



## Consistency of Planning and Budgeting of Basic infrastructure in West Java Province

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### Abstract

Planning and budgeting play an essential role in achieving development goals in the national and regional scale, especially fundamental development such as infrastructure. Development planning documents through the Medium-Term Expenditure Framework (MTEF) approach presents the relationship between policy priorities and available budgets. The development planning document is implemented annually through the Regional Development Budget (APBD) through a Public Expenditure Management (PEM) approach. Consistency between the two documents is needed to achieve development goals. The purpose of this study is to analyze the consistency between the MTEF and PEM in the Regional Medium Term Development Plan (RPJMD) and the realization of the APBD on basic infrastructure in West Java Province during the period 2016-2017. The research used a method of comparing programs and budgets according to the number, variance, and percentage of changes between MTEF and public budget management and Analytic Hierarchy Process (AHP). The results showed that the MTEF and PEM in infrastructure in West Java were not consistent. The difference was caused by the difference in agreement; where MTEF is an agreement between the executive only and PEM is approved by the executive and legislative.

## INTRODUCTION

National and regional development planning are regulated by law No. 25/2004 concerning National Development Planning System (SPPN). The National Development Planning System is a system of development planning procedures to deliver development plans in the long, medium, and yearly periods, implemented by state administrators and community at the central and regional levels.

Regional development planning is a process in preparing the stages of activities involving various elements of stakeholders, to utilize and allocate the existing resources in improving social welfare in the area or region within a certain period (Suhirman, 2006).

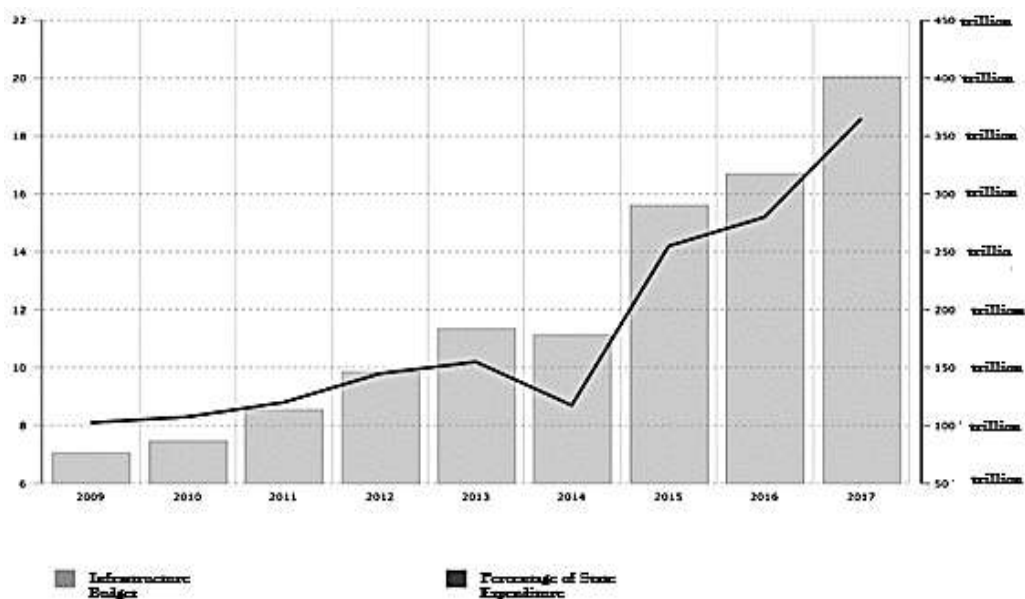
Indonesia's growth rate of approximately 5% per year, makes it one of the countries with a stable growth rate among other countries in Southeast Asia (World Bank, 2018). Nevertheless, the growth rate was not followed by significant infrastructure developments compared to other ASEAN countries. As the state of demographic, geographic, and economic progress are not the same, performance development between regions may differ, leading to a gap in the progress and prosperity levels between regions. Meanwhile, the 2008 Global Competitiveness Report shows that the competitiveness of Indonesia's infrastructure has decreased compared to other countries, in contrast to 1996, where Indonesia's competitiveness ranking is above China, Thailand, Taiwan, and Sri Lanka. Meanwhile, Indonesia's infrastructure competitiveness index in 2017-2018 was number 52, where previously in 2015-2016 were still number 62 (The Global Competitiveness Report, 2018).

Although Indonesia's infrastructure competitiveness index increased in 2017-2018, this achievement still lags behind other ASEAN countries such as Malaysia, Singapore, and Thailand. Indonesia's slow progress in infrastructure development indirectly makes economic growth and development stagnant which may cause economic inequality. This further proves that infrastructure development in Indonesia is not optimal. This condition may adversely affect the welfare of the Indonesian people.

