Policy Implementation of the Bus Rapid Transit System in Mataram City

Muhammad Aprian Jailani[1*], Abdul Hakim[2], Suryadi[3]

[1]Master of Public Administration Faculty of Administrative Sciences, Universitas Brawijaya
[2,3] Faculty of Administrative Sciences, Universitas Brawijaya, Malang, Indonesia

Abstract

The ministerial decree 692-2015 of Ministry of Transportation of the Republic of Indonesia regarding the Allocation of BRT of BRT Assistance have granted Mataram city that 25 BRT. The BRT is a program of Law 22 of 2009 regarding Road Traffic & Transportation; the program mandates every region have mass transportations. The BRT program seeks to help Mataram city, because the city transports service is low and they are less attractive; in addition, the number of private vehicles is high. The research objective to describe, identify and analyze problems in implementing BRT in Mataram. Moreover, this research employed a descriptive qualitative method; the researcher collected the data from interviews, observation, and document studies. Furthermore, this research used the qualitative data analysis interactive models. The findings reveal that BRT implementation in Mataram city was not optimally successful. This was due to long communication chain that must be carried out through socialization; the minimal socialization, unreached target groups, resources, and minimum BRT operational costs. The disposition displays a positive attitude; however, the commitment of BRT implementers is still low. In addition, the bureaucratic structure shows a limited pattern of relations between implementers; there are too many hierarchy levels which cause implementation inefficiency.

Keywords: Implementation of the Bus Rapid Transit System, Public Transportation.

INTRODUCTION

In this electronic era, BRT (Bus Rapid Transit) is the ideal transportation in terms of effectiveness, mass transport, economics and ability to overcome the problem of city transportation in several countries. As in India ; Implementation of Bus Rapid Transit System for Aurangabad City', the BRT increases demand for transportation as well as guarantees safety, comfort and sustainable modes of public transportation, since it has better management [1]. A similar study; the results shows that BRT systems can be easily adapted to the needs of the community and combine a low-cost advanced technology which will bring more passengers and less traffic congestion [2]. In addition, stated that BRT is one of the efficient, effective, and fast transportations which reduce the level of traffic congestion [3].

Comparing to other transportation types, BRT is a new innovation in effective and efficient mass transportation in various countries. The Bus Rapid Transit System (BRTS) is the concept of safe, economical, fast, convenient & new Public Transportation in India. There are more than 150 BRTS series running successfully around the world; some examples are in Bogota, Beijing, etc. Ahmedabad (India) is also a successful example of BRTS [4]. Similar results of study in Malaysia, reveal that BRT was able to be implemented with a smaller amount of budget than other types of public transportation such as Mass Rapid Transit (MRT) and Light Rail Transit (LRT) in Malaysia. Other studies stated that BRT implementation is not optimal [5]. Another study in Indonesia shows that the implementation of BRT in Jakarta faces obstacles. including maintenance issues, GPS technology, supervision, infrastructure, financing systems, and integrated e-ticket system [6].

A similar condition related to the implementation of the BRT system policy occurred in Mataram city. The central policy through The ministerial decree No. 692-2015 of Ministry of Transportation of the Republic of Indonesia regarding the Allocation of BRT (Bus Rapid Transit) Assistance have granted some units to various regions, including Mataram city and NTB Province that have been granted 25 BRT units. The distribution of BRT is a program of Law No. 22 of 2009 regarding Road Traffic & Transportation; the

Corresponding author:
Muhammad Aprian Jailani
Email : aprianjaelani@gmail.com
Address : Jl. Banda Seraya Presak Pagutan, Kota Mataram.
Lombok, NTB. 83117

program mandates every region to have mass transportations. The BRT interpretation program seeks to help Mataram city in which the city transports service is low and they are less attractive; in addition, the number of private vehicles is high. A survey revealed that 6000 people in Mataram city own private vehicles; this is based on the information obtained in the Indonesian Urban Transport Institute website (iutri.org); 74% of respondents owned motorbikes and 23% of respondents owned cars; and it was also revealed that in 2015, there were 2.2 million people travelling [7]. According to the data obtained from the Central Bureau of Statistics (2018), from 2011 – 2015, the percentage of transportation mode usage in Mataram city decreased every year. In 2011, it was 12.05% and decreased to only 5% in 2015, compared to private vehicles such as motorcycles and cars which was 16.55% in 2011 and increased to 70.10% in 2015 [8].

