Economic and Social Impact Analysis of Road Infrastructure Development in Grobogan District

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Abstract. The construction of road infrastructure in Grobogan District is a priority, but the percentage of poverty remains high. This research aims to analyze the extent impact of road infrastructure development carried out by the Grobogan District Government in improving the welfare of its people, both from Social and Economic Factors. This method uses policy impact from Patton, Sawicki and Clark [1] compares the results before and after comparisons. Researchers used data on road improvement, poverty percentage, Open Unemployment Rate, and Gross Regional Domestic Product (PDRB). The secondary data show that the expected effect of road infrastructure development to reduce poverty rates in Grobogan District. Moreover, the socioeconomic welfare level of people in Grobogan District low compared to some other districts in Central Java Province. Recommendations are Improving Human Resources and strengthening the business field, so that the society of Grobogan District can take advantage of the road infrastructure improvements made by the current Government.

Keywords: Social Effect, Economy Welfare, Grobogan District, Poverty, Infrastructure

1 Introduction

Poverty is a situation where a person or household has difficulty meeting basic needs, while the supporting environment provides fewer opportunities to improve well-being on an ongoing basis or to get out of vulnerability.

According to the World Bank, poverty is a general condition in welfare. By that, definition poverty can be seen from several sides. From a conventional view, poverty is viewed from the monetary side, where poverty is measured by comparing the income/consumption of individuals with certain limits, if they are below those limits, and then they are considered poor. The next view on poverty is that poverty is not only a monetary measure, but also includes a nutrient poor that is measured by examining whether children's growth is stunted. In addition, it can also be from poor education, for example by using an indicator of illiteracy numbers [2].

Furthermore, the broader view on poverty is that poverty exists if people lack basic abilities, resulting in inadequate income and education or poor health, or insecurity, or low confidence, or a sense of helplessness, or the absence of free speech rights. Based on this view, poverty is a multi-dimensional phenomenon, and the solution to overcome it is not simple.

Bappenas [3] defined poverty as a condition in which a person or group of people, male and female, are unable to fulfill their basic rights to sustain and develop a dignified life. These basic rights include, among other things, the fulfillment of food needs, health, education, employment, housing, clean water, land, natural resources and the environment, a sense of security from the treatment or threat of violence and the right to participate in socio-political

life. To realize the basic rights of a person or group of poor people, National Development Planning Agency (Bappenas) uses several main approaches, among others; basic needs approach, income approach, human capability approach and objective as well as subjective approach.

Poverty is a development problem in various fields characterized by limitations, disabilities, and shortcomings. Poverty reduction should be a top priority in national development. Poverty is a core issue whose countermeasures can no longer be put on hold [4]. Investment in the construction of infrastructure facilities thought to have a great influence on the economic development of a country. The availability of infrastructure, such as roads, ports, airports, electricity supply systems, irrigation, clean water supply systems, sanitation, and so on that are social overhead capital, has a very strong association with the level of regional development, which among others is characterized by the pace of economic growth and the welfare of the community [5].

Increasing the population is causing various problems, including food problems, boards, unemployment, the provision of educational facilities, and other social facilities. This can lead to a decrease in social welfare levels in both urban and rural areas. The percentage population in Indonesia is 9.22%, while in Central Java Province percentage is 10.58% [6]. Still high poverty rate in Central Java Province compared to the National average above Regional Medium Term Development Plan (RPJMD) target in 2019 (10.40%-9.93%).

Infrastructure is the driving force of economic growth. Transportation facilities allow people, goods, and services to be transported from one place to another around the world. Its role is very important both in the production process and in supporting the distribution of economic commodities [7]. Telecommunications, electricity, and water are very important elements in the production process of economic sectors such as trade, industry and agriculture. The lack of infrastructure will encourage increased productivity for production factors. Infrastructure improvements will increase labor absorption, spark investment and increase people's incomes. Good infrastructure also stimulates increased public income. Increasing economic activity encourages the mobility of production factors and trade activities.

