

PUBLICATION SCRIPT

**THE EVALUATION OF GOVERNMENT STRATEGY IN WASTE
MANAGEMENT (CASE STUDY OF WASTE BANK IN MAGELANG
REGENCY 2017-2018)**

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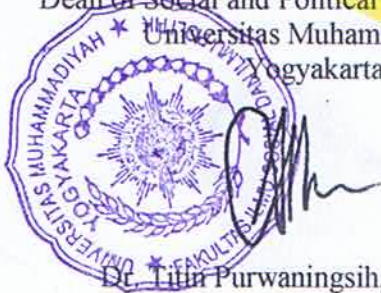
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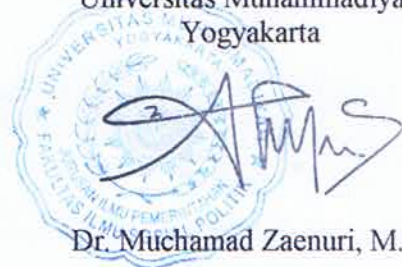
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MAGELANG REGENCY 2017-2018)**

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Abstract

In 2015, Magelang Regency was entering the category of 'emergency waste' which the volume of waste is 453 tons per day. After the news out, Magelang Regional Government held a Waste Bank Program in order to decreasing the volume of waste. Eventough the program has been implemented 3 years since 2015 until now there are still some problems that caused by waste. The problem to be studied in this research is how the evaluation of Waste Bank Program in Magelang Regency in 2017-2018?

Data collection of respondents is done by interview method and then the data is analyzed by using descriptive analysis. Meanwhile, the evaluation of waste bank program was formulated using the Criteria for Evaluation such as, effectiveness, efficiency, adequacy, alignment, responsiveness, and accuracy.

From all of the criteria for evaluation, there are two criteria that not optimal yet because there are still some obstacles that occur in implementation. Based on the results of the research, with the activity of waste bank program in Magelang Regency is successfully implemented based on the objectives targeted by the Environmental Office of Magelang regency.

Keyword: Magelang Regency, Waste Bank, Evaluation

INTRODUCTION

The population growth in Indonesia is very rapid. The rate of population growth still reaches 1,49 percent or about four million per year which brings Indonesia in fourth with the largest population in the world (bkkbn.go.id, 2016). Problems caused by population growth even more, one of the problems that has been closely related to Indonesia is waste. The problems of waste such as, household waste, industrial waste, commercial and public facility waste every year are getting worse. In addition to population growth, industrial development, urbanization and modernization lead to an increase in demand for food and other secondary needs that result in the increase of waste generated every day. Waste is potentially very damaging to the environment and human health. Based on statistical data, total volume of waste produced in Indonesia reaches 187,2 tons per year (pikiran-rakyat.com, 2017). The amount of waste transported per year gives an idea of the readiness of each region in handling the waste produced.

Magelang is one of the regencies facing this waste problem. The number of potential nature and heritage tourism located in Magelang regency, such as Borobudur temple, Ketep Pass and other attract local and foreign tourists to visit these places. It creates positive impacts to the local economy and people around the sights but this also can make negative impact to the surrounding environment namely waste multiply. Based on data from Central Bureau of Statistics Magelang Regency in 2012-2015, the total population spread in 21 sub districts in 2015 has reached 1 million people.

Population growth that is incompatible with environmental sustainability can lead to socio-economic problems. This is because of the various needs of human life. In addition, population growth will increase the volume of waste generated each day.

In general, the handling process of waste are sorting, collecting, transporting, and processing waste. Meanwhile, reduce, reuse, and recycling are great ways to reduce waste. Waste

management has been regulated by the government in Act Number 18 Year 2008 on Waste Management. The law states that not only governments and local governments are obliged to manage waste but also communities, especially business actors and waste producers, has a responsibility to create a clean and healthy environment by reducing and managing waste. However, local governments have the authority to establish waste management policies and strategies in accordance with national and provincial policies as mentioned in Article 9 of Act Number 18 of 2008 on Waste Management.

