

HOW DOES LOCAL GOVERNMENT AFFECT RURAL DEVELOPMENT? (CASE IN INDONESIA)

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ABSTRACT

In Indonesia, developing rural index is one measurement that can be used to strengthen the rural development. The factors that affect the rural development are not merely formed by three-dimensional include social, economy, and ecology, but there are also local government factors in the process of developing rural area. The local government can give the enormous benefits to the rural development if the factors of local government can be managed appropriately. In 2014, the government targeted to reduce the number of underdeveloped village until 5000 since there were still many underdeveloped villages that could hamper the achievement of national development in Indonesia. Therefore, the improvement and appropriate allocation of local government factors in Indonesia is needed in the regions to be evenly spread into the rural area. This research is aimed to find out the local government factors that affect the rural development and the effect of each factor towards the rural development so the improvement of each factor can be known to increase the rural development in Indonesia. We employ the multiple linear regression with the number of sample of 305 municipalities in Indonesia in 2014. The variables in this research include the developing rural index as dependent variable and human development index, gross regional domestic product, local own-source income, grant expenditure, capital expenditure, area size, and population size as independent variables. Based on the findings, we found that human development index, local own-source income, capital expenditure, area size, and population size are the local government factors that affect the rural development significantly. Moreover, the factors that have positive significant relationship toward developing rural index are human development index, local own-source income, and population size. Meanwhile, capital expenditure and area size are the factors that have negative significant relationship toward development rural index. Furthermore, if the factors of local government can be managed and optimized appropriately, it leads to increase the rural development as well as developing rural index which can reduce the number of underdeveloped village status and increase the number of independent village status.

Keywords: rural development, developing rural index, local government factors

1. INTRODUCTION

The national development is the one thing that is needed for Indonesia to improve the progress of various aspects. In order to aim the change of Indonesia to be sovereign politically, independence in economic, and having personality in cultural, President and Vice-President of Indonesia—Joko Widodo and Muhammad Jusuf Kalla has formulated the nine priority agenda that is called NAWA CITA. According to the third priority of NAWA CITA, it has been mandated to build Indonesia from the periphery to strengthen the regional and rural within the framework of unitary (Widodo & Kalla, 2014).

Based on Regulation of the Minister of Rural, Development of Underdeveloped Region and Transmigration of the Republic of Indonesia No. 2 of 2016, it's required the basic data of rural development and the determination of progress status and rural independence to strengthen the achievement of priority development target. Therefore, Developing Rural Index has been arranged as stated in National Medium-Term Development Plan 2015-2019 in order to reduce the number of underdeveloped village until 5,000 and to increase the number of independent village at least 2,000.

Developing Rural Index is focused on an effort in strengthening the rural autonomy through the community empowerment. It is composite from resilience of social, economy, and ecology or environment (Hamidi, et al., 2015). Moreover, the rural development is inseparable from the local government. As the local government, it has been a mandatory to provide and facilitate the needs of rural area, to understand and set the community goals, and to effectively implement the decisions made that is related to the policy objectives and outputs that must be carried (Soos, 2001).

The determination of progress status and the independence of rural area are classified into five rural status. There are independent village, advanced village, developing village, underdeveloped village, and very underdeveloped village. The classification is purposed as an instrument of coordination between the central government, local government, and rural government to implement the development and empowerment of rural community.

In 2014, the government targeted to reduce the number of underdeveloped village until 5000 as stated in National Medium-Term Development Plan since there were still many underdeveloped villages that could hamper the achievement of national development in Indonesia. Therefore, the improvement and appropriate allocation of local government factors in Indonesia is needed in the regions to be evenly spread into the rural area. The objectives of this research are to find out the local government factors that affect the rural development in Indonesia and the effect of each local government factor toward the rural development so the improvement of each factor can be known to increase the rural development in Indonesia.

