



# Road Damage Handling During Covid – 19 Pandemic Using DAU (General Allocation Fund) (Case Study of Kabupaten Karanganyar)

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**Abstract.** Planning and budgeting in regional development are two things that are interrelated and must be balanced. Planning and budgeting are integrated processes; therefore, the output of planning is budgeting. This study aims to determine the effect of the budget refocusing policy due to the covid pandemic and the impact of the refocusing on the budget for handling road damage. The evaluation was carried out by analyzing the effect of refocusing the road damage management budget by examining the Work Plan (Renja) and Budget Implementation List (DIPA) documents for handling road damage before and during the covid-19 pandemic. In addition, this study also discusses the impact of the covid-19 pandemic on the road damage management budget and its effect on the condition of road sections. The results of the analysis show that there is a decrease in the number of activities and the funding for handling road damage before and during the covid-19 pandemic, whereas, before the pandemic, the road damage budget amounted to 69.8 billion rupiahs. While during the initial period of the pandemic in 2020, there was a very significant decrease where road damage handling activities only amounted to 27 moves with a budget of 7.1 billion rupiahs. Meanwhile, in 2021, when the Covid pandemic has not ended, road damage handling activities are still low, with a total budget of only 6.55 billion rupiahs with only 14 activities. The impact of budget constraints has resulted in road sections that should have been repaired being delayed due to budget constraints, causing the condition of road sections that were originally in good shape to be lightly damaged and those that were initially lightly damaged to be severely damaged.

**Keywords:** Planning · Budgeting · Refocusing · Roads

## 1 Introduction

The road is a land transportation infrastructure that includes all parts of the road, and complementary buildings for traffic, both on the ground and below ground. Road infrastructure is very influential on the development and economic growth of a region. Therefore, road infrastructure must be adequately managed so that its condition is not quickly damaged [1]. The causes of road damage include high traffic volume and poor drainage, and if not handled immediately, it results in losses for road users both directly and indirectly and can even cause casualties [2]; therefore, it is necessary to analyze the proper

management of road damage handling [3] because improper handling of road damage will cause premature damage to the pavement which results in the road structure becoming unstable [4] so that the priority of damage handling is more focused on improving the road structure [5].

The total length of the roads in Karanganyar Regency in 2020 that are in lightly damaged and severely damaged condition reaches 164.5 km, which requires a large budget for maintenance and improvement. One source of funds for handling road damage is the General Allocation Fund (DAU). The funds come from the State Budget (APBN), which is allocated to meet regional needs in the context of implementing decentralization; it gives authority to the regions to be able to optimize the potential of the areas so that it is expected to be able to bring positive implications that will lead to regional progress [6].

The process of regional development planning can be a top-down or bottom-up planning mechanism, and it can be a combination of both instruments where community participation is needed in the development planning process in the region [7].

Regional financial management must be carried out economically, efficiently, effectively, transparently, and accountably. The goal of government financial management is the realization of good governance where participation, transparency, and accountability are crucial [8].

Prioritization of road damage management should be based on the results of existing road condition surveys but should also consider emergencies and political factors. It should also evaluate daily traffic, road capacity, and level of service [9]. To get maximum results in handling road damage, good budget management and good quality resources are needed [10].

Regional Finance is essential in organizing government activities and public services. Therefore, its management must be carried out effectively and efficiently so that it is appropriate and successful.

The problem faced by Karanganyar Regency at this time in handling road damage is due to limited funds. So far, the budget allocated for handling road damage has not been able to take all existing road damage, especially during a pandemic with a budget-refocusing policy for handling the covid-19 pandemic.

The government has struggled to overcome the problems in the economic sector by issuing regulations or policies that can help the Indonesian economy. In dealing with the financial crisis for the people of Indonesia, the Ministry of Finance of the Republic of Indonesia has issued a Circular Letter [11]. In addition, there are references to refocusing activities, budget reallocation, and procurement of goods and services in the context of accelerating the handling of Covid-19 [12]. Specifically, the acceleration of handling Covid-19 in the regional government environment is regulated in the Minister of Home Affairs Regulation [13].

For 2020, all local governments in Indonesia must carry out financial management by refocusing and reallocating the budget for handling Covid-19 based on established guidelines.

Karanganyar Regency's government budget is prioritized for handling covid-19 and the economic recovery of communities affected by the covid-19 pandemic, such as providing health infrastructure and also for community economic recovery [14].

With the limited funds available, there is a need for cooperation with the private sector to handle road damage [15]. In addition, there is also a need for innovation in handling road damage to overcome problems due to the lack of funds available [16]. With limited funds, transparency and accountability in road repair funds' management are significant [17]. In addition, prioritizing handling road damage is vital for effectively using the existing budget [18].

This study aims to determine the effect of the budget refocusing policy due to the Covid pandemic and the impact of refocusing on the budget for handling road damage.

## 2 Literature Review

Planning is a continuous process that includes planning formulation and implementation. Planning can be used to control and evaluate the course of activities because the nature of the plan is to guide the implementation of activities [19].