Based on a research conducted by the Ministry of Transportation's research and development agency in 2016, the BRT in Mataram City is predicted to have one of the highest transportation demands as 6,687 passengers were recorded on the public transport routes, and 3,628 passengers were on the train route [9]. However, it is empirical that the implementation of the BRT system policy in Mataram city and NTB Province is still not optimal because of several problems such as the lack of budgets, routes, corridors, and the refusal of city transport drivers towards BRT operation; it is also because the ideal principle of the Mataram BRT is still not optimal.

Therefore, based on these considerations, it seems that the implementation of the BRT system policy in Mataram city has not been successful as compared to other countries; also, it has many problems. Furthermore, the policy implementation model has many variations; this study uses a model developed by George Edward III because it is relevant to the field conditions.

MATERIAL AND METHODOLOGY

The research method of this study is a qualitative method with a descriptive approach. The method can bring the researchers closer to the objects being studied as they directly observe the objects; in other words, the researchers act as the main research instrument (human instrument).

Table 1. Interest and Attraction Public

Corridor	BRT 1	BRT 2
Origin-Destination	Narmada-kebon roek	Kebon-roek
length of route (Km)	32.49	32.49
traveling time	49.75	49.75
Speed (km)	39.183	39.133
passenger ride	6.687	3.638
transit passengers	2.395	2.395
Standar passenger flow	1.075	554
Max passenger	1.888	1.201

Source: RI Ministry of Transportation. 2016. Study on Organizing Mass Transport of the City of Mataram Agglomeration. Jakarta. Ministry of Transportation RI.

In table 1 is a people's interpretation of the high desire or need for mass transportation (BRT) in 2016, but in 2019 because it is intended for students, the interest of students in 2019 is ;

Table 2 Interest and Attraction Student

No	Month	Route	Rit/Bus	Total passenger	Capacity
1	September	Pool damri – sweta - Ampenan	4	2.420 Student	45
2	October		4	732	45
Total			8	3.152	90

Source: RI Ministry of Transportation. 2016. Study on Organizing Mass Transport of the City of Mataram Agglomeration. Jakarta. Ministry of Transportation RI.

Data Collection Methods

In this study, the data were collected using the methods of: first, interviews; which were conducted with questions leading to the depth of information and carried out in a way that is not formally structured; second, observations; which were done by observing directly at the activity (the events occurring in the field); third, documents; in which the researchers reviewed the literature or documents and documented photos relevant to the theme raised in this study.

The qualitative data analysis uses the interactive models. In analyzing qualitative data, the interactive model has several stages, they are:
a. Data Condensation: the data obtained from the study compressed in such a way to analyze the results carried out during the study.
b. Data Display: an organization of information that allows research conclusions; this makes the researchers easily understand what is happening and what is done.
c. Conclusion Drawing: from the beginning of data collection, the researchers understand the matters

being studied by recording the rules and patterns, as well as establishing configuration statements and causal directions. So, the conclusion in the data analysis stage is a unity of activities before, during and after collecting data in a parallel form to build general insights called data analysis. The three main activities in data analysis and data collection activities are interactive cycle processes [10].

RESULTS AND DISCUSSION

Based on the introduction, the analysis method of this study is a research framework that can be described as follows:
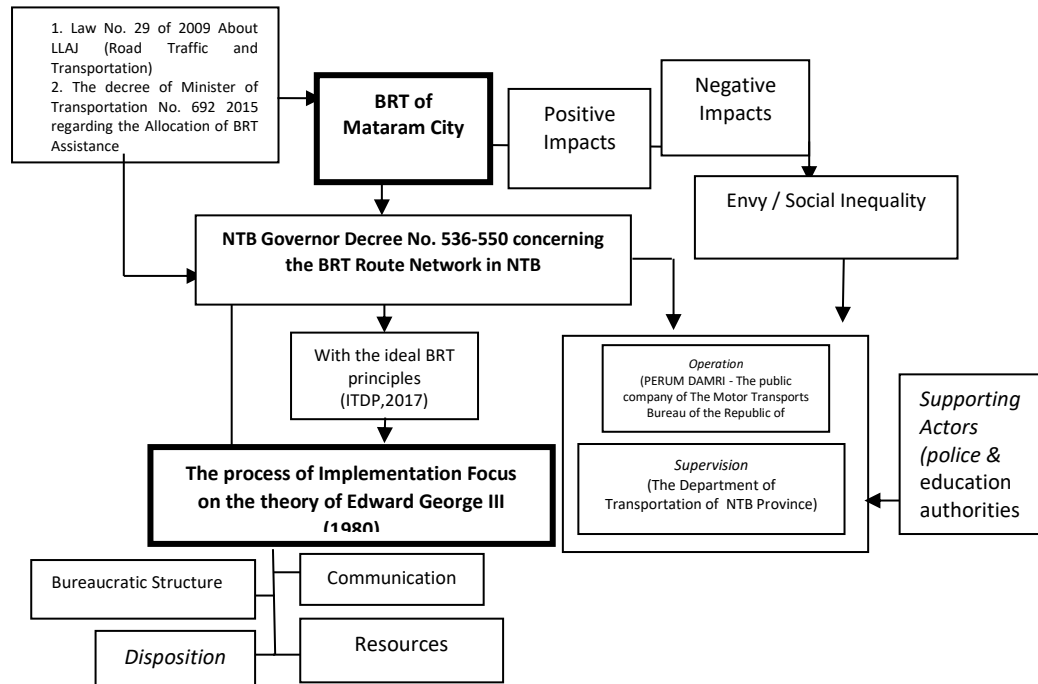