2. LITERATURE REVIEW

2.1 Rural Development

According to Regulation of the Minister of Home Affairs of the Republic of Indonesia No. 114 of 2014, the rural development is an effort to improve the quality of life for the greatest welfare of the rural community. In order to achieve the independence, the rural development is required a process starting from a good development planning and management program organized by rural government and community elements, the implementation of rural development includes the rural-scale and the sectorial program, and then the monitoring stage done by accessing the things such as procurement of goods/services, materials, labors, and management of financial administration (Yustika & Haryanto, 2015).

The rural development should be arranged with the assessment approaches of problems and potentials in the rural area. Based on the research of Setyobakti (2017), the rural area could use Developing Rural Index with its indicators as a measurement of rural development achievement so the indicators which have been achieved or not could be known. Thus, if Developing Rural Index can be used appropriately, the rural development can be arranged the strategies to solve the problems occurred according to the availability of potential.

2.2 Developing Rural Index

Developing Rural Index (*Indeks Desa Membangun*) is a measurement arranged to strengthen the development target achievement of rural area. It's stated in the book of National Medium-Term Development Plan (*RPJMN*) 2015-2019 that aims to reduce the number of underdeveloped rural until 5,000 as well as to increase the number of independent rural at least 2,000 in 2019.

Developing Rural Index is arranged based on the data of Rural Potential (*Potensi Desa*) published by Central Bureau of Statistics. For Developing Rural Index 2015 calculation, it was used the data sources from Rural Potential 2014. It includes a composite index which is dimension of social, economy, and ecology or environment.

Each dimension consists of variables and each variable consist of indicators. For instance, the social dimension has the variable of health that consists of indicators include travel time to health care < 30 minutes; availability of doctors, midwives, and other health workers; access to Rural Health Post (*poskesdes*), Rural Maternity Cottage (*polindes*), and Integrated Service Post (*posyandu*); level of Integrated Service Post activity; and membership of Social Security Administrative Bodies (*BPJS*).

There are five classification of rural status which are independent village, advanced village, developing village, underdeveloped village, and very underdeveloped village. These are intended to show the diversity of each rural character of Developing Rural Index and sharpening the determination of rural development status as well as the recommended policy interventions.

2.3 Local Government Factors

Due to the rural area which is included within the regions (municipalities), there are the factors of local government that may affect toward the rural development as the following below:

2.3.1 Human Development Index

Human Development Index is a strategic data to measure government performance and also used as one allocator of general allocation fund. It is an important indicator to measure the success in order to develop the quality of human and used to determine the level of region development. Moreover, it measures the outcomes of human development based on a number of basic components of life quality.

As a measure of quality of life, Human Development Index is built through a basic three-dimensional approaches that include long and healthy life, knowledge, and decent living. To measure the health dimension used the life expectancy at birth. To measure the dimension of knowledge used the indicator combination of duration education expectations and the average length of education. Meanwhile, to measure the living dimension, it is feasible to use the purchasing power parity indicator towards some basic needs which is seen from the average of expenditure per capita (Badan Pusat Statistik, 2015).

In the research of Susanto and Rachmawati (2013), Human Development Index has a positive significant towards the economic growth because the increase in Human Development Index encourages most industries to produce more efficiently so they can be able to produce the cheaper price of goods. It affects toward the public consumption increases as well as the people's income also increases.

2.3.2 Gross Regional Domestic Product

Gross Regional Domestic Product (GRDP) is the one important indicator to know the economic condition of an area in particular periodic. In the calculation of GRDP, there are two methods which are GRDP at current market prices and GRDP at constant market prices. GRDP at current market prices indicates the additional value of goods and services that are calculated using the price in the current year. It's used to know the capability of economic resources, shifting, and economic structure of a region. Meanwhile, GRDP at constant market prices indicates the additional value of goods and services that are calculated using the price that applied in a given year as a basic year. It is used to know the economic development in real terms from year to year.

The calculation of GRDP conceptually uses three approaches which are production, expenditure, and income. All this time, GRDP data published by Central Bureau of Statistics use the production and expenditure approaches. The data collection for the production approach is collected from relevant department of every sector such as production data, price data in producer level, and the cost incurred for production. For the expenditure approach, the data is collected from relevant department that officially release the data such as export-import and government expenditure, and also through specific surveys such as survey for household expenses (Departemen Statistik, 2014).