Establishing a performance budget system in budget preparation begins with the formulation of programs and the preparation of a government organizational structure by the program. These activities also include determining the work unit responsible for implementing the program and selecting the performance indicators used as benchmarks in achieving the program objectives that have been set [20].

“Planning is a process to determine the future right actions, through a sequence of choices, by taking into account available resources”. Meanwhile, “National Development is an effort carried out by all components of the nation to achieve state goals”. Planning, in general, can be interpreted as an effort to determine the best way to achieve predetermined goals.

Budget refocusing is focusing the funding for activities that were not previously budgeted through budget changes. During the Covid-19 pandemic that has hit Indonesia until now, there have been many changes in government policy due to Covid-19 itself. One is a policy on budget changes prioritized to deal with Covid-19.

## 3 Methodology

The type of research is descriptive qualitative. Qualitative descriptive research is intended to describe existing natural and human-made phenomena, both natural and human-made, which pay more attention to the characteristics, quality, and interrelationships between activities. In addition, descriptive research does not provide treatment, manipulation, or change in the variables studied but describes a condition as it is. The only cure is the research carried out through observation, interviews, and documentation [21].

Primary data in this study came from interviews with resource persons from regional apparatus organizations involved in planning and handling road damage management. The results of the interviews were then analyzed so that the impact of budget refocusing and the impact of the covid pandemic on the budget for handling road damage was known. Meanwhile, secondary data are work plan documents and Budget Implementation Lists (DIPA), which are then analyzed regarding the number of activities in the document so that the difference between the plan and the realization is known.

**Table 1.** Table of Work Plan and Realization of Road Damage in 2019

No.	Activities	Work Plan (Activity)	DPA (Activity)
1	Road Construction and Improvement	31	43
2	Bridge Construction and Replacement	8	9
3	Road Wall Construction	3	4
4	Road Periodic Rehabilitation and Maintenance	23	14
	Total Activities	65	70

Source: Bina Marga DPUPR Karanganyar Regency 2019

## 4 Result and Discussion

### 4.1 Budget Refocusing Policy Due to Covid-19 Pandemic

Infrastructure development, including handling road damage, is one of the priorities of the Karanganyar Regency government. The budget allocation for handling road damage is huge; although the budget cannot handle all existing road damage, it can take road sections so that their condition does not worsen. The plan and realization of road damage managing activities before the pandemic, especially in 2019, can be seen in Table 1.

Table 1 shows that the planned activities for handling road damage in 2019 amounted to 65 activities and the budgeted ones reached 70. It shows that the budget allocated is proportional to the road damage handled. The number of road damage managing activities also has an impact on the overall condition of the road.

The existence of the covid 19 pandemic impacts the local government budget as a whole, including the budget for handling road damage, where a lot of the budget must be diverted for handling the covid 19 pandemic.

Based on interviews with sources, it is known that the value of budget refocusing to accelerate the handling of Covid-19 in Karanganyar Regency in 2020 reached Rp. 247,355,098,000 which came from the Non-Fixed Expenditure budget post of Rp. 230 billion, as well as an additional Rp. 17 billion from some internal budget posts of Regional Apparatus Organizations (OPD) and goods and services and capital expenditures from all regional apparatus organizations in Karanganyar Regency [22].

The covid-19 pandemic impacts the budget for handling road damage in Karanganyar Regency, where most of the budget is focused on handling the impact of the covid-19 pandemic and community economic lectures. This situation has caused a reduction in the funding for handling road damage. It can be seen in Tables 2 and 3 where 2020 and 2021 are the years when the covid 19 pandemic began.

**Table 2.** Table of Work Plan and Realization of Road Damage in 2020

No.	Activities	Work Plan (Activity)	DPA (Activity)
1	Road Construction and Improvement	40	9
2	Bridge Construction and Replacement	9	2
3	Road Wall Construction	15	12
	Road Periodic Rehabilitation and		
4	Maintenance	4	4
	Total Activities	68	27

Source: Bina Marga DPUPR Karanganyar Regency 2022

**Table 3.** Table of Work Plan and Realization of Road Damage in 2021

No.	Activities	Work Plan (Activity)	DPA (Activity)
1	Road Construction and Improvement	15	5
2	Bridge Construction and Replacement	2	1
3	Road Wall Construction	2	5
4	Road Periodic Rehabilitation and Maintenance	26	3
	Total Activities	45	14

Source: Bina Marga DPUPR Karanganyar Regency 2022

The year 2020 is the beginning of the covid-19 pandemic; where this year, there has been a budget refocusing policy where many budgets have been rationalized for handling covid-19, such as increasing health handling capacity in the form of providing facilities and infrastructure for health activities such as personal protective equipment for health workers and also providing health facilities such as isolation rooms and equipment. Budget refocusing has an impact on the budget for handling road damage. This affects the number of road damage managing activities as shown in Table 2 where in 2020, the number of proposed road damage handling in the work plan is 68 activities. Still, in its implementation, there are only 27 budgeted activities.