Figure 1. Research Frameworks (Source: The Results of Analysis, 2018)

In Figure 1 it means that the main basis for providing public services in mass transportation is contained in Law 29/2009 concerning Road Transport Traffic, with derivatives of the Minister of Transportation decision No. 692/2015 BRT aid distribution including Mataram City obtaining 25 BRT units, but in the test try 2016 produces a positive value as in table 1 & 2 the appeal of society, while the negative value there are problems that arise.

The findings in the field indicate that the implementation of BRT in Mataram City caused problems so that BRT operational inefficiencies were due; First (related to the demonstration issue), the BRT had sparked disagreement to some city transports as the BRT's routes also passed through the city transports' (both of them had the same routes). Related to this matter, the Institute of Transportation and Development Policy ;mandated that the ideal principle is to pay attention to the conflicts of other modes of transportation [11].

Second, the lack of budget problem. In 2016, the operational budget as much as 250 million were used in two months. The BRTs were re-functioning in 2017, which were 4 units out of the 25 BRTs in Mataram city. As a result, the central government withdrew 15 BRT units to be transferred to Bandung city because it was viewed that the NTB provincial government and Mataram city were unable to manage the mass transportation.

Third, the limited authority of the regional government in overcoming problems in Mataram city; it is a result of the implementation of BRT policies. Furthermore, the implementation method of the George Edward III approach emphasizes that the success of implementation at least needs four things to be considered [12]. Based on the results of the policy implementation research with the model, they can be described as follows:

a. Communication

The main equipment used to see the implementation of BRT in Mataram city is the extent

to which communication is carried out. The results show that the communication chain was long and must be done through socialization; additionally, the socialization was still minimal and did not reach to the target group. The long communication chain through socialization resulted in ineffective implementation. This was supported by data and results of surveys carried out by the NTB provincial flower ministry, with an estimated 6,687 passengers on the national route, and 3,628 passengers on the toll road routes [9]. However, the number of passengers in September 2018 was 2,420; and it experienced a decline, which was 732. This was due to the declined number of operating BRTs , which were 2 units from the total of 10 BRTs within the routes of Mataram city.

Apart from that, it was also due to the inconsistency of the policy contents in determining the target group and routes. It was initially intended for the community and students; however, the government focused only on students by granting subsidy for them. Whereas in the basic principle the BRT, it must implement a tariff system for the BRT care. The routes cover the administrative area of Lombok Barat Regency; but because of these problems, they cover the routes of Mataram city.

When in fact, Edward III emphasizes that an effective implementation means knowing what will be done; having knowledge of what they will do can only work when communication with the target and implementor goes well [12].

As stated similarly by Metter and Horn, emphasizing the success of policy implementation is strongly influenced by factors such as policy standards and the objectives of inter-organizational communication, as well as strengthening activities characteristic of implementing agents, social, economic and political conditions and implementing characteristics [13]. Related to the aspect of communication, Mazmanian and Sabatier ; asserted that it is very important in supporting the successful implementation of public policy according to the clarity of policy content. This means that the clearer and more detailed the contents of a policy, the easier it is for the implementors to understand and translate it into real action [14]. This is based on the analysis that the communication chain was long and must be done through socialization; additionally, the socialization was still minimal and did not reach to the target group and was inconsistent.