Based on the research of Syahrullah (2014), GRDP has a negative significant relationship with the level of poverty in Banten Province. It means that the higher GRDP, the lower the poverty level in the region. Besides that, GRDP which is triggered by increased in economic activity, revenue of community, technological advancement, and discovery of new materials for production could reduce the level of poverty in the East Java Development Area (Ulfa, Priyono, & Viphindrarti, 2015).

2.3.3 Local Own-Source Income

Most of the local politicians believe that the amount of income can determine the probability to manage the municipality well. They believe that the money can make a difference in the local government performance. The larger income can ease the cooperation among stakeholders to increase the likelihood of compromise that can lead the better policy performance. Moreover, it can enable to hire the administrative staffs that are larger and more competent (Soos, 2001). One of the income that is sourced from the region can be called as local own-source income. For many local governments in the worldwide, the local own-source income includes the user fees and charges, and the local taxation, such as on property or income (Turley, Robbins, & Mcnena, 2015).

Based on Law of the Republic of Indonesia No. 33 of 2004, the local own-source income consists of local tax, local retribution, local own-source assets—a sub-item in local budgets, and other lawful local own-source income. Based on Regulation of Government of the Republic of Indonesia No. 72 of 2005, the components of local tax and retribution are the parts of local government assistances in the sources of rural income. The share of local tax is at least 10% and the local retribution is partly intended for the rural. Meanwhile, Wenny (2012) stated that other lawful own-source income is one component of local own-source income that partially affect the local government in term of financial performance.

2.3.4 Grant Expenditure

Grant is included the current expenditure that is considered as current transfer. Grant can be called as transfer that is received by the local government from the higher level of government. It depends on the variables such as inhabitants and the number of schools (Balaguer-Coll, Prior, & Tortosa-Ausina, 2007). Based on Regulation of the Minister of Home Affairs No. 13 of 2006, the grant expenditure is used to budget the grant assistance in the form of money, goods and/or services to the governments or other local governments, and specific community/individual groups that have been designated for their purposes. The grant assistance may be provided to certain local governments as long as stipulated in the laws and regulations.

The provision of grant expenditure by local government aims to support the implementation of local government affairs. Based on Regulation of the Minister of Home Affairs No. 32 of 2011, the grant is intended to support the objective achievement of government program and activities while maintaining the principles of justice, fairness, rationality, and benefits for the community.

2.3.5 Capital Expenditure

One of the basic categories that are considered as input from the economic structure of Spanish local government is the capital expenditure. It is related to the expenditure that is used to develop infrastructure of the municipality such as the number of lighting points and the street infrastructure surface area (Balaguer-Coll, Prior, & Tortosa-Ausina, 2007).

In Indonesia, based on the Regulation of the Minister of Home Affairs No. 13 of 2006, the capital expenditure is one of the direct expenditure and used in order for purchasing or construction of tangible fixed assets that have benefit value more than twelve months in government activities. The tangible fixed assets are such as in the form of land, equipment, machinery, buildings and facilities, roads, irrigation and networks, and other fixed assets.

Sularso and Restianto (2012) found that the allocation of capital expenditure by local government has positive effect towards the economic growth. It means the capital expenditure is in line with the increase of development level of a region. Meanwhile, Darwis (2015) found that the capital expenditure has significant negative effect toward the local financial independence. It means the capital expenditure which is less prevalent or low that causes many inequality level of financial independence among the regions.

2.3.6 Area Size

Area size can be the one factor that affects the local government. The government area of municipality is different with the government area of city. The municipality government area is relatively broader than the city government area so that there are many underdeveloped villages in the municipality (Marfiana & Kurniasih, 2013). Furthermore, municipality area needs more resources to reach the distribution of development in the whole regions.

Based on Law of the Republic of Indonesia No. 33 of 2004, the area size is a variable that reflects the needs of facilities and infrastructure provision per unit area. It means that as larger of area size of government, as more facilities and infrastructure that should be provided by government for availability of good public services.