The year of 2021 is still in the covid-19 pandemic period, and the budget is still focused on handling covid-19. This year's focus is on restoring the community's economic conditions due to the pandemic, such as controlling the distribution of basic needs and providing social safety networks and economic recovery due to the pandemic. It can be seen from Table 3 that the number of road damage handling activities is 14 activities out of 45 proposals in the work plan.

**Table 4.** Number of Activities and Budget Realization for Road Damage Handling

No.	Description	Year		
		2019	2020	2021
1	Number of Road Damage Handling Activities	70	27	14
2	Road Damage Handling Budget (Rp)	69,800,000,000.00	7,100,000,000.00	6,550,000,000.00

Source: Bina Marga DPUPR Karanganyar Regency 2022

Based on the explanation above, it can be seen that the Covid 19 pandemic affects the handling of road damage due to the budget refocusing policy. It can be seen from the number of road damage handling activities that when there is a budget-refocusing policy, the number of activities drops significantly compared to before.

#### 4.2 The Impact of the Covid-19 Pandemic on Road Damage Handling Budget

The COVID-19 pandemic has had a significant impact on several sectors in Karanganyar Regency. Apart from the health sector, which has an extraordinary effect, the social, economic, and infrastructure development aspects have also been affected. One of the infrastructure developments affected by the covid-19 pandemic is handling road damage, where the budget for handling road damage is reduced compared to before the covid-19 pandemic. It is shown in Table 4.

There was a significant difference between activities and budget realization for handling road damage before and during the pandemic in the number of activities and the budget amount. It can be seen in Table 4 that in 2019 when there was no covid-19 pandemic, the number of road damage handling activities reached 70 activities with a total budget of 69.8 billion rupiahs. While at the beginning of the pandemic in 2020, there was a very significant decline where road damage handling activities only amounted to 27 activities with a budget of 7.1 billion rupiahs. Meanwhile, in 2021 when the covid pandemic has not ended, road damage managing activities are also still low, where the total budget is only 6.55 billion rupiahs with only 14 activities.

Based on interviews with sources from Bina Marga, it is known that the decline in the budget for handling road damage has an impact on the overall condition of district roads, as shown in Table 5. With the budget's refocusing, many roads that should have been handled were delayed, resulting in worsening road damage.

Table 5 shows that the road conditions in Karanganyar Regency in 2019 were 820.05 km of roads in good condition, while in 2020, it increased to 904.66 km even though the budget for handling road damage began to decrease due to the covid-19 pandemic. In 2021, the excellent condition decreased to 882.01 km, likely due to the two-year limited budget due to the covid-19 pandemic. For lightly damaged needs in 2020, it has decreased compared to 2019, but for 2021 it has increased again to 147.55 km. For severely damaged conditions in 2019, a total of 37.98 km fell to 4.6 km in 2020 and rose again to 16.95 in 2021.

**Table 5.** Karanganyar Regency Road Section Condition

ROAD CONDITIONS	ROAD STATUS		
	KARANGANYAR DISTRICT ROAD		
	2019 (Km)	2020 (Km)	2021 (Km)
a. Good	820.05	904.66	882.01
b. Lightly Damaged	188.48	137.25	147.55
c. Severely damaged	37.98	4.6	16.95
AMOUNT	1046.51	1046.51	1046.51

Source: Bina Marga DPUPR Karanganyar Regency 2022

The increase in road conditions in good condition and the decrease in lightly damaged and severely damaged conditions in 2020 is due to considerable road damage handling activities and the large budget allocation to improve road conditions. Meanwhile, the decrease in good conditions and the increase in lightly damaged and severely damaged conditions in 2021 are due to the small budget and number of road damage handling activities. It resulted in road sections that should have been repaired being delayed due to budget constraints, causing the condition of road sections that were originally in good condition to be lightly damaged and those that were originally lightly damaged to be severely damaged.

Therefore, Bina Marga must make strategies for efficient budget management. One approach is to prioritize the handling of road damage. Because based on the results of interviews, there has been no method for determining the priority of handling road damage.

Priority budgeting for road damage should be on the most damaged sections based on road condition surveys' results, not on community aspirations. In addition, it is necessary to allocate the right proportion of the budget to the right road improvement and maintenance activities to make the limited budget more efficient. With this strategy, it is hoped that the overall condition of district roads can be maintained and not worsen.

## 5 Conclusion

The conclusions of the research are:

1. The covid -19 pandemic greatly affected the number of activities and the budget for handling road damage in Karanganyar Regency because, during the pandemic, the funding was prioritized for handling the pandemic and the economic recovery of communities affected by the covid-19 pandemic.
2. The limited budget for handling road damage resulted in changes in road conditions where in 2021, the number of roads in good condition decreased to 882.01 km compared to 2020 of 904.66 km; for lightly damaged needs, it also increased in 2021 to 147.55 km, which previously in 2020 amounted to 137.25 km and the number of roads with severely damaged conditions increased from 4.6 km in 2020 to 16.95 km in 2021.

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