The existence of the problems is recognized by the Central Government and is responded by increasing the infrastructure budget. The government's budget increase was done to escalate infrastructure development to boost economic growth. More details can be seen in Figure 1.

The government regulates this through Presidential Regulation No. 42/2005 concerning the Committee for Acceleration of Priority Infrastructure Delivery (KPPIP), which states that infrastructure provision is regulated by the government, namely:

Transportation infrastructure, road infrastructure, irrigation infrastructure, drinking water, and sanitation infrastructure, telematics infrastructure, electricity and transportation of oil and gas. The infrastructures above are classified as basic infrastructure as it is needed by the wider community, thus needing the regulation of the government. Guswandi (2017) showed that from 2009 to 2017, infrastructure provision in Indonesia was slow due to constraints in the various stages of the project, from preparation to the implementation phase. Overall, it can be concluded that the weak coordination between stakeholders often causes a withdrawal of decision making.



**Figure 1.** Infrastructure Budget of Year 2009 – 2017

Source: Ministry of Finance, 2017

The preparation stage may encounter problems due to the poor quality of project preparation and the limited funding allocation. Furthermore, the project is still constrained by land acquisition which results in delays in achieving financial close of the Public Private Partnership (PPP) project. Moreover, the lack of agreement of risk sharing between government and private entities cause a lack of fiscal support. Besides the government’s lack of fiscal support, the government’s limited guarantee on infrastructure projects tends to reduce investor interest in Indonesia.

One problematic area is the province of West Java. According to the data by Statistics Indonesia (BPS) (2018), West Java province is one of the most populous provinces with a population of 48.6 million people, thus adequate infrastructure facilities and infrastructure are needed. Continuous congestion could cause inefficient driving time and disruption of goods and services distribution.

Referring to the data from the West Java Province Regional body for planning and development (Bappeda) in 2015, several problems were related to infrastructure in

West Java Province, namely: 1) road, road stability have only reached 89.50%; 2) irrigation, good irrigation networks have only reached 58.69% ; 3) housing, health qualified housing have only reached 50.01%, and 4) electricity, electricity has only reached 65% of houses. These data show that infrastructure in West Java Province is still inadequate, which will be the main focus of this research.

Inadequate infrastructure will indirectly affect the interest of investors and tourists to West Java, which in turn will disrupt the community’s economic activity. Consistency between planning and budgeting is necessary, if the government makes a plan without considering the budget, then the government’s target will not be appropriately achieved (Sanuari et al., 2017; Suhadak & Nugroho, 2007).

The plan needs to include a realistic budget to ensure its realization. If the government sets a budget without considering the plan, the government will lose its target because it will not be effective and efficient to allocate the budget (Schick, 1998; Suhadak & Nugroho, 2017). Management of public expenditure as the the

Regional Development Budget (APBD), is part of the annual financial plan to implement a medium-term expenditure framework that reflects development planning and includes programs and budgets.

Meanwhile, public expenditure starts from January 1 to December 31, combining the population's preferences, political responsibility, and government commitment (Schiavo & Tommasi, 1999; Mikesell & Mullins, 2011). Given the importance of public expenditure on infrastructure development in West Java, it is necessary to appropriately and efficiently use the budget to ensure the development process become useful for the community.

Infrastructure drives economic development. Therefore, the low level of infrastructure is one of the critical obstacles when developing economic growth (Fox, 2007). Setiadi (2006) proves that infrastructure has a substantial impact on economic growth. The results of this study support the findings of Sahin & Dermibas (2014), where infrastructure can significantly affect the output. Simon Kuznets (in Todaro, 2011) shows that a country's economic growth rate is influenced by capital accumulation (investment in land, equipment, infrastructure and facilities and human resources), natural resources, human resources; both the number and quality of the population, technological progress, access to information, the desire to innovate and personal development and culture.

Meanwhile, Sibarani's (2002) research regarding the contribution of infrastructure to Indonesia's economic growth concluded that infrastructure (roads, electricity, telephone) had a significant and positive effect on aggregate output represented by the variable per capita income. The contribution of each type of infrastructure for each region is different, where the estimation results of all provinces in Indonesia obtained; electricity

elasticity at a growth of 0.06; education at 0.07; and investment at 0.01. Road and telephone variables are not significant. The results of the research also show that the infrastructure development policies which are centered Java Island and Western Indonesia (IBB) have caused a disparity in per capita income in each region in Indonesia, especially between Java and outside Java and Western Indonesia (IBB) with Eastern Indonesia (IBT), even though there is an increase in economic growth rate.