2.3.7 Population Size

Municipality size is a number of people living in a district permanently (Soos, 2001). There is a relationship between district size and local government performance where in a large number, there will be more institutional services available and efficient services. In addition, a large number also provides better services in order to meet the people's needs. The population is related to the minimum services provided by the government such as the supply of drinking water to households, regulation of food and drink, and cemetery (Balaguer-Coll, Prior, & Tortosa-Ausina, 2007).

Hiskey and Seligson (2003) found that the municipal population can determine the municipal council size in Bolivia. In example, for population that is less than 25,000, the number of council members is five, for population between 25,001 to 50,000 the number of council members is seven, for population between 50,001 to 75,000 there are nine council members, while for population more than 75,000 there are eleven members. Moreover, according to the research of Siregar and Wahyuniarti (2008), the increase in population will affect the increase of the poverty level in the regions where the population growth is relatively high in the poor families.

3. METHODOLOGY

This research uses the multiple linear regression with the secondary and cross-sectional data in 2014. The sampling method used in this research is disproportionate stratified random sampling since Indonesia has 33 provinces with different number of municipalities. The regions used are only municipality area in Indonesia and do not take city area as samples, cities and municipalities can't be pooled together since they have different characteristics such as the area of municipality government which is relatively broader than the area of city government so there are many underdeveloped villages in the municipality government area. The number of sample is 305 municipalities which have rural area in their regions and index data of Developing Rural Index. Since each municipality in Indonesia is different one another, there are control variables in each municipality that are used as independent variables.

For dependent variable (Y) which is the rural development, the data used is Developing Rural Index 2015 that is based on Rural Potential 2014. The data is sourced from Ministry of Rural, Development of Underdeveloped Regions and Transmigration. Meanwhile, for independent variables (X) which are the local government factors, the data used is from 2014 include Human Development Index (X_1) and Gross Regional Domestic Product (X_2) at 2010 constant market prices sourced from Central Bureau of Statistics, Local Own-Source Income (X_3), Grant Expenditure (X_4), and Capital Expenditure (X_5) sourced from Ministry of Finance of Republic of Indonesia, Area Size (X_6) and Population Size (X_7) sourced from Ministry of Home Affairs of Republic of Indonesia.

3.1 Classical Assumption Test

Before running the data for regression, firstly we conduct the classical assumption test. It is a series of tests that is required to ensure that the regression model have the accuracy in estimation, consistent, and unbiased. There are three tests that are conducted for cross-sectional data in this research as follow:

3.1.1 Normality Test

Normality test is a test to examine whether in the regression model, independent variable, dependent variable, or both have normal distribution or not. A good regression model should have normal distribution data. Normality test used for this research is One-Sample Kolmogorov-Smirnov Test.

Table 3.1 one-sample kolmogorov-smirnov test result

		Standardized Residual
N		305
Normal Parameters ^{a,b}	Mean	0.0000000
	Std. Deviation	0.98841979
Most Extreme Differences	Absolute	0.032
	Positive	0.030
	Negative	-0.032
Test Statistic		0.032
Asymp. Sig. (2-tailed)		0.200 ^{c,d}

Based on the table of one-sample kolmogorov-smirnov test result, the p-value or Asymp. Sig. (2-tailed) is 0.200. Therefore, the data is called normally distributed because p-value is more than 0.05.

3.1.2 Multicollinearity Test

Multicollinearity test is a test to examine whether in the regression model is found any correlation among the independent variables. A good regression model should not have correlation among independent variables. For this research, whether there is multicollinearity or not can be seen from the tolerance value and variance inflation factor (VIF).

Table 3.2 multicollinearity test result

Model	Collinearity Statistics	
	Tolerance	VIF
Human Development Index	0.461	2.171
Gross Regional Domestic Product	0.175	5.709
Local Own-Source Income	0.183	5.452
Grant Expenditure	0.587	1.705
Capital Expenditure	0.420	2.382
Area Size	0.668	1.498
Population Size	0.333	3.004

Based on the table of multicollinearity test result, each independent variable has tolerance value > 0.100 and $VIF < 10$. Therefore, the data has no multicollinearity among independent variables in this research.

