



The Effect of Community Participation on the Effectiveness of the Implementation of Road Development in Sibaganding Village, Garoga District

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ABSTRACT

Community participation in the implementation of development programs is one form of public concern for the implementation of development. Community participation is also one of the factors that influence the success or failure of development programs in a region. Community participation is needed because the government program that is being implemented is none other than the community. The community should participate together with the government to provide a role to increase and facilitate the implementation of development programs. The involvement or participation of all levels of society in providing participation in any development program can be in the form of contributing thoughts or giving ideas of physical involvement or energy, as well as sharing in the results of the development program itself. The purpose of this study was to determine how the influence of community participation on the effectiveness of the implementation of road construction in Sibaganding Village, Garoga District. This type of research is an associative study, namely research conducted to determine the effect of two or more variables. Data collection was carried out by means of questionnaires, interviews and documentation. Data analysis techniques are: simple correlation, simple regression and t test. The result of the research is that there is a positive relationship between Community Participation and the Effectiveness of the Implementation of Road Development of 0.759. The coefficient of determination (R^2) is 0.576. The regression results are: $Y = 15,456 + 0.810 (X)$, the result of t count $(10,863) > t$ table (1).

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1. Introduction

Indonesia as a developing country, optimizes development in all areas of life to ensure the welfare of society. Therefore, in the aspect of physical infrastructure development in particular, the government is making efforts to improve the community's welfare through various empowerment programs, both national and regional in nature, based on regional autonomy, so that development is carried out evenly and far from gaps. Rural development is a very important thing to do, departing from the fact that the basic problems of development itself are inherently rural.

Nowadays, community participation is indispensable for the development of an urban or rural area, because we can see that the influence of this participation is so great, this community participation greatly determines the success of a plan or programs that are around them, the success of a program without community participation is not will run well, community participation will be needed in planning or programs, so that the program runs properly. Certainly the planned programs are closely related to community development. For this reason, the community is required to participate in this development.

Community participation in the implementation of development programs is one form of public concern for the implementation of development. Community participation is also one of the factors that influence the success or failure of development programs in a region. Community participation is needed because the government program that is being implemented is none other than the community. The community should participate together with the government to provide a role to increase and facilitate the implementation of development programs.

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In this case the government is expected to be able to take an approach to foster community participation. One thing that needs to be remembered is that the community does not feel ownership if they are not included in the implementation of the development program. In addition, in the preparation of a development program, it must involve the community, because it is very difficult if the implementation of the development program does not involve the community. So the government must work together with the community in compiling a development program plan until its implementation. Thus, it can be understood the importance of participation in mobilizing the community in a development program plan and achieving the desired targets.

Efforts are needed to further convince the public to participate in the implementation of development programs, namely the existence of communication between the government and the community or vice versa. This situation will change people's attitudes and actions from apathy then to support for participation. This shows how big the role of the government is in increasing participation.

Likewise the situation in Sibaganding Village, which is located in Garoga District, North Tapanuli Regency. Road construction is carried out in this village to support the community's economy, namely for the smooth transportation of agricultural products and transportation for the village community.

Sibaganding Village in Garoga Subdistrict are two hamlets, namely Sibaganding Jae and Sibaganding Julu which are across the Tanjung river. Along with the development of the times the people of the two hamlets moved towards the road and are now called Sibaganding Village.

The length of roads handled in Sibaganding Village for the 2019 fiscal year from the Village Fund is 540 m. The road construction from the Village Fund is carried out jointly by the Sibaganding Village community.

2. Literature review

2.1 Society participation

a. Definition of Participation

Many experts provide an understanding of the concept of participation. When viewed from the origin of the word, the word participation comes from the English word "participation" which means taking part, participation (Echols & Shadily; 2000: 419).

Participation means the participation of a person or community group in the development process either in the form of a statement or in the form of activities by providing input on thoughts, energy, time, expertise, capital and / or material, as well as taking advantage and enjoying the results of development (Sumaryadi, 2010: 46).

