

CHAPTER IV

CONCLUSION AND RECOMMENDATION

A. CONCLUSION

In this chapter, the researcher explains the conclusions of all the variables that have been analyzed. The conclusions is discussed based on variables - Context, Input, Process, and Product.

1. Context

In this variable, there are 3 indicators used by the researcher, namely the Bekasi Environmental Agency's vision and mission, the type of pollution and also the water quality of the Bekasi River. The vision and mission of the Bekasi Environmental Agency refers to the conditions of the Bekasi City that are comfortable, clean, green and also cultured environment and the Bekasi Environmental Agency which is in line with the mission that has been written into the RPJMD of Bekasi City in 2013 - 2018. In 2016, it is the number of improved governance city, and focuses on infrastructure and also natural resource management in the Bekasi City. One of the missions of the Bekasi Environmental Agency is to equalize the accessibility of infrastructure and facilities to all sections or elements of society fairly. One example taken in this infrastructure is the ease of access in clean water services which is actually the right of the entire community.

In addition to seeing from the perspective of vision and mission, in the context, it also discusses the type and quality of water available in the Bekasi River. Bekasi river itself is a merger between Cikeas river and Cullinan river. The

pollution that occurs in Bekasi River can be caused by two types of waste produced. There are two types of waste, namely industrial waste and domestic waste. Based on available data, Bekasi River has two types of waste originating from the two Kali. Based on the interview that has been described previously, most of the industrial waste comes from the Cileungsi river. Meanwhile, the domestic river comes from the Cikeas River. In addition to problems with liquid waste (domestic and industrial), Bekasi River also has problems from solid waste in the form of plastic, bamboo, and also mattresses. The presence of solid waste inhibits the flow of water and also affects the quality of the water itself.

Based on the Decree of the Minister of Environment Number 115 of 2003 concerning Guidelines for Determining the Status of Water Quality, water quality in Bekasi River is measured using a PI or Pollution Index. This measurement is carried out twice a year. The graphic 3.1 above shows the pollution index number in Bekasi River during 2016 to 2018. There are no significant changes occurred in the pollution index. If it is seen from the discussion and focus of the 2013-2018 RPJMD, there should be a significant change in terms of water quality. Because in 2016, one of the missions of the Bekasi City Government is to change and manage natural resources, so they can be accessed by every element of society in Bekasi City.

It can be concluded that there is variable which is a mismatch between the vision and mission of the Bekasi Environmental Agency for the quality of Bekasi River water. With the implementation of the program, it can be expected that the quality of Bekasi River water can recover and gradually improve to raise its classification into quality standards that have been set.

2. Input

In the input variable, there are three indicators used by researcher such as Human resources, adequate technologies, and also the budget allocation of the programs. The garbage that clogs up and affects water quality in Bekasi River is handled by a field worker named *Tim Katak*. The worker handles solid waste and also accommodates the government if there are activities that require waterways. The *Tim Katak* also monitors the discharge to water quality if there is a change in physical terms. Debit and solid waste monitoring is carried out every day with shifts in place of workers. Unfortunately, the *Tim Katak* only has 32 members. It is not worth with the work they do every day. In addition to personnel, the constraints felt by field workers are due to the lack of allocation of funds provided by the Bekasi environmental agency. The funds provided are actually not sufficient to support the needs that must be met or must be purchased such as fiber ships or allowances to members of the *Tim Katak*. The funds used by the Bekasi Environmental Agency come from the APBD. This is very unfortunate considering that the problem of pollution in the Bekasi River already involves two regencies / cities, Bekasi City and Bogor Regency. This problem should have been resolved by the intervention of the provincial government.

In addition to the problems coming from human resources, there are also problems with reports on lab equipment that are less transparent. There are no reports or data that can be elaborated by the Bekasi Environmental Agency. This also occurs in less transparent funding. The activity report that cannot be accessed

by all parties shows that the government is not transparent, especially in terms of the use of activity funds.

It can be concluded that in the input variable, one thing affects the other. The financial support that is less influential on human resources also affects the effectiveness of the program itself. Besides also influencing the effectiveness of the program, the lack of transparency also affects the public's trust in the government in handling a problem.

3. Process

In the process variable, there are 4 indicators used such as Planning, Implementation, monitoring, and evaluation. In the planning indicator, there is the use of fund allocation for the program as a parameter. It can be seen in table 3.2 - table 3.4 is a table for the use of funds for water pollution management programs in Bekasi River. Table 3.2 shows the use of funds for the 2016 program. The lack of transparency occurred in 2016. The data or written report forms cannot be accessed for the use of this research. On the other side, table 3.3 and table 3.4 are the use of program funds throughout 2017 -2018. In 2017, the maximum amount of funds used was 90.91%. Whereas in 2018, the use of funds provided only reached 37.67% of the total funds. This is unfortunate because the funds received can be used to support accommodation and also work benefits provided to field workers (*Tim Katak*).

In the implementation indicator, collaboration with the community is one of the parameters used by researcher. Bekasi Environmental Agency has collaborated with local and international communities. One of the collaborations that was

developed was with the Caring Community of Cullinan - Cikeas. Initially, this collaboration was established only to check or notify if there was a shipment of water coming from Bogor. These water shipments greatly affect the water debit in the Bekasi river. However in 2018, cooperation was established by the Bekasi Environmental Agency and also the KP2C to monitor the water quality of the Cileungsi River.