3.1.3 Heteroscedasticity Test

Heteroscedasticity test is a test to examine whether in the regression model, there is any difference among the residual variance from one observation to another observation. A good regression model should be homoscedasticity or no heteroscedasticity. For this research, heteroscedasticity test used is Glejser Test.

Table 3.3 glejser test result

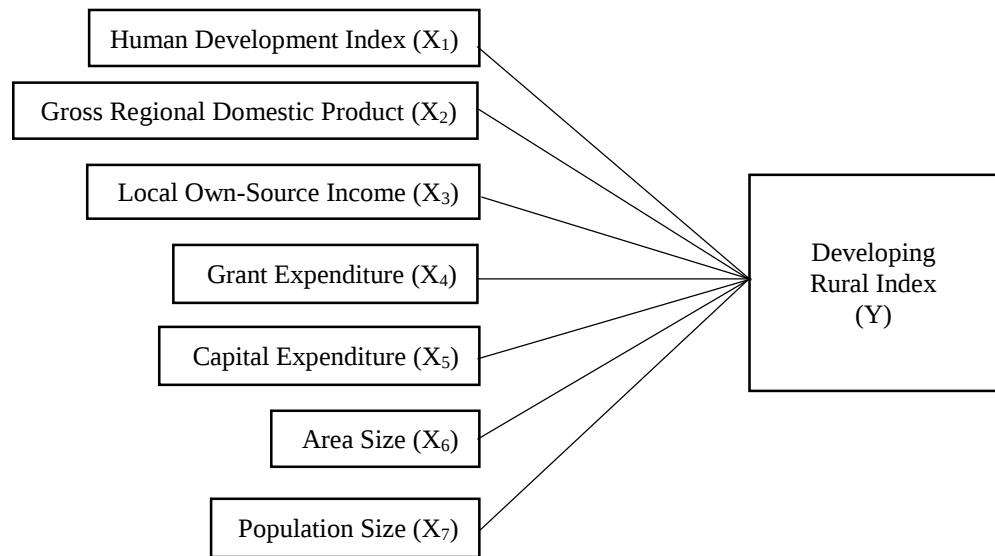
Model	Sig.
Human Development Index	0.547
Gross Regional Domestic Product	0.836
Local Own-Source Income	0.944
Grant Expenditure	0.693
Capital Expenditure	0.869
Area Size	0.086
Population Size	0.706

Based on the table of glejser test result above, the data has no heteroscedasticity because the p-value (Sig.) of each independent variable is more than 0.05.

3.2 Multiple Linear Regression

After the data has passed all the classical assumption test, the multiple linear regression is ready to be processed. The conceptual framework of this research as the following below:

Figure 3.1 conceptual framework



Based on the conceptual framework, there are some hypotheses used to prove the regression result with the level of significant $\alpha=0.05$. The hypotheses (Ha) are stated in the following below:

- Ha₁ : There is a significant relationship between Human Development Index (X₁) toward Developing Rural Index (Y)
- Ha₂ : There is a significant relationship between Gross Regional Domestic Product (X₂) toward Developing Rural Index (Y)
- Ha₃ : There is a significant relationship between Local Own-Source Income (X₃) toward Developing Rural Index (Y)
- Ha₄ : There is a significant relationship between Grant Expenditure (X₄) toward Developing Rural Index (Y)
- Ha₅ : There is a significant relationship between Capital Expenditure (X₅) toward Developing Rural Index (Y)
- Ha₆ : There is a significant relationship between Area Size (X₆) toward Developing Rural Index (Y)
- Ha₇ : There is a significant relationship between Population Size (X₇) toward Developing Rural Index (Y)

Test criterion:

- If p-value < 0.05, then accept Ha. It means that there is a significant relationship between independent variable (X) partially and dependent variable (Y).
- If p-value > 0.05, then reject Ha. It means that there is no significant relationship between independent variable (X) partially and dependent variable (Y).