Djalal and Supriadi (2001: 201-202) put forward the notion of participation where participation can also mean that decision makers suggest that groups or communities be involved in the delivery of suggestions and opinions, goods, skills, materials and services. Participation can also mean that the group recognizes their own problem, examines their options, makes decisions, and solves problems.

Tilaar (2009: 287) states that participation is a manifestation of the desire to develop democracy through the decentralization process where efforts are made to include, among other things, the need for bottom-up planning by involving the community in the planning process and community development.

According to Sundariningrum (Sugiyah; 2001: 38) classifies participation into 2 (two) based on the way of involvement

Cohen and Uphoff (Astuti; 2011: 61-63) differentiate participation into four types, namely first, participation in decision making. Second, participation in implementation. Third, participation in utilization. And fourth, participation in evaluation.

b. Forms of Participation

The form of participation according to Effendi (Astuti; 2011: 58

According to Basrowi (Astuti; 2011: 58), community participation, seen from its form, can be divided into two

According to Arnstein's statement (Sigit; 2013: 27), dividing the levels of community participation in development programs carried out by the government into 8 levels of community participation based on the power given to the community. Participation rate from highest to lowest

c. Society participation

Geddesian (Sari 2008: 43) argues that basically the community can be actively involved from the early stages of planning.

Abe (2002: 81) argues that the definition of participatory planning is planning which involves the interests of the community, and in the process involves the people (either directly or indirectly), the goals and methods must be seen as one unit. A goal is in the interests of the people and if it is



formulated without involving the community, it will be very difficult to be sure that the formula will be in the side of the people.

Regarding the community in the stages of development activities, Siagian (1989: 108) states that participation in decision making is a process of choosing alternatives that are provided by all elements of society, formal institutions, social institutions and others. This means that community participation in decision-making is very important, because people are required to be able to determine what they want to achieve, what problems are faced, what alternatives might solve the problem, and which alternatives must best be done to overcome these problems.

Wicaksono and Sigiarto (Sari, 2008: 56 - 57) argue that participatory planning is an effort made by the community to solve the problems faced in order to achieve the expected conditions based on their needs and abilities independently.

2.2 Effectiveness.

a. Definition of Effectiveness

This is in accordance with the opinion of Emerson (Handyaningrat; 2006: 16) which states that "Effectiveness is a measurement in the sense of achieving predetermined goals."

Effectiveness means successful or effective. Effective is the basic word, while the adjective of effective is effectiveness. According to Effendy (2008: 14) defines effectiveness as follows: "Communication whose process reaches the planned goals in accordance with budgeted costs, set time and the number of personnel specified."

Another definition according to Susanto (2005: 156), "effectiveness is the power of messages to influence or the level of ability of messages to influence". According to Susanto's understanding above, effectiveness can be interpreted as a measure of the achievement of carefully planned goals.

b. Approach Used in Assessment of Effectiveness

In assessing program effectiveness, Tayibnafis (Muhidin; 2009) describes various evaluation approaches. Approaches

The same view according to the opinion of Drucker (Moenir) defines effectiveness, as follows effectiveness, on the other hand, to be the ability to choose the appropriate outcome objectives. An effective manager is one who chooses the truth to carry out "(Moenir, 2006: 166). Taking into account the opinions of the experts above, that the concept of effectiveness is a multidimensional concept, meaning that in defining the effectiveness varies according to the basis of the knowledge possessed even though the ultimate goal of effectiveness is the achievement of goals.