Meanwhile, when the public and private financing is analyzed, infrastructure is seen as the locomotive of national and regional development. Macroeconomically, the availability of infrastructure affects the marginal productivity of private capital, whereas, in the microeconomic context, the availability of infrastructure can reduce production costs (Mamatzakakis, 2008).

Based on this background, this study analyzes consistency between the realization of the Regional Development Budget (APBD) and the RPJMD in the basic infrastructure sector and evaluate the effectiveness of planned policies and programs by the Government of West Java Province in the field of physical infrastructure development.

## RESEARCH METHODS

The first analytical method compares the program and budget according to the number, variance, and percentage of changes between MTEF as a medium-term budgeting plan and public budget management as the Revised State budget (APBN-P). The formulations are as follows:

$$\frac{\text{Variance}}{\text{RPJMD and APBD}} \times 100\% \text{ Deviation ... (1)}$$

Second, the Analytical Hierarchy Process (AHP) method. This study aims to recommend the appropriate policy strategies

to implement consistency between the planning and budgeting documents. Therefore, this study uses the Analytical Hierarchy Process (AHP). Analytical Hierarchy Process (AHP) is a simple and flexible decision-making method that accommodates creativity in the design of a problem. Analytical Hierarchy Process (AHP) includes qualitative and quantitative aspects of an idea (Saaty, 2008).

The steps in AHP include: first, making a hierarchy to illustrate and describe all forms of problems into the main elements which are then divided into more parts. Second, making judgments about the relative importance of two elements at a certain level in relation to the level above it through a questionnaire based on input from experts. The results of this assessment will appear more clearly if shown in the form of a matrix pairwise comparison.

Third, do a synthesis of the assessment results, namely measuring the priority weight of each element based on expert perception. Next, in each matrix pairwise comparison, the eigenvector is analyzed to obtain local priority. Meanwhile, the pairwise comparison matrix is found at each level; thus. In this case, the priority is analyzed to find out whether it is the adoption of technology, the quality development of human resources or commitment of regional leaders. Data to measure priority interests of alternatives from each criterion inconsistency is obtained through questionnaires of four people, namely two academics or practitioners, two members of the West Java Regional House of Representative (DPRD) budget committee.

## RESULTS AND DISCUSSION

In deciding the technique analysis that is used in data panel regression, there are

three types of testing that must be done. The first test is conducting Chow test.

The Chow test is conducted in deciding the best technique used between PLS and FEM. The decision to use FEM happens when the result of Chow test shows that the F-prob value of Cross-Section less than confident level. Next, on the second test, conduct the Hausman test in deciding whether FEM or REM is better in data panel regression. The decision to use FEM or REM can be seen from the probability value. If the probability value is less than the confident level, we use FEM, and if the probability level is more than the real value, we use REM. Last is the Lagrange Multiplier (LM) test, conducted to choose whether REM or PLS is better.

If the result of LM value calculation is bigger than Chi Square table, so the model used is REM model, so does the other way. Table 2 shows the result of the best data panel model choosing for the five models that had been developed. Based on the test result, the best model chosen is FEM for the whole models. Several programs are on the Infrastructure sector in the 2015 Public Expenditure and the West Java Regional Medium-Term Development Plan (RPJMD) for 2013 - 2018. More details can be seen in Table 1.

In Table 1 above, there is a consistency analysis of the West Java program in the Regional Medium-Term Development Plan (RPJMD) with its implementation of the Regional Development Budget (APBD) in 2015 and 2016. There are 18 RPJMD programs in the infrastructure sector, 18 of which are also implemented into the Regional Budget. Infrastructure is the 4th mission or one of the main missions of West Java. Thus the planned action should also be the same as the next action implemented.

**Table 1.** Program Identification of 2015

| Regional Medium Term Development Plan (RPJMD) Program                                | Regional Development Budget (APBD) Program   |
|--|--|
| Road and Bridge Construction   | Road and Bridge Construction   |
| Road and bridge rehabilitation/maintenance   | Road and bridge rehabilitation/maintenance   |
| Improvement of Facilities and Customer Service                                       | Improvement of Facilities and Customer Service                                       |
| Inspection of road and bridge conditions   | Inspection of road and bridge conditions   |
| Development and management of Irrigation, Swamp and other irrigation networks        | Development and management of Irrigation, Swamp and other irrigation networks        |
| Development, Management, and Conservation of Rivers, Lakes and other Water Resources | Development, Management, and Conservation of Rivers, Lakes and other Water Resources |
| Flood and drought control and coastal security                                       | Flood and drought control and coastal security                                       |
| Fostering and developing residential infrastructure                                  | Fostering and developing residential infrastructure                                  |
| Development of construction services   | Development of construction services   |
| Spatial planning   | Spatial planning   |
| Development of Housing and residential areas   | Housing development and residential areas  |
| Construction of transportation infrastructure and facilities                         | Construction of transportation infrastructure and facilities                         |
| Rehabilitation and maintenance of infrastructure and facilities for road transport   | Rehabilitation and maintenance of infrastructure and facilities for road transport   |
| Improvement of transportation services   | Improvement of transportation services   |
| Control and security of traffic  | Control and security of traffic  |
| Development and improvement of mineral resources, geology, and groundwater           | Development and improvement of mineral resources, geology, and groundwater           |
| Fostering employment development and energy utilization                              | Fostering employment development and energy utilization                              |
| Geothermal and oil and gas development   | Geothermal and oil and gas development   |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