The government has implemented several strategies to overcome the waste problem, one of which namely Waste Bank. Waste bank is generally formed in neighborhoods with 1.000 inhabitants and is usually run by underprivileged citizens who want to increase their income. The customer brings all his non-organic waste to the bank that is treated like a savings account. Transactions are recorded in a savings book given to a customer

or alternatively recorded in a book kept by a bank. Many banks also accept organic waste, meanwhile others encourage household composting. A waste bank sells goods that are saved to collectors for reuse or recycling. Saved waste is converted into withdrawn cash if necessary after a 15% cut to finance the bank's operations.

In Magelang Regency, the waste bank has been established since 2015. The reason behind the creation of this waste bank is due to the fact that in 2015, the United Nations (UN) states that Magelang Regency fall into the category of 'emergency waste'. The volume of waste is 453 tons per day and still increasing every year in which 70 percent of the total waste in the Regional Landfill comes from household activities (nationalgeographic.grid.id, 2016). The amount of waste that collected becomes a challenge for Magelang Regency in order to manage the waste properly. Good waste management will create a positive impact on the environment.

Waste Bank program that planned by Magelang regional government regarding waste, is processing household waste management into organic fertilizer, counseling, as well as waste management or recycling training. This program not only can solve the waste problem in each region, but also can improve the quality of society and also the income of the community. In addition, the community in this case also be able to participate to reduce or overcome the problem of waste.

Approximately 3 years after this program has been implemented, the publication of the implementation of Waste Bank in Magelang Regency is aggressively carried out by the Regency Government in an effort to socialize this Waste Bank program to the wider community. Based on last news published by Wawasan News online version in February 2018 in the order to celebrate the 34th year of Mungkid, the Magelang Regional Government held a Waste Bank Competition Level Magelang Regency. 21 groups of Waste Bank spread over 21 districts in Magelang

Regency joined this competition (wawasan.co, 2018).

Although the regional government held a large-scale socialization by holding a competition as previously explained, in 2018 there was no significant reduction in the volume of waste. The National Waste Management Information System (SIPSN) still shows the total volume of Magelang Regency waste of 575,40 tons/day, where the amount of unmanaged waste are 510.40 tons/day during the 2017-2018 period (sipsn.menlhk.go.id, 2018). This shows that from 2015 to 2018 the volume of waste has not been reduced even though in the vulnerable time the waste bank program has been implemented. However, the data has not shown a decrease in the amount of waste volume and the volume of waste that is not accommodated in the regional Magelang landfill is still in massive number.

Another problem is because in several sub-districts in Magelang Regency, still have lacks awareness of the importance of environmental

cleanliness. Most of the people still burn waste around the home environment even though the smoke, especially plastic waste smoke, is one of the triggers of cancer, this happens for example in Bringin Village, Srumbung District, Magelang District. Even though there is a waste bank in the village, the residents prefer to burn waste instead of depositing the waste into the waste bank (rumahzakat.org, 2018).

Serious waste problem also occurs in some areas of Borobudur, in which the volume of waste is increasing. Landfill is provided in the irrigation section or ditch area of PT. Taman Wisata Candi Borobudur, yet the general public make it as an opportunity to dispose waste which has exacerbated the view (krjogja.com, 2018).

Another problem that still often occurs in some villages is the habit of people throwing waste into the river, which is located close to residential areas, causing the river to almost overflow during the rainy season, as happened in Bligo Village (republika.co.id, 2017). It shows that

the waste has not been properly accommodated in the waste bank, this also raises the question of the effectiveness of waste banks in Magelang Regency.

CONCEPTUAL FRAMEWORK

1. Policy Evaluation

According to Lester and Stewart (Winarno, 2008: 166) policy evaluation can be differentiated into two different tasks, the first task is to determine the consequences of a policy by describing its impact. Meanwhile the second task is to assess the success or failure of a policy based on predefined standards or criteria. Evaluation of the policy is a matter of fact in the form of measurement and assessment of both the implementation phase of the policy and the outcome or impact of the work of a particular policy or program, thus determining the steps that can be taken in the future. Regarding the performance of policies in generation information, the criteria for evaluation of the impact of public policy are as follows:

1. Effectiveness

2. Efficiency
3. Adequacy
4. Alignment
5. Responsiveness
6. Accuracy

2. Waste Bank

Waste bank is one of 3R implementation strategy in waste management at community level. Through the waste bank, it is finally found an innovative solution to "force" the community to sort waste. By equalizing the waste with money or savings that can be saved, people are finally educated to appreciate the waste according to the type and value so they want to sort out the waste. (Ministry of Environment RI, 2013).