The word effective is often confused with the word efficient even though the meaning is not the same, something that is done efficiently is not necessarily effective. In Gibson's opinion; 1996: 34, states that the measure of organizational effectiveness is as follows:

- 1) Production is the organization's ability to produce the quantity and quality of output in accordance with environmental demands.
- 2) Efficiency is the ratio (ratio) between output and input.
- 3) Satisfaction is a measure to show the degree to which the organization can meet the needs of society.
- 4) Excellence is the degree to which organizations can and do respond to internal and external changes.
- 5) Development is a measure of an organization's ability to increase its capacity to face community demands. (Gibson, 1996: 34)

In the opinion of Steers; 1985: 46-48, mentions several measures of effectiveness, namely:

- 1) Quality means the quality produced by the organization;
- 2) Productivity means the quantity of services produced;
- 3) Readiness, namely a comprehensive assessment with respect to the possibility of completing a specific task properly;
- 4) Efficiency is a comparison of several aspects of performance against costs to produce these achievements;
- 5) Income is the amount of resources that are still left after all costs and obligations are met;
- 6) Growth is a comparison of his present and past existence;
- 7) Stability, namely the maintenance of structures, functions and resources at all times;
- 8) Accidents, namely the frequency of repairs resulting in time loss;
- 9) Morale, namely the feeling of being bound in terms of achieving goals, which involves additional effort, shared goals and a feeling of belonging;
- 10) Motivation means the strength that emerges from each individual to achieve goals;
- 11) Coherence is the fact that the members of the organization like each other, which means working well together, communicating and coordinating;

12) Flexibility. Adaptation means the existence of a new stimulus to change the standard operating procedure, which aims to prevent freezing to environmental stimuli;

c. Effectiveness Indicator

Barnard (Prawirosentono; 2008: 27) who says that effectiveness is a dynamic condition of a series of processes for the implementation of tasks and functions of work in accordance with the objectives and recommendations of program policies that have been set, with this conceptual definition, a study dimension is obtained, namely the dimension of program effectiveness.

2.3 Road Construction

a. Definition of Infrastructure

Based on Presidential Regulation No. 38/2015 defines infrastructure as one of the technical, physical, systems, hardware and software needed to provide services to the community and support networks to the community and support network structures so that economic and social growth of the community can run well. The World bank (Prasetyo and Firdaus: 2009)

As a basic physical need, infrastructure requires organizing a structural system for economic security in the public and private sectors as services and facilities needed in the form of physical and social infrastructure so that the economy can function properly (Wikipedia, 2018). The term infrastructure refers more to technical and physical infrastructure that supports a network of structures such as road facilities, clean water, electricity, telecommunications, waste management, airports, reservoirs, embankments, canals, trains which functionally facilitate the economic activities of the community.

As there is a good road in a country, it can facilitate the transportation of raw material shipments to the factory according to the destination. So this is called infrastructure provided by the government which is called public goods, in addition, such as toll roads, which are infrastructure provided by the government (Stiglitz in Hapsari, 2011). The characteristics of public goods according to their use (consumption of public goods) are non-rivalry and non-excludable rivalry. However, this can have a competitive nature (rivalry) in its use if the goods used by someone cannot be used by others.

Apart from that, infrastructure also has links to regional development because this is a feature of the rate of economic growth and social welfare. If a region has a better complete infrastructure system, it will have a better rate of economic growth and social welfare and vice versa. This means that infrastructure is very important in a country because infrastructure is one of the driving forces for economic growth (Gie: Chaerunnisa; 2014).

The availability of a country's infrastructure can affect the country's economic growth. In addition, infrastructure has a very important position in the existence of a country's economy as a driver of output productivity and carrying out economic activities. However, on the other hand, there are two obstacles in infrastructure procurement (Yanuar: Purnomo; 2009), which states that there are two obstacles in infrastructure procurement, namely the possibility of market failure and financing. This market failure is because this type of infrastructure has benefits that are not only felt personally but can also be felt by others.

