aquaculture as found by Cuong (2010) in Vietnam that the impact of crops and forestry production toward the income per capita and consumption expenditure were not statistically significant. However, production of aquaculture statistically had a positive and significant impact on income and spending. Thus, aquaculture production helps household income to reduce the poverty rate.

Human resource factor as estimated using HDI has a positive impact on poverty. This means that the increase of HDI will increase the rural poverty rate. Madan (2012) predicted that this was due to the result of development which yet evenly distributed to all groups of the community. Meanwhile, unemployment and inflation factors had a positive effect on rural poverty, which means that the increase of unemployment rate and inflation will boost the increase of rural poverty level. This finding backed up the result found by Powers (1995) dan Haataja (1999) where it was founded that the increase of unemployment level will increase the poverty rate. However, inflation seemed to have a positive and significant influence on poverty, which indicates that inflation can cost the poor people more than it was previously predicted. The study carried out by Gillani, Rehman and Gill (2009), Siyan, Adegioriola and Adolphus (2016) found that unemployment and poverty have a causality relationship, while inflation and poverty have two ways relationship.

The Village Fund Transfer factor significantly influenced rural poverty; this showed that if village fund transfer is increased each year by 10 percent, then it will significantly decrease rural poverty rate in Indonesia. Village fund transfer is part of fiscal decentralization which independently managed by the village

government, and its planning is autonomous. This is in line with a common perspective among the experts that through fiscal decentralization (autonomy), the poverty rate will decrease (Faridi and Nazar, 2013), Obi (2007). Nevertheless, Bjornestad (2009) noted that fiscal decentralization in the form of unconditional transfer have no guarantee that the fund will be efficiently spent to reduce the poverty rate. In order for the fund to be appropriately spent, administration preparedness and accountability of local government are needed. Meanwhile, according to Ramírez, Díaz, dan Bedoya (2016) found that fiscal decentralization spatially has more considerable effectiveness to decrease multidimensional poverty compared to geographical design.

## CONCLUSION

Based on the findings and discussion, several conclusions as follow are reached: Village Fund Transfer has a significant influence on rural poverty rate reduction; it means that this policy is as expected because rural poverty rate for years has been more significant than the urban poverty rate. However, utilization of village fund transfer has to be integrated with programs financed by the Local State Budget and Expenditure (APBD). Investment or agricultural sector financing has a strong influence on poverty. However, it encourages the increase of poverty. The stimulant in agricultural sectors is plenty. However, most are still stimulant in the production sector. Hence, most are less appropriate as the requirement to obtain this kind of stimulant and financing in the agricultural sector is designed for landowners, whereas most farmers in the rural area are sharecroppers, thus have no land.

Based on the conclusion and the result of the analysis presented above, these following things can be recommended: Based on the roadmap of the village fund, it will be increased each year to reach more than Rp 1 Billion per village, where the increase of this Village fund influences the rural poverty reduction. Therefore, the central government needs to be consistent in

implementing that road map, as part of the government program to develop Indonesia from the village. Thus, it is appropriate for the Village fund to be increased by conducting financing efficiency for other less productive sectors. In addition to that, provincial and district/city governments should increase the Village Fund Allocation in their local budget and not merely relied on village fund transfer from the National State Budget and Expenditure (APBN). In order for this village fund to be more effective in reducing poverty, better-integrated planning between village and district/regency level government within the province is needed to execute innovative economic activities outside agricultural activities. This study finds that the Village Fund Transfer influences the reduction of the rural poverty rate. Therefore, in addition, to increasing the Village fund both from APBN and APBD, an increase of development financing in the rural area through appropriate and on target stimulants to reduce the rural poverty rate in Indonesia is needed. As agricultural sector financing which currently implemented only had insignificant contribution toward the reduction of the rural poverty rate in Indonesia.

## REFERENCES

- Afandi, A. Wahyuni, D & Sriyana, J. (2017), "Policies to Eliminate Poverty Rate in Indonesia", *International Journal of Economics and Financial Issues*, 7 (1): 435 – 441.
- Ahluwalia, M.S., Carter, N.G. & Chenery, H.B. (1979), "Growth and Poverty in Developing Countries", *Journal of Development Economics*, 6 (1979): 299-341.
- Anderson, E., Orey, M. A. J., Duvendack, M. & Esposito, L. (2018). "Does Government Spending Affect Income Poverty? A Meta-Regression Analysis". *World Development*, 103; 60 – 71.
- Arham, M.A. (2013), "Pengaruh Kebijakan Desentralisasi Fiskal Terhadap Pergeseran Sektoral dan Ketimpangan Antar Kabupaten/Kota di Sulawesi dan Jawa", *Disertasi Tidak Dipublikasikan*. Program Pascasarjana Fakultas Ekonomi dan Bisnis Universitas Padjadjaran. Bandung.
- Arham, M.A. & Naue, T.F. (2015), "Public Expenditures and Poverty: Evaluation of the Government's Priority Programs in Gorontalo Province", *Economic Journal of Emerging Markets*, 7 (2): 107-119.
- Arham, M.A. (2016), *Alokasi Dana Desa Dan Pengentasan Kemiskinan*. Makalah, Fakultas Ekonomi Universitas Negeri Gorontalo.
- Bjornestad, V. (2009), "Fiscal Decentralization, Fiscal Incentives, and Pro-Poor Outcomes: Evidence from Vietnam", *ADB Economics Working Paper Series No. 168*. <https://www.adb.org>. (Diakses 20 September 2017).
- Christiaensen, L. Demery, L. & Kuhl, J. (2011). "The (Evolving) Role of Agriculture in Poverty Reduction-An Empirical Perspective", *Journal of Development Economics*, 96 (2): 239 – 254.
- Cuong, N.V. (2010), Does Agriculture Help Poverty and Inequality Reduction? Evidence from Vietnam, *Agricultural Economics Review*, Vol. 11 (1): 44 – 56.
- Dollar, D & Kraay, A. (2004), "Trade, Growth, and Poverty", *The Economic Journal*, 114 (493): 22 – 49.
- Fan, S. & Zhang, X. (2008), "Public Expenditure, Growth and Poverty Reduction in Rural Uganda". *African Development Review*, 20 (3): 466 - 496.
- Faridi, M.Z & Nazar, R. (2013), "Impact of Fiscal Autonomy on Poverty in Pakistan", *Pakistan Journal of Commerce and Social Sciences*, Vol. 7 (1): 141-156
- Gaiha, R., Imai, K., Thapa, G., & Kang, W. (2012). Fiscal Stimulus, Agriculture Growth and Poverty in Asia. *The World Economy*. 35 (6) : 713-739.
- Gillani, S. Y. M., Rehman, H. & Gill, A. R. (2009). "Unemployment, Poverty, Inflation and Crime Nexus: Cointegration and Causality Analysis of Pakistan, *Pakistan Economic and Social Review*, 47 (1): 79 – 98.
- Gupta, M.D., Bongaarts, & Cleland, J. (2011) "Population, Poverty, and Sustainable Development A Review of the Evidence", *Policy Research Working Paper 5719*. [worldbank.org/curated/en/239381468170352053/pdf/WPS5719.pdf](http://worldbank.org/curated/en/239381468170352053/pdf/WPS5719.pdf). (Diakses 8 Juli 2018).
- Haataja, A. (1999). "Unemployment, Employment and Poverty", *Journal European Societies* 1 (2); 169 – 196.
- Headey, D. D., & Hodge, A. (2009). "The Effect of Population Growth on Economic Growth: A Meta-Regression Analysis of the