The purpose of the further waste bank is to awake the public awareness to a healthy, neat and clean environment. Waste banks are also established to turn waste into something more useful in society, for example making it into handicrafts and fertilizers that have economic value.

Waste banks have several benefits for humans and the

environment, such as making the environment cleaner, awakening the public awareness to the importance of cleanliness, and making waste into economic goods. The benefit of the waste bank for the community is to increase the income of the community because when they exchange their waste they will get reward in the form of money collected in their own account. The public can at any time take money on the savings when the savings collected is much. The rewards given to savers are not just money but also staple foods such as sugar, soap, rice oil, free schools fee, and health insurance.

Waste Bank can also be a solution to achieve a clean and comfortable settlement for its citizens. Decides being disciplined in managing waste, residents get additional income from the waste they collect. It seems that such thoughts were captured by the Ministry of the Environment.

3. Strategy

The first strategy definition proposed by Jauch & Glueck (in Akdon, 2011: 13) mentions that

Strategy is a unified, comprehensive and integrated plan that links the benefits of organizational strategy with environmental challenges and is designed to ensure that the organization's main objectives can be achieved through proper implementation by the organization.

Moreover, the strategy according to Salusu (2006: 101) is an art using the skills and resources of an organization to achieve its goals through an effective relationship with the environment in the most favorable conditions.

Based on the above explanation it can be concluded that strategy is to develop an organization's plan to ensure that the objectives to be achieved can be achieved properly and implemented effectively. The strategy created is expected to be adapted to the internal or external environment of the organization. Strategy that is able to adjust between the ability and the resources of the organization with its environment can certainly be able to achieve the goals to be achieved.

Research Methods

This research using qualitative method. Employing this method is expected to generate a conclusion of a materialize analysis, because this study wants to find out how the government strategy can manage the waste.

Qualitative method is employed in this study because it presents directly the relationship of the researchers and respondent. In addition, it is more deeply with the sharpening of shared influences and the patterns of value faced (Moleong, 2010). It is necessary to get more in-depth information through interviews with respondent who are directly related to the implementation of policy evaluation, therefore it can answer all the variables in this study.

In the collection of data, then the researcher obtains data in accordance with several data sources as follows:

a. Primary Data is data source that provides data. In this research the primary data obtained in a straight line from the results of information and genuine that are collected individually by an organization. The writer conduct

interview with Head of Environmental Pollution Control Department of Environmental Office of Magelang Regency, Head of Lestari Waste of Dusun Cecelan, Soroyudan Village, Tegalorejo sub-district, Magelang Regency, Head of Sekar Gendis Waste Bank as a main waste bank in Magelang Regency, society around Sekar Gendis Waste Bank and Lestari Waste Bank.

b. Secondary Data is data that support primary data. It is obtained from literature and documents as well as data from the researcher. The secondary data came from Regulation of State Minister of Environment Republic of Indonesia Number 13 Year 2012 about Guidance of Implementation of Reduce, Reuse and Recycle through Waste Bank, and Instruction of Regent Number 1 Year 2017 about Formation of Waste Bank in Village and Sub-district of Magelang Regency.

RESULT AND DISCUSSION

Magelang Regency again optimizes the Waste Bank program with the aim of changing people's behavior to be more concerned about

cleanliness, changing the paradigm of waste as waste material into something that has economic value, and developing waste management with the 3R concept, namely, Reuse-Reduce-Recycle. It is hoped that it will bring benefits to the community, namely, increasing knowledge and skills in waste management, increasing the benefits of yard land for Family Medicinal Plants (TOGA) and Vegetables and Fruits (SABU), and increasing community welfare through skills in waste recycling and organic fertilizer management.

Waste management before the waste bank program was applied still used the old paradigm called End of Pipe. The End of Pipe paradigm is to dispose of waste directly into a landfill (TPA) using the 3R principle as the good waste management. Waste management policies emphasize waste reducing at source, sorting and recycling. A very important initial foundation in changing this paradigm is to change the policy towards minimizing waste at its source not at its disposal (Environmental Office of Magelang Regency, 2018).