So with these constraints, the government provides infrastructure through government spending from the State Revenue and Expenditure Budget through state development. According to Wagner's theory: Chaerunnisa; 2014, states that government spending will grow faster than GDP (Gross Domestic Product), in other words, the elasticity of government spending on GDP is more than one. So in the economy, if per capita income increases in relative terms, government spending will also increase.

b. Definition of Highway

According to Law No.38 / 2004 the meaning of roads is:

- 1) Roads are land transportation infrastructure covering all parts of the road, including complementary buildings and equipment intended for traffic, which are above the surface of the ground, below the surface of the ground and / or water, and above the surface of the water, except railways, roads, lorries, and cable roads.
- 2) Public roads are roads designated for public traffic.
- 3) Special roads are roads built by agencies, business entities, individuals, or community groups for their own interests.
- 4) Toll roads are public roads that are part of the road network system and as national roads whose users are required to pay toll fees.

3. Research Methods

The population of this study were 765 people in Sibaganding Village, Garogayang District.

The sample is a certain part of the population unit which is the object of research. The type of sample taken must reflect the population, the sample can be defined as part of the population (Nazir, 2005: 271). Determination of the number of samples is determined by the Slovin formula with an error rate of 10%

Based on the formula above, the number of samples can be calculated as follows:

$$n = \frac{765}{1 + 765 (0,1)^2} = 88, 43930$$

From the results of the above calculations, the sample in this study amounted to 89 people.

Data collection techniques are carried out by giving a set of questions or written statements to respondents to be answered by the respondent, namely the people of Sibaganding Village, Garoga District.

Data analysis or processing techniques were carried out using the SPSS program version 17.0, using:

3.1 Simple Correlation Analysis.

In testing the research hypothesis, the data analysis technique used is the calculation of the correlation coefficient (r), which is to find out how many correlation coefficients of the independent variables, and to determine the level of relationship that exists between variables X and Y, with the following formula:

$$r = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{\{n(\sum X^2) - (\sum X)^2\} \{n(\sum Y^2) - (\sum Y)^2\}}}$$

3.2 Regression Test.

In predicting how much influence the variable X has on the variable Y, a Simple Linear Regression test is used with the Carl Pearson formula, namely:

$$Y = a + b X$$

$$a = \frac{(\sum y)(\sum x^2) - (\sum x)(\sum xy)}{n(\sum x^2) - (\sum x)^2}$$

$$b = \frac{n(\sum xy) - (\sum x)(\sum y)}{n(\sum x^2) - (\sum x)^2}$$

3.3 Correlation Coefficient Significance Test (t test)

In order to determine / conclude the research results, it is necessary to first test whether the r (correlation coefficient) that has been determined above is significant or not. To determine the meaning of the correlation coefficient, the t test is used with the formula:

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

4. Results and Discussion

In knowing the relationship between variable X, namely community participation to variable Y, namely the effectiveness of the implementation of road construction, using the SPSS version 17.0 program, the following correlation results are obtained:

Table 1.
Correlation coefficient

		Society participation	Effectiveness of Road Development Implementation
Society participation	Pearson Correlation	1	.759 **
	Sig. (2-tailed)		.000
	N	89	89
Effectiveness of Road Development Implementation	Pearson Correlation	.759 **	1
	Sig. (2-tailed)	.000	
	N	89	89

** . Correlation is significant at the 0.01 level (2-tailed).

From the results of the SPSS 17.0 Program, the correlation between Community Participation and the Effectiveness of Road Development Implementation was positive at 0.759. This positive relationship

explains that each increase in the Community Participation variable (X) will increase the Road Development Implementation Effectiveness variable (Y). By looking at Table 3.1. Guidelines for Interpretation of Correlation Coefficients, then the correlation coefficient of 0.759 is categorized as strong.

Then to see what percentage of the influence of the independent variable (Community Participation) on the dependent variable (Effectiveness of Road Development Implementation) can be seen from the following coefficient of determination:

Table 2
Coefficient of Determination
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759a	.576	.571	2,995

From the table above, the coefficient of determination (R²) is 0.576. This means that the independent variable, namely community participation, is able to explain the dependent variable, namely the Effectiveness of Road Development Implementation of 0.576 or 57.6%. The remaining 42.4% is influenced by other variables not discussed in this study.