The model of multiple linear regression for this research as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + \epsilon$$

Y = Developing Rural Index as dependent variable
a = Constant coefficient
b₁, b₂, b₃, b₄, b₅, b₆, b₇ = Independent coefficient
X = Local Government Factors as Independent variables, where:
X₁ = Human Development Index
X₂ = Gross Regional Domestic Product
X₃ = Local Own-Source Income
X₄ = Grant Expenditure
X₅ = Capital Expenditure
X₆ = Area Size
X₇ = Population Size
ε = Error coefficient

After the data of multi linear regression is processed, we can find out the result and analyze whichever the local government factors that have significant relationship toward Developing Rural Index and whether the effect is positive or negative significant relationship between Developing Rural Index and each local government factor. The discussions are also conducted to analyze the major findings.

4. RESULT AND ANALYSIS

After the data of all variables is processed, there is the result of the multiple linear regression as the following below:

Table 4.1 multiple linear regression result

Model	Unstandardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)*	0.391	0.058	6.724	0.000
Human Developing Index*	0.004	0.001	7.694	0.000
Gross Regional Domestic Product	0.008	0.009	0.838	0.403
Local Own-Source Income*	0.049	0.009	5.610	0.000
Grant Expenditure	0.003	0.004	-0.754	0.451
Capital Expenditure*	-0.060	0.012	-4.959	0.000
Area Size*	-0.004	0.000	-9.478	0.000
Population Size*	0.023	0.006	3.615	0.000

Dependent Variable: Developing Rural Index

* indicates the significance level is less than 0.05

Based on the table of multiple linear regression result, the hypotheses analysis of the result as the following table below:

Table 4.2 hypotheses result

Hypotheses (Ha)	Sig. (p-value)	Result
Ha ₁ : There is a significant relationship between Human Development Index and Developing Rural Index.	0.000	Ha ₁ is accepted (0.000 < 0.05), then there is a significant relationship between Human Development Index and Developing Rural Index. It means Human Development Index is a factor that affects the rural development.
Ha ₂ : There is a significant relationship between Gross Regional Domestic Product	0.403	Ha ₂ is rejected (0.403 > 0.05). There is no significant relationship between Gross Regional Domestic Product and Developing Rural Index. It means Gross Regional

and Developing Rural Index.		Domestic Product is not factor that affects the rural development.
Ha ₃ : There is a significant relationship between Local Own-Source Income and Developing Rural Index.	0.000	Ha ₃ is accepted (0.000 < 0.05). There is a significant relationship between Local Own-Source Income and Developing Rural Index. It means Local Own-Source Income is a factor that affects the rural development.
Ha ₄ : There is a significant relationship between Grant Expenditure and Developing Rural Index.	0.451	Ha ₄ is rejected (0.451 > 0.05). There is no significant relationship between Grant Expenditure and Developing Rural Index. It means Grant Expenditure is not factor that affects the rural development.
Ha ₅ : There is a significant relationship between Capital Expenditure and Developing Rural Index.	0.000	Ha ₅ is rejected (0.000 < 0.05). There is a significant relationship between Capital Expenditure and Developing Rural Index. It means Capital Expenditure is a factor that affects the rural development.
Ha ₆ : There is a significant relationship between Area Size and Developing Rural Index.	0.000	Ha ₆ is accepted (0.000 < 0.05). There is a significant relationship between Area Size and Developing Rural Index. It means Area Size is a factor that affects the rural development.
Ha ₇ : There is a significant relationship between Population Size and Developing Rural Index.	0.000	Ha ₇ is accepted (0.000 < 0.05). There is a significant relationship between Population Size and Developing Rural Index. It means Population Size is a factor that affects the rural development.

Based on the table of hypotheses result, the local government factors that affect the rural development are Human Development Index, Local Own-Source Income, Capital Expenditure, Area Size, and Population Size. Meanwhile, Gross Regional Domestic Product and Grant Expenditure do not affect the rural development.