The new paradigm used by the Waste Bank Program is Good Housekeeping. The paradigm re-uses and the waste bank, namely:

- Reduce
- Reuse
- Recycle
- Disposal (Landfill)

1. Reducing waste
2. Sorting waste
3. Utilizing waste
4. Recycling waste
5. Saving waste

Waste will be reduced first by sorting or eliminating namely waste which will be reused as a creation or compost and waste that will be sold to collectors. Therefore, people can save using their household waste. This waste do not directly dispose to the landfill. Those waste will be reduced by the waste bank by sorting them which will later the waste be processed into organic creations or fertilizers, and the remaining waste that cannot be recycled will be taken to the landfill (Environmental Office of Magelang Regency, 2018). The basic concept of a waste bank through 5M can be seen in diagram below:

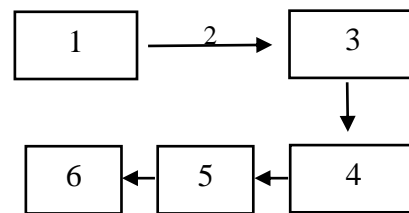


| | |
|---------------|-------------------|
| Old paradigm: | New paradigm: |
| End of Pipe | Good Housekeeping |

(Source: Environmental Office of Magelang Regency, 2018)

The implementation mechanism of the waste bank will be explained in the form of chart below:

Waste Bank Mechanism in Magelang Regency



1. Sorting waste in the household
2. Taken to the waste bank
3. Collected in waste bank
4. Sorting phase 2 by the officer
5. Weighing and selling
6. Transporting

(Source: Environmental Office of Magelang Regency, 2018)

Evaluation is an activity to assess the implementation of a program that has been implemented, regarding the success and constraints of a program. The purpose of the evaluation is to control the

implementation of the program in the future so that it becomes better and the information about the achievement level of the goals and objectives in implementation the Waste Bank Program could be obtained. Based on the data of Waste Bank in Magelang Regency in 2018 there are around 516 waste banks registered with the Environmental Office of Magelang Regency. Some of them received support in the form of assistance from the Environmental Office and PT. Unilever through their NGO (PERSADA). Assistance in the form of facilities is a kind of grant given to waste banks in several sub-districts in Magelang Regency. In the implementation of the Waste Bank program in the field there are factors that influence the success of program evaluations including effectiveness, efficiency, adequacy, equity, and accuracy. It can be further explained that the factors that influence the success of the Waste Bank Program Evaluation in Magelang Regency in 2017-2018 are as follows:

1. Effectiveness

The purpose of the waste bank program according to the Environmental Office is to reduce the volume of waste in Magelang Regency, as well as empower the community by running the program. The reduced volume of waste in Magelang Regency due to the existence of this waste bank program is felt by the waste bank community.

The implementation of the waste bank program in the two places was carried out in accordance with the needs of residents and assistance which then prosper the surrounding community. Data on the volume of waste collected in both waste banks, namely Sekar Gendis Waste Bank and Lestari Waste Bank can be seen in table below:

Comparison of Waste Volume in

| Waste Bank | Waste Volume (per month) | |
|--------------|--------------------------|----------|
| | 2017 | 2018 |
| Sekar Gendis | 285.6 kg | 230 kg |
| Lestari | 321.5 kg | 191.5 kg |

Two Banks in 2017-2018

(Processed by Researcher)

From the comparison table above, there is a reduction in the volume of waste in the two waste bank areas, this supports the statement of the two previous waste banks stating that the waste bank helps reduce the problem of waste volume in Muntilan Village and Cecelan Village.