The decision to use FEM or REM can be seen from the probability value of Chi Square. If the probability value is less than the confident level, we use FEM, and if the probability level is more than the real value, we use REM. Last is the Lagrange Multiplier (LM) test, conducted to choose whether

REM or PLS is better. If the result of LM value calculation is bigger than Chi Square table, so the model used is REM model, so does the other way. Table 2 shows the result of the best data panel model choosing for the five models that had been developed. Based on the test result, the best model chosen is

FEM for the whole models. Several programs are on the Infrastructure sector in the 2015 Public Expenditure and the West Java Regional Medium-Term Development Plan (RPJMD) for 2013 - 2018. More details can be seen in Table 1.

In Table 1 above, there is a consistency analysis of the West Java program in the Regional Medium-Term Development Plan

(RPJMD) with its implementation of the Regional Development Budget (APBD) in 2015 and 2016. There are 18 RPJMD programs in the infrastructure sector, 18 of which are also implemented into the Regional Budget. Infrastructure is the 4th mission or one of the main missions of West Java. Thus the planned action should also be the same as the next action implemented.

**Table 2.** Identification of 2015 Budget Values

| Program   | Budget in RPJMD    | Budget in Regional Development (APBD) |
|---|--------------------|---------------------------------------|
| Road and bridge rehabilitation/maintenance  | 286,652,139,000.00 | 477,310,378,249.00                    |
| Improvement of Facilities and Customer Service                                      | 7,067,401,000.00   | 7,752,032,250.00                      |
| Inspection of road and bridge conditions  | 17,557,895,000.00  | 1,308,700,000.00                      |
| Development and management of Irrigation, Swamp and other irrigation networks       | 150,471,291,000.00 | 86,640,716,050.00                     |
| Development, Management and Conservation of Rivers, Lakes and other Water Resources | 83,634,762,000.00  | 38,933,415,775.00                     |
| Flood and drought control and coastal security                                      | 22,158,690,000.00  | 3,710,000,000.00                      |
| Fostering and developing residential infrastructure                                 | 136,990,849,000.00 | 126,721,875,150.00                    |
| Development of construction services  | 5,281,375,000.00   | 2,422,597,625                         |
| Spatial planning  | 2,246,223,000.00   | 338,018,253,650.00                    |
| Development of Housing and residential areas  | 459,800,000,000.00 | 41,386,433,000.00                     |
| Construction of transportation infrastructure and facilities                        | 567,548,018,000.00 | 22,045,212,500.00                     |
| Rehabilitation and maintenance of infrastructure and facilities for road transport  | 29,460,267,000.00  | 32,412,500,000.00                     |
| Improvement of transportation services  | 4,541,666,000.00   | 8,141,250,000.00                      |
| Control and security of traffic   | 113,484,000.00     | 4,522,000,000.00                      |
| Development and improvement of mineral resources, geology and groundwater           | 2,252,751,000.00   | 4,737,754,000.00                      |
| Fostering employment development and energy utilization                             | 52,169,006,000.00  | 106,505,234,850.00                    |
| Geothermal and oil and gas development  | 22,602,830,202.37  | 1,423,638,400.00                      |
| Total   | 635,694,501,202.37 | 1,804,970,576,499.00                  |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

Based on Table 2 above, the total expenditure between the RPJMD and the basic infrastructure budget in the APBD tends to be different. Meanwhile, out of 18 programs recorded in the RPJMD, nine programs experienced a decline and the remaining nine programs experienced an increase in the budget.