The study of public policy analysis to be conducted by researchers is currently located in Grobogan District, Central Java Province. Because based on bps data Grobogan District has a higher poverty rate than Central java and national provinces, also belongs to the category of red regency.

The poverty percentage in Grobogan District in 2019 was 11.77%, while the poverty percentage in Central Java Province was 10.80%, and the national poverty average was 9.22%. With these conditions, the Grobogan District Government to reduce poverty levels-built infrastructure to support regional economic growth. Due to the road that is, supporting the pace of economic growth in Grobogan District area that belongs to the category of light and heavy damage is still high percentage.

The condition of road infrastructure in Grobogan District area which is categorized as light and heavy damaged by 20.94% with details broken lightly by 11.28%, and Heavily Damaged by 9.66%. The data, which is related to the high poverty rate in Grobogan District and the percentage of road damage, illustrates that the road use policy that has been suspected has not been optimal to improve the society welfare in Grobogan District. Therefore, this is what makes researchers interested in analyzing and decrypting and knowing the impact of road construction carried out by Grobogan District Government in improving the welfare of its people both from social, economic, and from environmental factors.

Development is a program of change that concerns many processes, systems, and values that are in the joints of people's lives. It can be said to be successful if the Government pays

attention to the response. a). Socialization done by the government to the community, then; b). The attitudes of the citizens are to accept or reject the plan for the road construction, as well; c). The impact that can be anticipated by the community. It is especially the social impact that will be highlighted, in addition to some other consequences or factors affecting the development program.

2 Literature Review

2.1 Public Policy

Anderson [8] mentioned, "Public Policies are those policies developed by governmental bodies and official. David Easton provides the following definition of public policy: "Public policy is the authoritative allocation of values for the whole society". (Public policy is the allocation of values martyrdom to all members of the community).

According to Peters and Pierre [9] public policy was an act of jurisdiction that leads to a specific purpose directed at a particular, interconnected issue that affects the majority of citizens. According to Nugroho [10], public policy was a decision made by the state, especially the government, as a strategy to realize the objectives of the country in question. Public Policy is a strategy to usher people in the early days, into society in transition, to lead to a society that is aspired to.

Eulau and Easton [11] defined public policy was as the allocation of the values of power to an entire society whose existence is binding. In this sense, only the government can do something to the community and a form of something chosen by the government that is a form of values allocation to the community. A particular characteristic of public policy is that political decisions are formulated by Eulau and Easton [11] as "authority" in the political system: "seniors, supreme chiefs, executives, legislatures, judges, administrators, advisers, kings, and so on."

Then it is further mentioned that those who are authorized in the political system in order to formulate public policy [11]. The people who are involved in the affairs of the daily political system and have responsibility in a particular issue where at one point they are asked to make decisions later that are accepted and bind most members of the public during a certain time. Based on the opinion explained that public policy is a decision set by governments that are interconnected with each other with the aim of achieving the success of a policy of course by having authorities that have certain boundaries.

2.2 Public Policy Step

Some of the public policy stages mentioned by Dunn [12] can be seen in the following table along with the characteristics at each stage:

Table 1. Public Policy Step

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Phases	Characteristics	
Agenda	Elected and appointed officials put the issue on the public agenda. Many	
Planning	problems are not touched at all, while others are postponed for a long time.	

Policy Formulation	Officials formulated policy alternatives to address the problem. Alternative policies observe the necessity to make executive orders, judicial decisions and legislative action. Others were delayed for a long time.
Policy	Alternative policies are adopted with the support of a legislative majority,
Adoption	consensus among directors of institutions or judicial decisions.
Policy	Administrative units that mobilize financial and human resources
Implementation	implement the policies that have been taken.
Policy Assessment	The inspection and accounting units in the investigation determine whether the executive, legislative and judicial bodies are in policymaking and achieving objectives.

Source: Dunn [12].

From the above description, it can be said that in a policy must start with several stages that must be passed. Until later, it can be known what and how a policy is produced and the extent to which its impact affects policy objectives.