In addition to collaborating with the local community, Bekasi Environmental Agency also collaborates with the international community, namely, One Earth One Ocean (OEOO) and GreenCycle. This organization determines the development and application of the concept because water throughout the world should be free from plastic, oil and pollutant waste. In collaboration with the international community, this has resulted in the results received by the Bekasi Environmental Agency, which is a solid garbage transport vessel to facilitate the Tim Katak to transport garbage in Koja Dam.

Although working with reliable communities, the important role needed is community participation. The community is an important point in the success of the government program. Unfortunately in 2016 – 2017, the role of the community expected for environmental care is still lacking. The Catch Hands operation conducted by the Bekasi Environmental Agency has resulted in several people who still often litter. This is also strengthened by data on household waste management in 2016 and also 2017 in graph 3.2. as much as 5% of the total population still dispose of waste in the river / river. This also becomes one of the parameters used in monitoring indicators. In 2016 and 2017, people were concerned about the actual

function of the river, but in 2018, there were differences from community participation.

Since the construction of the Bamboe Forest, community participation has shown progress. The function of the Bamboe Forest is to recall the important role of the river. Community participation can be seen from the formation of the Bekasi Kali Lovers Community Forum (FMPKB) which was built to manage the Bamboe Forest. This originated from community initiatives around the Bekasi River. The construction of these water attractions also has an impact on the economic rise felt by residents around Bekasi River. In addition to the development of the Bamboe Forest, the addition of a Bank Sampah in each district also produces good results. *Bank Sampah* serves to educate the public on the importance of reducing and managing their own waste at home.

It can be concluded that in this variable, many advantages affect the program that has been implemented. However, the most shortcoming is the lack of transparency which is important to gain the trust of the people. The community should be able to easily access the reports and know the program implementation process, so the community can participate with the government.

4. Product

In this variable, there is an impact of implementing the program. This impact can be seen from changes in the number of memberships of PDAM Tirta Patriot and also changes in PI values in water quality in first and second period of testing. Water quality from the Bekasi River did not show a large difference, and it still remained "Mildly Polluted" status in the first period and the second period. This also has an impact on the quality of the production of PDAM Tirta Patriot.

One of the functions of the Bekasi River is as a water supplier for PDAM Tirta Patriot. Pollution causes and influences the distribution and quality of water produced by the PDAM. Graph 3.4 shows the production figures and also the distribution figures from PDAM Tirta Patriot. Although production and distribution have declined, the number of PDAM membership has continued to increase. This is influenced by economic factors that make PDAM customers reluctant to decide on the clean water service.

Based on the four variables above, it can be concluded that the environmental service programs in Bekasi City has run well. Bekasi Environmental Agency has implemented programs such as PROKASIH in accordance with standard operating procedures. Bekasi Environmental Agency also works with local and international communities. The collaboration formed was the cooperation of personnel to expedite the implementation of the program that had been prepared by the Bekasi City Environmental Agency. Other assistance in the form of advanced technology was also provided by the One World One Ocean Organization to the Bekasi City Government to clean the river from plastic waste. The technology assistance is in the form of Garbage Cleaners.

However, the lack of a major factor in this regard is the budget. The problems that arise within the agency was caused by the budget, either the maximization of the budget or the transparency which have an impact on the relation between the society and the government. Transparency that should be done can build community participation. In addition, the shortage of field workers (*Tim Katak*) could not cover and cover all existing areas. Moreover, when the use of

funds that is not optimal, it is felt to greatly affect the effectiveness of the programs implemented.

B. RECOMMENDATION

Based on the conclusions drawn from the four variables, it can be concluded that the source of lack of the Bekasi Environmental Agency is funding. The use of funds is not maximum and also transparency is a factor or obstacle faced by the Bekasi Environmental Agency. Based on conclusions, suggestions can be made as follows:

1. Bekasi environmental agency is expected to maximize the uses of their budget allocation in order to maximize the implementation of the programs in managing the water pollution of Bekasi River.
2. Bekasi environmental agency should add more fiber boats for *Tim Katak* to facilitate the process of carrying the garbage in Koja Dam. Moreover, the agency is expected to add more member of *Tim Katak* so that the work can be more effective and efficient, and it can also shorten the time of the work.
3. Bekasi environmental agency should be more transparent and be more detailed in reporting the programs of managing the water pollution. Thus, the relation that is built by the society and the government can be fixed and the public can be actively participate in the programs.
4. Bekasi environmental agency should also be connected to the province government in order to receive the aids that are needed, such as aiding in the facilities or the fund that are lacking.

5. For industrial factories are expected to follow the requirements set by the Bekasi Environmental Agency such as the building of installments of wastewater treatment plant. Besides that, the industrial factories should have been followed the local regulation of Bekasi City Number 09 Year 2013 regarding the disposal of hazardous and toxic waste.
6. Residents are expected to reduce the single-used of plastic and expected to sorting out their garbages. Besides that, the public also expected to restore the main function of Bekasi river as the sources of clean water by not throwing the garbage on to Bekasi river.