**Table 3.** Variance and Percentage of Change

| Program  | Variance Between RPJMD and Basic infrastructure budget in the APBD | Deviation between the RPJMD and the Basic infrastructure budget in the APBD |
|--|--|---|
| Road and bridge rehabilitation/maintenance   | (190,658,239,249.00)   | -67%  |
| Improvement of Facilities and Customer Service                                       | (684,631,250.00)   | -10%  |
| Inspection of road and bridge conditions   | 16,249,195,000.00  | 93%   |
| Development and management of Irrigation, Swamp and other irrigation networks        | 63,830,574,950.00  | 42%   |
| Development, Management, and Conservation of Rivers, Lakes and other Water Resources | 44,701,346,225.00  | 53%   |
| Flood and drought control and coastal security                                       | 18,448,690,000.00  | 83%   |
| Fostering and developing residential infrastructure                                  | 10,268,973,850.00  | 7%  |
| Development of construction services   | 2,858,777,375.00   | 54%   |
| Spatial planning   | (335,772,030,650.00)   | -14948%   |
| Development of Housing and residential areas   | 418,413,567,000.00   | 91%   |
| Construction of transportation infrastructure and facilities                         | 545,502,805,500.00   | 96%   |
| Rehabilitation and maintenance of infrastructure and facilities for road transport   | (2,952,233,000.00)   | -10%  |
| Improvement of transportation services   | (3,599,584,000.00)   | -79%  |
| Control and security of traffic  | (4,408,516,000.00)   | -3885%  |
| Development and improvement of mineral resources, geology, and groundwater           | (2,485,003,000.00)   | -110%   |
| Fostering employment development and energy utilization                              | (54,336,228,850.00)  | -104%   |
| Geothermal and oil and gas development   | 21,179,191,802.37  | 94%   |
| Total  | 58,751,012,703.37  | 3%  |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

Meanwhile, those related to changes in the budget, variance, and percentage of changes were identified between the RPJMD and the basic infrastructure budget in the APBD (see Table 3). In Table 3, the total variance between RPJMD and APBD is Rp



58,751,012,703.37 with a standard deviation RPJM and APBD budget can be seen in Table of 3%. Meanwhile, the revision of the 2015 4 below.

**Table 4.** Identification of the 2015 Change Budget Value

| Program   | Budget in RPJMD             | Budget in APBDP             |
|---|-----------------------------|-----------------------------|
| Road and bridge rehabilitation/maintenance  | 286,652,139,000.00          | 571,619,856,784.00          |
| Improvement of Facilities and Customer Service                                      | 7,067,401,000.00            | 7,724,632,250.00            |
| Inspection of road and bridge conditions  | 17,557,895,000.00           | 1,308,700,000.00            |
| Development and management of Irrigation, Swamp and other irrigation networks       | 150,471,291,000.00          | 106,478,904,680.00          |
| Development, Management and Conservation of Rivers, Lakes and other Water Resources | 83,634,762,000.00           | 42,688,134,411.00           |
| Flood and drought control and coastal security                                      | 22,158,690,000.00           | 6,886,828,000.00            |
| Fostering and developing residential infrastructure                                 | 136,990,849,000.00          | 114,593,696,600.00          |
| Development of construction services  | 5,281,375,000.00            | 2,340,355,625.00            |
| Spatial planning  | 2,246,223,000.00            | 281,269,731,168.00          |
| Development of Housing and residential areas  | 459,800,000,000.00          | 37,933,426,600.00           |
| Construction of transportation infrastructure and facilities                        | 567,548,018,000.00          | 158,936,837,987.00          |
| Rehabilitation and maintenance of infrastructure and facilities for road transport  | 29,460,267,000.00           | 31,297,614,800.00           |
| Improvement of transportation services  | 4,541,666,000.00            | 4,208,970,000.00            |
| Control and security of traffic   | 113,484,000.00              | 4,515,000,000.00            |
| Development and improvement of mineral resources, geology and groundwater           | 2,252,751,000.00            | 4,837,754,000.00            |
| Fostering employment development and energy utilization                             | 52,169,006,000.00           | 85,400,659,857.00           |
| Geothermal and oil and gas development  | 22,602,830,202.37           | 1,423,618,200.00            |
| <b>Total</b>  | <b>1,863,721,589,202.37</b> | <b>1,996,494,720,982.00</b> |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

Table 4 above shows that the total basic infrastructure budget in the APBD is expenditure between the RPJMD and the different. From the 18 programs recorded in

the RPJMD, six programs experienced a budget decline, and seven programs experienced budget increase. Related to changes in the budget, variance and the percentage of changes are identified between what is written in the RPJMD and the basic infrastructure budget in the APBD (see Table 5).