The reduced volume of waste is also supported by a statement from the Head of Environmental Control and Pollution Department, M. Irham Noor Syarif, SP, MM who stated that:

“In our calculation, the volume of waste in Magelang Regency is reduced by 2% per month from a total around 17,000 tons per month. Indeed, it looks like it has increased from the previous year, but that's because the population has also increased. If it is calculated again, the volume is actually reduced and that is due to the implementation of the waste bank program in each village in Magelang Regency.” (Interview with Head of Environmental Control and Pollution Department on October 9th, 2018, at 7.30 AM)

Comparison of Waste Volume per day in 2017-2018

| Population | | Waste Volume (ton) | |
|------------|-----------|--------------------|--------|
| 2017 | 2018 | 2017 | 2018 |
| 1.257.496 | 1.268.396 | 560,23 | 575,40 |

(Source: National Waste Management Information System (SIPSN), 2018, processed)

The statements and processed data show that there is an increase in the population from 2017 to 2018. The increase in population is directly proportional to the increase in volume of waste per day. If in the period of the volume of waste decreased by as much as 2%, then the volume of waste reduced by 303.4 kg/day. With the existence of this waste bank, even though it is only 2%, it can reduce the rate of waste growth in Magelang Regency.

The reduction in the amount of waste listed above is also felt by the people in the area. In Dusun Cecelan where the Lestari Waste Bank is located, the community feels satisfactory results from the program. The following is a statement from one of the residents in Dusun Cecelan:

"It's very clean now. Before this program implemented, the waste was piled up in one

place (which is now a waste bank). If we pass in front of that place, it will smell bad. Especially if after the rain, the waste goes everywhere. Now it's neat, the trash bin is also look good even though it is from used materials." (Interview with the residents around Lestari Waste Bank on December 13th, 2018, at 1.15 PM)

This supports two previous statements about the effectiveness of the waste bank program in reducing the volume of waste in Sekar Gendis Waste Bank and Lestari Waste Bank. It can be concluded from the calculations made by Environmental Office, that this program is effective in overcoming the problem of waste in Magelang Regency.

2. Efficiency

The source of the waste bank program budget comes from the Government of Magelang Regency grant and the sale of 15% waste bank products is used for the implementation of the waste bank (Ministry of Environment Regulation Number 13 year 2012). This is supported by a statement from Head of Environmental Control and

Pollution Department who stated that:

"After receiving Adipura Award in 2017, we are given more budget to give grants to waste banks. There are 30 waste banks that receive grants namely waste bank management facilities in the form of scales, shelves to put waste, storefronts to store creations made from waste, and administrative books. In addition to getting a grant from the Magelang Regency Government, we collaborated with PERSADA as an NGO from PT. Unilever which provides grant assistance. Even in one of the places the land was represented for the establishment of the waste bank." (Interview with Head of Environmental Control and Pollution Department on October 9th, at 7.45 AM)

This statement is in accordance with was felt by the two waste banks that were interviewed. Each received assistance or gifts from several agencies other than the Magelang Regency Government, not only in the form of facilities but also funds for the implementation of the waste bank program. The Head of Sekar Gendis Waste Bank stated that:

"We received assistance from Mandiri Syari'ah Bank to make this gate and the stalls

that are in front of the waste bank, and also provide assistance in the form of loans. From the Environmental Office also helps in the form of materials such as the facilities we need. There is also from Unilever to provide passbooks for local residents. Last year we got a Silver certificate from Unilever Yogyakarta, so we can stimulate funds according to the certificate.” (Interview with Head of Sekar Gendis Waste Bank on November 11th, 2018, at 4.25 PM)

Similar to the Lestari Waste Bank which is located quite far from the Administrative Region, the Treasurer of the Lestari Waste Bank who stated that:

“From Unilever, it was once obtained, because last year we joined Monitoring and Evaluation (MONEV) and got ranked 22 out of 72 waste banks in Magelang Regency. From Unilever we received stimulant assistance of 750,000 rupiahs which we then bought for waste bank facilities even though out of budget, but Alhamdulillah, there was an addition from one of the Councils as a sign of gratitude to the local people for having cared for the environment around 500,000 rupiahs, but yeah, we have only relied on the results of the collectors. Because we rarely get direct

financial assistance.” (Interview with Treasurer of Lestari Waste Bank on November 11th, 2018 at 1.01 PM)

The income in the two waste banks from the sale of waste to collectors is also as a source of funding for the implementation of waste bank. Income in Sekar Gendis Waste Bank is Rp. 600,000 per month and Lestari Waste Bank of Rp. 560,800, according to the profit-sharing system determined by the Minister for Environment of Republic of Indonesia, which is 15% of the revenue used for bank operations. Then the amount of funding sources obtained by Sekar Gendis Waste Bank is Rp. 90,000 per month and Lestari Waste Bank is Rp. 84,120 per month.