- Macroeconomic Literature". *Population and Development Review*, 35 (2): 221 – 248.
- Heng, Y. (2008), "Fiscal Disparities and the Equalization Effects of Fiscal Transfers at the Country Level in China", *Journal Annals of Economics and Finance*, 9 (1) : 115–149.
- Madan, S. (2012), "Human Development and Poverty: a Perspective Across Indian States", *Statistika Analysis*. 49 (4): 81 – 94.
- Mapfumo, A., Mushunje, A. & Chidoko, C. (2012) "The Impact of Government Agricultural Expenditure on Poverty in Zimbabwe", *Russian Journal of Agricultural and Socio-Economic Sciences*, 7 (7): 17 – 22.
- Muloka, D., Kogida, M., Asida, R., & Lilya, J. (2012). "Is economic growth sufficient for poverty alleviation? Empirical evidence from Malaysia". *Cuadernos de Economía*, 35 (970): 26 – 32.
- Nanga, M., (2006), "Dampak Transfer Fiskal Terhadap Kemiskinan di Indonesia: Suatu Analisis Simulasi Kebijakan", Disertasi, Tidak Dipublikasikan. Sekolah Pascasarjana Institut Pertanian Bogor.
- Obi, B.O., (2007), "Fiscal Policy and Poverty Alleviation: Some Policy Options for Nigeria", AERC Research Paper 164 African Economic Research Consortium, Nairobi. <https://opendocs.ids.ac.uk>. (Diakses 18 September 2017).
- Powers, E.T. (1995), "Inflation, Unemployment, and Poverty Revisited. Federal Reserve Bank of Cleveland", *Economic Review*. 31 (3): 02-13.
- Ramírez, J.M. Díaz, Y. & Bedoya, J.G., (2016), "Fiscal Decentralization and Multidimensional Poverty Reduction in Colombia: A Spatial Approach", WORKING PAPER SERIES. Document No. 192 Territorial Cohesion for Development Working Group. (Diakses 12 Juni 2017).
- Rao, G.M. (2000), "Fiscal Decentralization in Indian Federalism", Working Paper, Bangalore, Institute for Social and Economic Change (Diakses 25 Agustus 2017).
- Renzio, A. dan Levy, T. (2006), "The Role of Public Investment in Poverty Reduction: Theories, Evidence and Methods", Working Paper 263, Overseas Development Institute, London. (Diakses 24 Mei 2017).
- Rusliyadi, M & Libin, W. (2018). "Agriculture Development Programs for Poverty Reduction Evidences from Indonesia and China - Comparative Study Case", *Asian Journal of Agriculture and Rural Development*, 8 (2); 104 - 118.
- Sepulveda, C.F. & Martinez-Vazquez, J. (2011), "The Consequences of Fiscal Decentralization on Poverty and Income Equality", *Environment and Planning: Politics and Space*, 29 (2): 321 – 343.
- Sertoğlu, K. Ugural, S. & Bekun, F.V. (2017), "The Contribution of Agricultural Sector on Economic Growth of Nigeria", *International Journal of Economics and Financial Issues*. 7 (1): 547-552
- Siyan, P, Adegioriola, AE & Adolphus, JA. (2016), "Unemployment and Inflation: Implication on Poverty Level in Nigeria", MPRA Paper No. 79765 Online at <https://mpra.ub.uni-muenchen.de/79765/>. (Diakses 25 Agustus 2017).
- Steiner, S. (2007), "Decentralisation and Poverty: Conceptual Framework and Application to Uganda", *Public Administration and Deelopment*, 27 (2) : 175 – 185.
- Yao, G. A. (2007), "Fiscal Decentralization and Poverty Reduction Outcomes: Theory and Evidence". Dissertation Unpublished., Atlanta University".
- Yusuf, A. A., & Sumner, A., (2015). "Growth, Poverty, and Inequality Under Jokowi". *Journal Bulletin of Indonesian Economic Studies*, 51 (3); 323 – 348.