Therefore, the model of multiple linear regression would be as following below:

$$DRI = 0.391 + 0.004HDI + 0.049LOSI - 0.060CAPITAL - 0.004AREA + 0.023POPULATION + \epsilon$$

DRI : Developing Rural Index
 HDI : Human Development Index
 LOSI : Local Own-Source Income
 CAPITAL : Capital Expenditure
 AREA : Area Size
 POPULATION : Population Size
 ϵ : Error coefficient

Table 4.3 model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.859 ^a	0.737	0.731	0.0344935

Based on the table of model summary, the coefficient of correlation (R) is 0.859 and the coefficient of determination (R Square) is 0.737. The coefficient of correlation of 0.859 indicates that the strength between Developing Rural Index and the local government factors are highly correlated. Moreover, the coefficient of determination of 0.737 indicates that 73.7% of variation in Developing Rural Index can be explained by Human Development Index, Local Own-Source Income, Capital Expenditure, Area Size, and Population Size. Meanwhile, 26.3% of variation is explained by the other causes. The discussions related to the major findings as follow:

4.1 Human Development Index and Rural Development

There is a positive significant relationship between Human Development Index and Developing Rural Index which the effect is the higher the Human Development Index, the higher the rural development. Susanto and Rachmawati (2013) found that there is a positive significant relationship between Human Development Index toward the economic growth. Human Development Index and the economic growth are closely related because the increase in Human Development Index encourages most industries to produce more efficiently so they can be able to produce the cheaper price of goods. It affects toward the increase of public consumption and also the increase of people's income.

In the human development, there are also three basics and important choices which include to have a long and healthy life; to get an education; and to have access towards the sources of needs in order to live properly (Badan Pusat Statistik, 2015). It's related to some variables of Developing Human Index such as health services, community empowerment for health, access of primary and middle education, having social solidarity, and access to electricity or information and communication. If the objectives in Human Developing Index could be obtained and increased continuously, it drives the increase in Developing Rural Index through the increase of each indicator of the relevant variables. The effect can also develop the potentials of rural area. Through the rural development, there are more employment opportunities and increasing the community's income as well as encouraging the workers to stay and work in the rural area (Pasaribu, 2007).

4.2 Local Own-Source Income and Rural Development

There is a positive significant relationship between Local Own-Source Income and Developing Rural Index which the effect is the higher the local own-source income, the higher the rural development. The components and performance of the local own-source income significantly affects the local government, especially in financial terms. In the research of Wenny (2012), the other lawful own-source income is one component of local own-source income that partially affect the financial performance of local government. Moreover, based on Regulation of Government of the Republic of Indonesia No. 72 of 2005, the components such as local tax and retribution are the parts of local government assistances in the sources of rural income. The share of local tax is at least 10% and the local retribution is partly intended for the rural. By the increase of local own-source income from each municipality, it leads to increase the rural income that is beneficial for the increase of the rural development.

4.3 Capital Expenditure and Rural Development

There is a negative significant relationship between Capital Expenditure and Developing Rural Index which the effect is the lower the capital expenditure, the higher the rural development. This is contradictory with the research of Sularso and Restianto (2012) that the allocation of capital expenditure that is done by local government has positive effect towards the economic growth. It is indeed in line with the level of development of a region because the provision of the facilities and infrastructure in the region and rural area can be increased.

Meanwhile, this result could be happened due to the governance factor that is not observed such as deviation or corruption in capital expenditure. Indonesian Forum for Budget Transparency (*Fitra*) noted that there are five municipalities in Indonesia in 2012 with the most corrupt indications of capital expenditure budget include Nduga (Papua), Sula (North Maluku), Wajo (South Sulawesi), Berau (East Kalimantan), and

Kapuas (Central Kalimantan). The most common causes such as the lack of work volume, the work isn't according to the contract, and penalties for delay in work that hasn't been billed (Maharani, 2013).