**Table 5.** Variance and Deviation

| Program  | Variance             | Deviation |
|--|----------------------|-----------|
| Road and bridge rehabilitation/maintenance   | (284,967,717,784.00) | -99%      |
| Improvement of Facilities and Customer Service                                       | (657,231,250.00)     | -9%       |
| Inspection of road and bridge conditions   | 16,249,195,000.00    | 93%       |
| Development and management of Irrigation, Swamp and other irrigation networks        | 43,992,386,320.00    | 29%       |
| Development, Management, and Conservation of Rivers, Lakes and other Water Resources | 40,946,627,589.00    | 49%       |
| Flood and drought control and coastal security                                       | 15,271,862,000.00    | 69%       |
| Fostering and developing residential infrastructure                                  | 22,397,152,400.00    | 16%       |
| Development of construction services   | 2,941,019,375.00     | 56%       |
| Spatial planning   | (279,023,508,168.00) | -12422%   |
| Development of Housing and residential areas   | 421,866,573,400.00   | 92%       |
| Construction of transportation infrastructure and facilities                         | 408,611,180,013.00   | 72%       |
| Rehabilitation and maintenance of infrastructure and facilities for road transport   | (1,837,347,800.00)   | -6%       |
| Improvement of transportation services   | 332,696,000.00       | 7%        |
| Control and security of traffic  | (4,401,516,000.00)   | -3879%    |
| Development and improvement of mineral resources, geology, and groundwater           | (2,585,003,000.00)   | -115%     |
| Fostering employment development and energy utilization                              | (33,231,653,857.00)  | -64%      |
| Geothermal and oil and gas development   | 21,179,212,002.37    | 94%       |
| Total  | (132,773,131,779.63) | -7%       |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

Based on Table 5 above, the total variance between RPJM and APBD is Rp 132,773,131,779.63 with a standard deviation of -7%. Meanwhile, the 2013-2018

Mid-Term Regional Development Plan for West Java and the 2016 public expenditure for Infrastructure shows a number of programs as seen in Table 6 below.

**Table 6 . 2016 Program Identification**

| RPJMD Program  | Regional Development Budget (APBD) Program   |
|--|--|
| Road and bridge rehabilitation/maintenance   | Road and bridge rehabilitation/maintenance   |
| Improvement of Facilities and Customer Service                                       | Improvement of Facilities and Customer Service                                       |
| Inspection of road and bridge conditions   | Inspection of road and bridge conditions   |
| Development and management of Irrigation, Swamp and other irrigation networks        | Development and management of Irrigation, Swamp and other irrigation networks        |
| Development, Management, and Conservation of Rivers, Lakes and other Water Resources | Development, Management, and Conservation of Rivers, Lakes and other Water Resources |
| Flood and drought control and coastal security                                       | Flood and drought control and coastal security                                       |
| Fostering and developing residential infrastructure                                  | Fostering and developing residential infrastructure                                  |
| Development of construction services   | Development of construction services   |
| Spatial planning   | Spatial planning   |
| Development of Housing and residential areas   | Development of Housing and residential areas   |
| Construction of transportation infrastructure and facilities                         | Construction of transportation infrastructure and facilities                         |
| Rehabilitation and maintenance of infrastructure and facilities for road transport   | Rehabilitation and maintenance of infrastructure and facilities for road transport   |
| Improvement of transportation services   | Improvement of transportation services   |
| Control and security of traffic  | Control and security of traffic  |
| Development and improvement of mineral resources, geology, and groundwater           | Development and improvement of mineral resources, geology, and groundwater           |
| Fostering employment development and energy utilization                              | Fostering employment development and energy utilization                              |
| Geothermal and oil and gas development   | Geothermal and oil and gas development   |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

The next step is to analyze the consistency of the West Java program in the Regional Medium-Term Development Plan (RPJMD), against its implementation in the Regional Development Budget (APBD) in 2015 and 2016. There are 18 RPJMD

programs in the infrastructure sector, 18 of which are also implemented infrastructure budget of APBD, becoming the 4th mission and also becoming one of the main missions of West Java. Thus, what is designed must be the same as what is implemented.

**Table 7.** Identification of 2016 Budget Values

| Program   | Budget in RPJMD    | Budget in Regional Development Budget (APBD) |
|---|--------------------|--|
| Road and Bridge Construction  | 17,237,601,000.00  | 663,981,744,750.00                           |
| Road and bridge rehabilitation/maintenance  | 337,007,630,000.00 | 250,093,582,542.00                           |
| Improvement of Facilities and Customer Service                                      | 8,308,915,000.00   | 4,997,505,000.00                             |
| Development and management of Irrigation, Swamp and other irrigation networks       | 176,904,220,000.00 | 176,789,038,550.00                           |
| Development, Management and Conservation of Rivers, Lakes and other Water Resources | 129,205,016,000.00 | 92,053,962,500.00                            |
| Flood and drought control and coastal security                                      | 26,051,254,000.00  | 2,753,000,000.00                             |
| Fostering and developing residential infrastructure                                 | 169,728,002,070.70 | 190,906,836,000.00                           |
| Development of construction services  | 5,814,014,000.00   | 3,386,000,000.00                             |
| Spatial planning  | 2,472,760,000.00   | 8,186,835,000.00                             |
| Development of Housing and residential areas  | 465,125,000,000.00 | 90,947,761,000.00                            |
| Construction of transportation infrastructure and facilities                        | 634,001,386,000.00 | 49,898,816,000.00                            |
| Rehabilitation and maintenance of infrastructure and facilities for road transport  | 34,635,481,000.00  | 13,209,342,916.00                            |
| Improvement of transportation services  | 5,339,490,000.00   | 3,244,325,000.00                             |
| Control and security of traffic   | 142,295,000.00     | 3,969,200,000.00                             |
| Development and improvement of mineral resources, geology and groundwater           | 2,977,673,000.00   | 8,809,163,625.00                             |
| Fostering employment development and energy utilization                             | 52,793,781,000.00  | 25,357,375,000.00                            |
| Geothermal and oil and gas development  | 15,601,772,000.00  | 950,000,000,000.00                           |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

