

The Priority of Infrastructure Development in Kabupaten Lampung Barat

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Abstract

Infrastructure development is one of the important and vital aspects in order to accelerating the process of regional development. Infrastructure is also give an impact in improving the economy, accessibility, community development and the quality of human life. But, infrastructure development can't be done simultaneously. Kabupaten Lampung Barat was designated by government as disadvantaged areas because of the lack on providing the infrastructure. Therefore, by using the analytical hierarchy process (AHP) this study is trying to find out the most important factor that affect the infrastructure development and the order of priority development of the five infrastructures in Kabupaten Lampung Barat, the infrastructure is: Roads, Drainage, Waste, Waste Water, and transportation. The AHP method revealed that the funding factor with the weight values 0,361, is the most important parameter that affect the infrastructure development in the study area. While, for the infrastructure, the AHP method revealed that roads infrastructure with the weight values 0,42, is the infrastructure which should be prioritized. Based on these result, the priority development of infrastructure in Kabupaten Lampung Barat is the provision of road infrastructure by increasing the capacity of the road and other road several indicators such as mobility and safety aspects.

Keywords : *Infrastructure development, AHP, Kabupaten Lampung Barat*

I. Introduction

Infrastructure development is one of the most important and vital aspect in order to accelerating regional development. Infrastructure also can growth the economy aspect, accessibility, empowerment, and also make quality and quantity of people increase.

a. Problem

Kabupaten Lampung Barat was once stated by government in PP No. 131 Tahun 2015 as disadvantaged areas because they were lack on infrastructure development like low rate of economic, human resources, infrastructure, etc [5].

Practically, infrastructure development can not be done simultaneously. In Marsuki, (2007) infrastructure is government responsibility, but the limit of budget become problem in order to developing infrastructures [3]. Based on data released by Bappenas in Surachman, (2014) GDP investigation on infrastructure development was only 4,51% from 5% of target, this number was too low if we compared with another country in asia like India 7%, and China 11% [6].

In PP Nomor 75 Tahun 2014 about Accelerate infrastructure priority delivery there are nine (9) infrastructure that should be priority to be delivered, the infrastructure is: Transportation, Road, Drainage,

Water, Waste Water, Waste, Telecommunication, and oil and gas. That nine infrastructure should be priority in infrastructure development [4].

b. Purpose

This study will see the priority of 5 infrastructures out of 9 which should be delivery first in Kabupaten Lampung Barat. The 5 infrastructures is transportation, road, drainage, waste water, and waste. This study will using analytic hierarchy process method in order to find the priority of each infrastructure.

II. Methodology

This study use analytic hierarchy process as a methodology, by giving 5 respondents an AHP questionnaire this study try to calculate the priority number of 5 infrsructure that should be developt in Kabupaten Lampung Barat. These respondents was chosen because of their expertise in infrastructures development. The respondents are:

1. Rector of Sumatera Institute of Technology;
2. Head of planning and regional infrastructure departement, Bappeda Lampung Barat;
3. Head of transportation departement, Dinas Perhubungan Lampung Barat;
4. Head of road, planning, and water infrastructures departement, Dinas Pekerjaan Umum Lampung Barat;
5. Head of ecology, waste, and park departement, BLHKP Lampung Barat;

The respondents has to gave a priority score to 4 factors (Local Budget, Government, organization, and risk) [1] and 6 sub factors (local budget, local government, midterm planning, longterm planning, budget risk, and development risk) to find out which factor that have the biggest role to developt infrastructures in Lampung Barat, also the respondents has to give a priority score to 5 infrastructures which is road, transportation, waste, drainage and waste water to found out which infrastructure that should be prioritized in Lampung Barat.

III. Analysis

There were 3 steps in AHP, first weighting the factors, second weighting sub factors, third calculate the number of priority [1].

1. Weighting Factors

Based on questionnaires and using expert choice software to calculate factors, this study find that Funding Factor has the biggest number of priority with 0.361, followed with Responsibility Factor with 0.215, and for the last factor was Risk Faktor with 0.28. This finding means the Funding factor is the first factor that Kabupaten Lampung Barat's Government should think when they want to develop infrastructure.

2. Weighting Sub Factors

With same method like when weighting Factors, this study finds that Sub faktor local budgeting (APBD) has the biggest score with 1.00. It means that local budget has the biggest role when government try to developt infrastructure.

Table 1 Sub Factors Weight.

No	Sub Factors	Local	Global	Rank
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		Weights	Weights	
1	Local Budget	1.000	0.250	1
2	Government	1.000	0.250	2
3	Midle term planning document	0.525	0.131	4
4	Long term planning document	0.475	0.119	5
5	Budget risk	0.614	0.154	3
6	Development risk	0.386	0.097	6

3. Number of priority

Table 2 The Priority Number of Infrastructure.

Factor/Alternative	Local Budget (0,361)	Government (0,215)	Organization (0,215)	Risk (0,208)	Priority Numbers
Road	0.146566	0.095675	0.084925	0.08736	0.41
Transportation	0.078698	0.04988	0.05547	0.048672	0.23
Waste	0.058482	0.02881	0.027735	0.030784	0.15
Drainage	0.042598	0.02365	0.02881	0.025584	0.12
Waste Water	0.034656	0.01677	0.01806	0.015808	0.09

As we can see on Table 2, Road Infrastructure has the biggest score of priority, it means the Government of Kabupaten Lampung Barat should develop the road infrastructure first or we can say road infrastructure is the infrastructure that Kabupaten Lampung Barat needed the most. But, it does not mean that the other infrastructure are not important, the other infrastructure should be developed too in order to support the road infrastructure.

IV. Conclusion

It is concluded that when the Government of Kabupaten Lampung Barat want to develop infrastructure they should think about Funding factors which is local budget, then the budget should be used to develop road infrastructure. Then, in order to support the priority infrastructure the government should follow the order of priority number each infrastructure. It means, after developed the road government should develop the transportation infrastructure, then waste infrastructure to support the previous infrastructure that had been built.

This conclusion did not mean that all the local budget of Lampung Barat Regency should be allocated on road development, but based on calculation using AHP showed that the infrastructure that Lampung Barat needed is road. So according to that calculation Lampung Barat Government should develop road infrastructure first and so on based on the number of priority.

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