2.3 Public Policy Evaluation

Evaluation is one of the important stages in the public policy process, but often this stage is ignored and only ends at the implementation stage. Evaluation is an activity to assess the performance level of a policy. Policy evaluation is used to measure the success and failure of the implementation of a public policy. Literally, the evaluation comes from the English evaluation, which means assessment or assessment [13].

According to Stufflebeam [14] defined evaluation as "The process of delineating, obtaining, and providing useful information for judging decision alternatives". This means that evaluation is a process of describing, acquiring, and presenting useful information to formulate an alternative decision.

Evaluation is one of the levels in the public policy process; evaluation is a way to assess whether a policy or program is running properly or not. The evaluation has a diverse definition, Dunn [12] giving meaning to the term evaluation that: "In general the term evaluation can be likened to appraisal, rating and assessment, words that express an attempt to analyze the results of the policy in the sense of its unit of value. In a more specific sense, the evaluation relates to the production of information about the value or benefits of policy outcomes".

The above understanding explains that policy evaluation is the result of a policy that in fact has the value of the result of the policy objective or objective. The final part of a policy process is policy evaluation. According to Stewart, Hedge and Lester [15] in a book Public Policy: An Evolutionary Approach stated that the evaluation is intended to look at some of the failures of a policy and to see if policies have been formulated and implemented can produce the desired impact. Therefore, evaluation is done because not all public policy programs can achieve the desired results.

2.4 Policy Effect Evaluation

The impact is a change in physical and social conditions because of policy output. Because of the policy output, there are two kinds:

a. The consequences resulting from a program intervention in the target group (either due to expected or unexpected consequences) and these consequences are able to create a new pattern of behavior in the target group (impact). b. The consequences are resulting from a program intervention in the target group, whether appropriate or not and consequently incapable of inflicting new behavior on the target group (effects).

Impact evaluation is an effort to determine the impact of policy implementation by policy implementers on circumstances or groups beyond the objectives or policy objectives.

A policy assessed successfully if it produces the desired impact. According to Dunn [12] and Rusli [16] were mentioning the impact of policy is changes in physical and social conditions as a result of policy output. Output is goods, services or other facilities received by a particular group of people, both the target group and the other group referred to be touched by the policy. Meanwhile, the output and the impact itself are a consequence of a policy. According to Anderson [8] the impact of policy has several dimensions, that dimension should be carefully considered in conducting an assessment of public policy.

These dimensions include: (1) the impact of intended consequence (untended consequence) both on the problem and on society. (2) Waste discretion on situations or persons (groups) that are not subject to or the primary purpose of such discretion, this is usually called "externalities" or "spillover effects". (3) Waste this wisdom can be positive or negative. (4) The impact of discretion may occur or affect current conditions or future conditions. (5) Impact of discretion is on direct costs. Calculating economic costs is relatively easier than calculating other qualitative costs. (6) The impact of discretion is on indirect costs as experienced by members of the community. Often such costs are rarely assessed, this is partly due to the difficulty of being quantified (measured). Assessments of the wisdom of the state often indicate that the wisdom of the country does not achieve results or have the expected impact.

According to Ali et al. [17] the achievement of this policy goal is due to the following factors: (1) Limited resources, both energy, cost, material, time and so on, so that the expected impact is not achieved. (2) Errors are in the administration of state policies. (3) Public problems often arise due to various factors, while wisdom is often formulated only because of one and a small number of such factors. (4) The community responds or exercises the wisdom of the state in its own ways to reduce or eliminate its impact. In other words, if the implementation of the country's policy is implemented incompatible with its instructions, then the impact will be further than expected. (5) There are several policies of countries have conflicting objectives with each other. (6) There are efforts to solve certain problems that cost more than their own problems. (7) The number of public problems that cannot be solved completely. (8) Changes in the nature of policy issues are being formulated or implemented. (9) The new problems are more interesting and can distract people from existing problems.