b. Resources

The starting point of resources is related to the two conditions of resources, namely: First, the availability of time and other sufficient sources. The sufficient human resource is an undergraduate education background which helps with understanding the implementation. Accordingly, there are 146 implementers with a bachelor degree. The budget availability, however, is still minimal. In 2016, 250 million rupiahs are only sufficient for two months. The tabulation of the BRT budget operational costs can be explained as follows:

Table 3. BRT Operational Costs Needs Per Year

Operational Costs	BRT I Narmada – Kebon Roek	BRT II Kebon Roek - Bengkel
Fuel per year	272.498.688	272.498.688
Drivers salary	146.688.143	146.688.143
Tax & Vehicle Tests per bus	4.100.000	4.100.000
Maintenance & Spare Parts costs per bus	626.201.158	631.364.909
Mechanical Costs per bus	70.285.647	59.485.363
Total	**1.119.773.636**	**1.114.137.103**

Source: The Ministry of Transportation of the Republic of Indonesia, pg. IV-21, 2016. Balitbang, Republic of Indonesia, Final report on the Delivery of Mass Transportation of the Agglomeration City of Mataram.

The high annual budget needs of BRT operations are considered by the central government as failing the expectations; in **table 3** is a tabulation of the operational requirements of BRT as many as 25 units in 2016 which are operationalized, but with the incompatibility of local government budgets ; thus, 15 BRT units were transferred to Bandung city. Even though other aspects like the facilities, infrastructure, and human resources are adequate, the budgetary resulted in the ineffectiveness of implementation. According to Edward III, although the contents of the policy have been communicated clearly and consistently, the implementation will not run effectively if the implementor lacks the resources as well as the availability of the budget.

Another view by Grindle ; stated that the success of policy implementation is largely determined by whether or not a program is supported by adequate resources; it is to bring the ability to communicate the policy contents to be implemented [15]. The success of policy implementation is largely determined by the sources involved, which are the apparatus as the policies implementors and funding sources [16]. Van Meter and Van Horn; viewed the success of policy implementation from the aspect of resources, that is the availability of the policy

sources, including the resources of the apparatus/implementor and the budget.

Mazmanian and Sabatier ; viewed this more on the allocation of financial resources to policies to be implemented. The availability of adequate funding sources will be a driving factor for the success of policy implementation. The theoretical debate over the importance of resources, such as the budget, is the most important factor in the implementation of BRT. The lack of budget is a barrier to the implementation of BRT in Mataram city.

c. Disposition (Implementor's Behavior)

The implementors may understand the goals and objectives of the program and show a positive attitude of willingness in implementing them. However, the BRT implication arises from the previous problems mentioned earlier, such as the lack of budget, subsidized feeders (passenger feeders) that were not working, and the lack of socialization of the implementor hindering from finding the solutions, especially to the BRT operational budget problems. First, the issue of the feeder (Passenger Feeder) was not working. This was caused by the inability of city transport drivers in being the feeders as they did not meet the minimum service standards (also called *SPM*). From 398 city transports, the need for 100 feeder units has not been met yet. Additionally, it was due to the lack of socialization, supervision and control to the target group.

The implementor's consistency can be seen through the relevancy of the policy contents and the implementation. The previous problems were related to the incompatibility between the norms and the empiricism. Theoretically, Edward III and Mazmanian & Sabatier share a similar view on the implementation of policies, which emphasizes the success of policy implementation; one of which is the target group's behavior and sources emphasizing the group's behavior in influencing implementers to reformulate the BRT policies through published criticism of the implementor's performance.

This theory was unable to answer the problem because the target group as the BRT operational users did not post a demand or response to disagreements with BRT operations. However, the impact caused by the implementation of BRT actually emerged; due to the implementation of Mataram BRT policy, in the city transports (Land Transports Organization - *Organda*) filed their rejection. According to Grindle; it is assumed that the success of policy implementation is not only

concerned with the contents and environment of the policy but also the attention to the policy impacts [15].