Next, we will see the effect of variable X (Community Participation) on variable Y (Effectiveness of Road Development Implementation) in Sibaganding Village, Garoga District. The results of the regression test using the SPSS version 17.0 program are as follows:

Table 3
Regression Coefficient

		Coefficients				
		Unstandardized Coefficients	Std. Error	Standardized Coefficients	t	Sig.
Model		B		Beta		
1	(Constant)	15,456	2,849		5,425	.000
	Society participation	.810	.075	.759	10,863	.000

a. Dependent Variable: Effectiveness

Based on the regression coefficient table above, the results are:

$$Y = 15,456 + 0,810 (X)$$

From the regression results obtained, namely $Y = 15,456 + 0,810(X)$ it can be concluded that the value of b is 0.810, meaning that any changes in variable X, namely community participation, will be offset by changes in variable Y, namely the Effectiveness of Road Development Implementation. Because the value of b is positive (0.810), any additional community participation will be balanced with the addition of the effectiveness of the development implementation of Jalandi in Sibaganding Village, Garoga District. If the variable X (Community Participation) increases by 1, the variable Y (Effectiveness of Road Development Implementation) will increase by 0.810.

After knowing the effect of Community Participation on the Effectiveness of the Implementation of Road Development in Sibaganding Village, Garoga District through the regression discussed above. Then it is necessary to see the significance of the influence of Community Participation on the Effectiveness of the Implementation of Road Construction, so the test is carried out by comparing the t value with the t table with the test criteria:

Ho is accepted and Ha is rejected if $t < t_{table}$

Ho is rejected and Ha is accepted if $t_{count} > t_{table}$

From table 4:14 (regression coefficient) above, it is obtained the value of $t_{count} = 10,863$. Furthermore, the t value will be compared with t table. For a 5% error, the two-party test and $dk = n - 2 = 87$, then the t table value = 1.663.

In accordance with the results obtained, namely $t_{count} (10,863) > t_{table} (1,663)$ then Ho is rejected and Ha is accepted or in other words there is a significant influence between Community Participation on the Effectiveness of the Implementation of Road Development in Sibaganding Village, Garoga District.



5. Conclusion

Based on the research results described in Chapter IV, the following conclusions are drawn:

- a. It was found that the correlation between Community Participation and the Effectiveness of the Implementation of Road Development was positive at 0.759. This positive relationship explains that each increase in the Community Participation variable (X) will increase the Road Development Implementation Effectiveness variable (Y). By looking at Table 3.1. Guidelines for Interpretation of Correlation Coefficients, then the correlation coefficient of 0.759 is categorized as strong.
- b. Obtained the coefficient of determination (R²) of 0.576. This means that the independent variable, namely Community Participation, is able to explain the dependent variable, namely the Effectiveness of Road Development Implementation of 0.576 or 57.6%. The remaining 42.4% is influenced by other variables not discussed in this study.
- c. The regression obtained is $Y = 15,456 + 0,810(X)$ it can be concluded that the value of b is 0.810, meaning that any changes in variable X, namely community participation, will be offset by changes in variable Y, namely the Effectiveness of Road Development Implementation. Because the value of b is positive (0.810), any additional community participation will be balanced with the addition of the effectiveness of the implementation of road construction in Sibaganding Village, Garoga District. If the variable X (Community Participation) increases by 1, the variable Y (Effectiveness of Road Development Implementation) will increase by 0.810.
- d. In accordance with the results obtained, namely $t \text{ count } (10,863) > t \text{ table } (1,663)$ then H_0 is rejected and H_a is accepted or in other words there is a significant influence between Community Participation on the Effectiveness of the Implementation of Road Development in Sibaganding Village, Garoga District.

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