Moreover, Darwis (2015) found the capital expenditure has significant negative effect toward the local financial independence. It is due to the capital expenditure occurred are still less prevalent or low, so that there are many inequality level of financial independence among the regions. These may occur if the capital expenditure for infrastructure development does not support the investment in encouraging the economic growth in the region or the evaluation and assessment are almost never done on the inventory items that are available in terms of conditions either economic age, so that the procurement of inventory items cannot be done selectively as needed (Kementerian Keuangan Republik Indonesia, 2014). Thus, the lower the capital expenditure yet efficient would be more encouraging the increase of the rural development in each region rather than the higher the capital expenditure yet inefficient which could hamper the development progress in the rural area.

4.4 Area Size and Rural Development

There is a negative significant relationship between Area Size and Developing Rural Index which the effect is the smaller Area Size, the higher the rural development. Based on the Law No. 33 of 2004, the area size is a variable that reflects the needs for the provision of facilities and infrastructure. The larger the area size, the more facilities and infrastructure that are necessarily provided by the local government as an effort of providing the decent public services, so that it will need more resources to provide more services. Hence, if the area size is getting smaller, the resources that have been allocated for the rural development could be managed more maximally in accordance with the needs of community. The local government could be easier to take control the regions and span the regions deeper until the level of very underdeveloped rural area. In addition, the community could also give aspirations more easily toward the local government in order to enhance the level of rural development that would be encouraging the increase of Developing Rural Index.

4.5 Population Size and Rural Development

There is a positive significant relationship between Population Size and Developing Rural Index which the effect is the larger Population Size, the higher the rural development. Siregar and Wahyuniarti (2008) stated that the increase in population affects the increase in poverty level which the population growth is relatively high in the poor families. However, if it's related with increasing and maximizing the local and rural development, the needs of human resources are very important in contribution to develop a region. According to the research of Lonni et al. (2013), the quality of human resources are very important toward the economic growth. The human resource quality such as population of productive age and education are factors that have significant relationship towards the economic growth. The higher the population that succeed achieving the high level of education can encourage the quality of human workforce is getting better. The high population size with the human resources that have knowledge and better workforce skills, they are able to organize the work effectively and generate the high production. In the developing regions, there are many industrial sectors that are able to absorb the labor and expand the employment opportunities in order to improve the welfare of community (Hardini, 2011). Therefore, if the high population size can give a good performance significantly toward the region, it drives increasing the rural development.

5. CONCLUSION AND SUGGESTION

In Indonesia, developing rural index is one measurement that could be used to strengthen the rural development. The rural development is inseparable from the local government that provides the needs of rural area for the development progress. However, the local government factors in Indonesia are not still managed appropriately, so it needs to be found the local government factors that affect the rural development through developing rural index and the effect of each factor toward the rural development. The methodology used in this research is the multiple linear regression with the sample of 305 municipalities in Indonesia in 2014.

Based on the data analysis and findings, we conclude that human development index, local own-source income, capital expenditure, area size, and population size are the local government factors that affect the rural development in Indonesia. The factors that have positive significant relationship toward developing rural index are human development index, local own-source income, and population size. The effect is the higher these factors, the higher the rural development. Therefore, the government should increase the quality and quantity of educations, the skills of labor forces, and the employment opportunities to increase human development index and maximize human resources to overcome the population size which is getting higher in Indonesia. Moreover, the local government can provide the decent public services that allows the higher levels of public compliance in paying local tax to increase the local own-source income.

Meanwhile, capital expenditure and area size are the factors that have negative significant relationship toward developing rural index. The effect is the lower these factors, the higher the rural development. Therefore, the capital expenditure should have evaluation and assessment on the availability of inventory items so the procurement of inventory items will be done selectively as needed. Moreover, the creation of new area can be an alternative for the area that is too large in order to ease the community to give aspirations and the local government can take control the rural area deeper more easily.

For further researches, it is better to expand the independent variables which are not only the local government factors that have been stated in this research but the others that may have great impacts toward the rural development, such as rural funds. The dependent variable also can employ another instrument with different methodology or with more specific samples such as in the rural area level. Thus, there will be more variables that can be known to enhance the sustainability of rural development in order to achieve national development in Indonesia.

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