d. Bureaucratic Structure

Related to the BRT implementation in Mataram, the bureaucratic structure (implementing elements of policy implementation) was quite clear; which are the apparatus of Mataram City Department of Transportation, NTB Province Department of Transportation, and *Perum Damri* of Mataram branch. Nonetheless, the bureaucratic procedures were still long and the local government decision making was limited. The following is a figure illustrating the relationship pattern and hierarchy of BRT implementors in Mataram city:
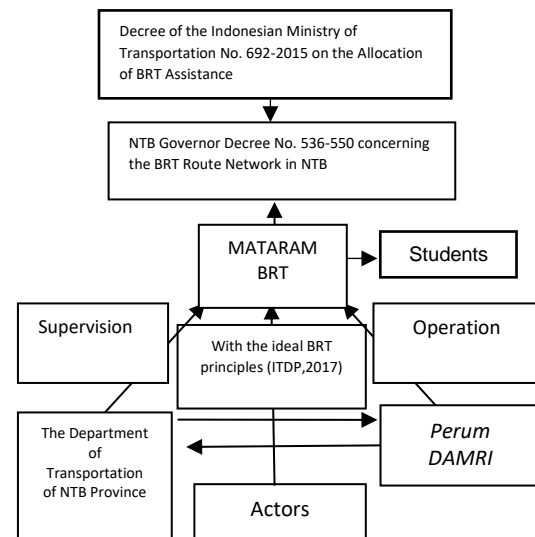

Figure 2. Implementor Relationship Pattern Mataram BRT (Source: Results of Analysis, 2018)

In figure 2, the NTB provincial transportation department as the supervisor in the BRT operations in Mataram ensures that the BRT principles and norms are in line with the expectations; it is supported by the supportive implementers (the police, the city education authorities) in order to reach the target. The excessively long (authority) relationship patterns that are integrated into the central government is certainly a problem for the regional government. It is because of the small scope, and the BRT operational budget problem not finding a solution in minimizing the BRT operation budgets throughout the routes of Mataram City. Thus, the long hierarchical levels will result in the ineffectiveness of the policy content delivery process to the target group.
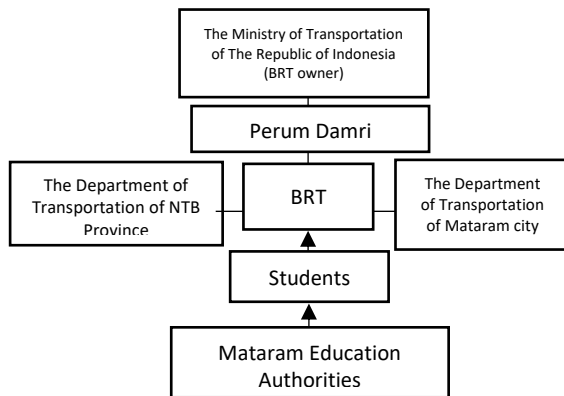
Figure 3. The Levels of Mataram BRT Implementer Hierarchy. Source: The results of Analysis, 2018.

The explanation in figure 3 shows the hierarchy of regional government in implementation, which is monitoring and overcoming regional or impacts issues on implementation of BRT in Mataram city. However, the emerging problem must be addressed by the central government, such as the distribution of the budget for insufficient BRT operational subsidies. While the regional government has limited authority, the relationship pattern is too long to overcome the problem.

The results of Meter and Horn ; research are similar to this issue. It is stated that emphasizing the success of policy implementation is determined by the characteristics of implementing agents; including the bureaucratic structures, norms, and patterns of relations in the bureaucracy, all of which affect program implementation. Mazmanian and Sabatier ;viewed this from the linkage and support among various implementing institutions. In addition, program failure is often caused by a lack of vertical and horizontal coordination between the departments involved in the program implementation [15].

Cheema and Rondinelli; stated that there are a number of variables that can affect the program performance and impact, they are: environmental conditions, relationships between organizations, organizational resources for program implementation, characteristics and capabilities of implementing agents. This emphasized relationship between organizations greatly determines the success of policy implementation; accordingly, an organizational structure that is not so long can facilitate coordination [17]. Ripley ; referred to bureaucratic structures as normal characteristics, routines, and relationship patterns in implementing agencies that have both potential and factual relationships with what they do in the policy line;

including the pattern of supervision and responsibility [18].

Based on the theoretical discourse, the importance of relationships patterns with not-too-long organizational structures have the implications for the effectiveness of policy implementation between the coordinating actors.

Conclusion

The implementation of BRT in the city of Mataram was not optimal because of problems with the lack of budget, minimal socialization (communication aspects). In the future, BRT should operate in the coverage of the entire city / regency government in Lombok. however efforts to overcome problems include;

1. Increased coordination and supervision carried out between actors (police, education services, provincial NTB relations services, City transportation offices, Perum Damri) and compliance of the implementor towards achieving goals.
2. Covering the minimum budget in collaboration with corporations such as ITDP, Ngo local government.
3. Shortening the bureaucratic hierarchy by providing BRT management to regional / city / district governments.
4. Expand the operational routes of BRT in each city / district government.

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