The total expenditure between the RPJMD and the basic infrastructure budget in the APBD is different (see Table 7). Meanwhile, out of the 18 programs recorded in the RPJM, 13 programs experienced a decline and five programs experienced an

increase of budget.

Changes in the budget, variance and the percentage of changes are identified between what is written in the RPJMD and the basic infrastructure budget in the APBD (see Table 8)

**Table 8.** Variance and Deviation Value

| Program  | Variance            | Deviation   |
|--|---------------------|-------------|
| Road and Bridge Construction   | -646,744,143,750.00 | -375193.82% |
| Road and bridge rehabilitation/maintenance   | -246,723,506,242.00 | -7321.01%   |
| Improvement of Facilities and Customer Service                                       | 3,311,410,000.00    | 39.85%      |
| Inspection of road and bridge conditions   | -1,054,082,500.00   | -545.35%    |
| Development and management of Irrigation, Swamp and other irrigation networks        | 115,181,450.00      | 0.07%       |
| Development, Management, and Conservation of Rivers, Lakes and other Water Resources | 37,151,053,500.00   | 28.75%      |
| Flood and drought control and coastal security                                       | 23,298,254,000.00   | 89.43%      |
| Fostering and developing residential infrastructure                                  | -21,178,833,929.30  | -12.48%     |
| Development of construction services   | 2,428,014,000.00    | 41.76%      |
| Spatial planning   | -5,714,075,000.00   | -231.08%    |
| Development of Housing and residential areas   | 374,177,239,000.00  | 80.45%      |
| Construction of transportation infrastructure and facilities                         | 584,102,570,000.00  | 92.13%      |
| Rehabilitation and maintenance of infrastructure and facilities for road transport   | 21,426,138,084.00   | 61.86%      |
| Improvement of transportation services   | 2,095,165,000.00    | 39.24%      |
| Control and security of traffic  | -3,826,905,000.00   | -2689.42%   |
| Development and improvement of mineral resources, geology, and groundwater           | -5,831,490,625.00   | -195.84%    |
| Fostering employment development and energy utilization                              | 27,436,406,000.00   | 51.97%      |
| Geothermal and oil and gas development   | -934,398,228,000.00 | -5989.05%   |
| Total  | -789,929,834,012.30 | -45.14%     |

Source: (Regional Medium Term Development Plan (RPJMD) of West Java Province 2013-2018 and Regional Development Budget (APBD) of West Java Province 2015)

Table 8 shows that the total variance between RPJM and APBD is Rp. 7,89,929,834,012.30 with a standard deviation of -45.14%. Thus, the value of the RPJMD and basic infrastructure budget in the APBD in 2015 and 2016 have significant differences or in other words, inconsistency in planning and budgeting in West Java. The

value of the APBD budget and RPJMD in West Java differs, where the variance in 2015 reached Rp 58,751,012,703.37 with a standard deviation of 3%.

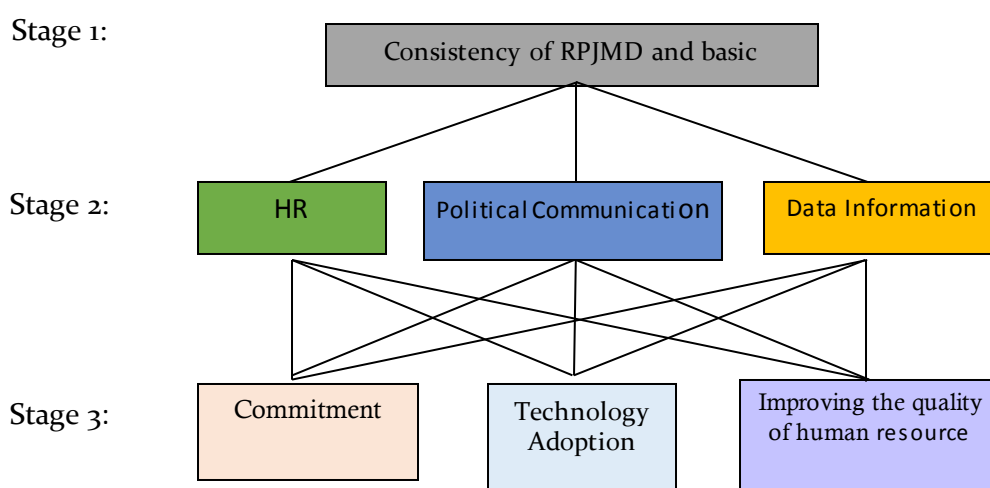
Meanwhile, in 2016, the total variance between RPJMD and APBD was Rp 789,929,834,012.30 with a standard deviation of -45.14%, making budgeting for