3 Method

In conducting a study of the Social and Economic Impact of Road Infrastructure Development on Poverty Reduction in Grobogan District, researchers will use the method mentioned by Patton, Sawicki and Clark [1] was one method that can be used to measure the success of policy performance is before and after comparisons. This core approach or methods are aiming to compare the conditions (person or population of an area) before and after the program (actual post program data) against the target group. By using this approach, researchers can also compare the condition of the community after the program is implemented (actual post program data) with the people who do not run the program or policy.

4 Result and Discussion

To determine the impact of road development policy program in Grobogan District in improving people's well-being. The researchers are currently using an analysis of data sourced from Grobogan District in 2019 figures published by Statistical National Agency related to the comparison of the increase in the percentage of road construction that has been done by Grobogan District Government with the decrease percentage of poor people.

Road improvement began to be carried out by Grobogan District Government in 2017, where in previous two years (2015-2016) road repairs in Grobogan District only increased by 6.49%, with only able to reduce the poverty percentage by 0.11%. While in 2017 after Grobogan District Government made a high road, improvement compared to the previous year of 18.98% with the achievement of the percentage of road improvement reaching 67.06%, the condition did not get better than the previous year by only being able to lower the poverty percentage by 0.3% with the achievement of 13.27%. As is the case with the next two years, road improvement in Grobogan District decreased by 13.93. From the previous year with an increase of only 5.05%, the condition was only able to reduce poverty by 0.96% to 12.31% and in the following year road; repairs were again downgraded by 0.73% with an increase in repairs of 4.32%. this condition called for a decrease in the return of percentage achievement (0.54%) from the previous year's achievement of the poor in Grobogan District to 11.77%.

Suboptimal, Grobogan District's reduction in poverty rate is heavily influenced by social factors of employment, where the Open Unemployment Rate shows an increase in 2018-2019. The Open Unemployment Rate in Grobogan District in 2015 was 4.25%, then increased in 2016 (5.22%). After a decline in the 2016-2018 Open, Unemployment Rate in Grobogan District again increased to 3.59% from the previous year. Meanwhile, the economic impact on the growth rate of GDP during 2017-2019 in Grobogan District has always decreased.

During the period 2017-2019, the Growth Rate of Grobogan District Gross Regional Domestic Product (PDRB) according to the Business Field because of Constant Price always decreased. The lowest decline for 3 years (2017-2019) was shown in 2019, resulting in a rise in open unemployment by slightly lowering the poverty level after road infrastructure improvements were made by Grobogan District Government.

5 Conclusion and Suggestion

The results of the Social and Economic Impact Analysis of Road Infrastructure Development on Poverty Reduction in Grobogan District have been completed. There are several conclusions that can be known together, namely:

- 1) The policy impact of road infrastructure of development program conducted by Grobogan District government has not been able to improve the welfare of the socioeconomic condition of the current community.
- 2) With the development program of Road Infrastructure that is expected to increase the PDRB Grobogan District because of Constant Price in all sectors of the business field until now the results have not been optimal. Because in Grobogan District, the business field sector over the last three years the percentage has always decreased.
- 3) Further impact expected from the construction of Road Infrastructure can lower the poverty rate in Grobogan District until now does not occur. Since the Open Unemployment

- Rate represents a volatile percentage, it has not been able to continue to lower the Open Unemployment Rate in Grobogan District.
- 4) Similarly, in the end, the construction of Road Infrastructure can have an impact on improving the socioeconomic welfare of society in Grobogan District cannot be realized, because until now Grobogan District mapping is still in the Red Zone area whose poverty line is higher than the Province and National. Therefore, it can be said that the residents of Grobogan District have not been able to help or take advantage of the benefits with the construction of Road Infrastructure carried out by the government until now.

Road Infrastructure Development Program policy is the main supporting activity in the effort to improve the community economy through its function as the driving wheel of the regional economy. In connection with this, all relevant agencies both directly and indirectly work with responsibility oriented towards the interests of the community in implementing poverty alleviation programs by improving and building human resources in all areas in order to lower Level of Open Airing, which is currently increasing from the previous year. Participation of the Government's role and good response from the community is necessary in the implementation of this activity, as it can improve the improvement to the business field conditions that have been in decline in Grobogan District in recent years.

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