infrastructure development in West Java inconsistent. This happens due to the planning of activities that are not in accordance with the needs, and the discrepancy between the budget plan and the unit of cost thus making the excess funds (unabsorbed difference in funds) or lack of funds to hinder the realization of the program. This inconsistency can be used to assess whether the government's performance is good and has met the expected goals, or not. The most critical factors of inconsistencies are the lack of program planning and bad budgeting. Preparing plans and budgets requires professional staff with good knowledge of the physical, economic and environmental conditions that have become the goals of the development (Dixon & Hakim, 2009).

The inconsistency that occurs in the West Java province are tolerated as the development goals are realized, such as the construction of the Soreang-Pasirkoja Toll Road, West Java, which goes for 11 km, and

the Jatigede Dam in Sumedan City. The difference of goals in the two documents; the RPJMD and APBD, may occur as the related human resources may not understand the physical, economic and environmental conditions that are the goals of development.

Meanwhile, the assessment results of the 4 (four) respondents through geometric means obtained results of various priorities. The consistency of RPJMD and basic infrastructure budget in the APBD is considered to be the best by respondents, with an alternative of the commitment weight value of 0.5783, the improvement in the quality of HR with a weight value of 0.3643 and the last adoption of technology with a weight value of 0.0574. These results indicate that the most important thing is the commitment of data and information transparency to obtain useful information data for planning and budgeting, ensuring community participation in the monitoring of activities. More details can be seen in Figure 2 below.



**Figure 2.** Policy Determination for Budget Consistency Hierarchy

In the political communication sub-criteria in the consistency of the RPJMD and the basic infrastructure budget in the APBD which were considered the best by the respondents, the commitment was the first priority with a weight value of 0.8044, while the sub-criteria for

improving the quality of HR was the second priority with a weight of 0.1218. Finally, data information is the third priority with a value of 0.07378. These results indicate that commitment in aligning the goals and interests of development priorities is the best thing in

political communication in the consistency of the RPJMD and basic infrastructure budget. As the Analytical Hierarchy Process (AHP) model uses human perception as its input, inconsistencies may occur as humans have limitations in expressing their perceptions consistently, especially when comparing many criteria. Measuring consistency is intended to observe inconsistencies when respondents are giving judgments.

If the consistency ratio (CR) is less than 0.1 (<0.1), then the value of pairwise

comparisons on the given criteria matrix is consistent. In this case, if the CR is above 0.1 (CR > 0.1), the value of pairwise comparisons on the given criteria matrix is inconsistent. Thus values in the paired matrix of the criteria and alternative elements must be repeated. The calculation results show that all respondents' ratings are consistent, and do not need to be repeated. More details can be seen in Table 9 below.

**Table 9.** Respondents' Consistency Ratio (CR) Assessment

| Pairwise Comparison                             | CR   | Information |
|---|------|-------------|
| Between sub-criteria of Data Information        | 0.05 | Consistent  |
| Between sub-criteria of Political Communication | 0.03 | Consistent  |
| Between sub-criteria Human Resources            | 0.07 | Consistent  |

Source: Results of AHP calculation

## CONCLUSION

The calculation results show that the results in implementing a performance-based budget are still not as expected as there were inconsistencies in the budget plan. Also, data transparency has not been optimally implemented. This is evident from the data differences among documents, confusing the public when formulating data with facts in the field.

The inconsistency between the realization of activities and budgeting can result in low absorption of the budget. Thus not all funds can be absorbed to finance the program, especially in the basic infrastructure development programs. The calculation results of the Analytic Hierarchy Process (AHP) indicate that commitment is one of the factors that influence the improvement of planning and budgeting. Thus, regional heads and other related actors in planning and budgeting activities in West Java should carry out consistent planning and budgeting to ensure the funds of the West Java government does not go into deficit. If this happens, it can hamper regional development and make a loss of accountability.

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