Beside the revenue from the sale of waste that carried out by waste bank, residents also helped increase the income for the needs of waste bank. In both of these waste bank, the citizens raised funds through Family Welfare Development (PKK) contributions per month. The following is a statement from one of the residents

who was a member of the PKK in Dusun Cecelan:

"Every month there are always contributions for the needs of the Dusun, so the needs of the waste bank are also included in the contribution. Sometimes it's a change, this month for a waste bank then the next month for others. Usually each household is asked for 15,000 rupiahs. Not bad for additional waste bank needs." (Interview with one of the society who is part of PKK in Dusun Cecelan on December 13th, 2018, at 1.25 PM)

In the efficiency indicator, it is explained that the assistance obtained is in the form of grants from government and institutions outside the government in the form of facilities such as shelves for storing waste, storefronts to put creations, scales, savings books, materials for waste bank buildings. In addition, self-help funds obtained from waste sales to collectors, creation contests, performance achievement levels that can be seen from the level of achievement where the level determines the stimulant funding assistance to be received. Based on

the efficiency indicators of the waste bank program in Magelang Regency, it can be said that the implementation has been efficient. This can be seen from the limited sources of funds obtained from the government, but in its implementation the waste bank is able to develop.

3. Adequacy

The criteria for sufficiency in the waste bank program are not only how to achieve targets with certain costs, but also how the strategies and mechanisms implemented are able to implement the program well and adequate facilities such as, involvement or cooperation with parties related to the implementation of the program.

In order to achieve a clean environment from scattered waste and to achieve success in waste bank activities that involve the community as managers of activities and place the community as objects starting from the identification of locations, needs, planning, and implementation. The adequacy criteria for the implementation of the Waste Bank

program in Magelang Regency can be seen in the table below:

Adequacy Criteria for Waste Bank Program

| No | Indicator | Waste Bank | D | E | Not Yet |
|----|----------------------------|--------------|---|---|---------|
| 1. | Facility | Sekar Gendis | | √ | |
| | | Lestari | | | √ |
| 2. | Socialization and Training | Sekar Gendis | √ | | |
| | | Lestari | | √ | |
| 3. | Cooperation | Sekar Gendis | √ | | |
| | | Lestari | | | √ |

(Source: Processed by Researchers)

The data above is based on the results of interviews conducted in two waste banks. There is a significant difference between Sekar Gendis Waste Bank and Lestari Waste Bank.

The facility can be said to have fulfilled the adequacy criteria when it is accordance with Article 4 of the Regulation of the Minister of Environment of the Republic Indonesia Number 13 year 2012, which the requirements are building area, floor, ventilation, mechanical

(AC, fan), roof, ceiling, doors, service rooms, scales, lighting and waste bank environment. The facilities at Sekar Gendis Waste Bank are quite complete, such as buildings, shelves, storefronts, scales, offices, tables, chairs, and places of transactions. Sekar Gendis Waste Bank as the main waste bank has not yet integrated its activities and still needs a lot of improvement. Whereas the Lestari Waste Bank facilities cannot yet be said to be complete namely the condition of buildings that have not been proper, such as the absence of offices, waste reception tables, chairs, and tools for compost makers. Despite such conditions, Lestari Waste Bank is still active in carrying out waste bank activities.

Socialization and training can be said to have fulfilled the adequacy criteria if it conducted to provide introduction and basic knowledge about waste bank, to provide a detailed explanation of the standardization of waste bank system, the working mechanism and the advantaged of the waste bank system. The socialization and

training provided to the community has still originated from internal waste bank managers. In Sekar Gendis there was often held socialization and training for the community. Head of Sekar Gendis Waste Bank took the initiative to carry out this activity so that local residents were educated and there was interest in continuing the management so that the program can run for a long time. Sometimes socialization and training are provided by the Environmental Office or Persada. This was also stated by residents who participated in the socialization and training conducted by Sekar Gendis Waste Bank:

"Every week we will get training that given by waste bank. Yesterday we just got training to make handmade creations from plastic which were then made into placemats, bags. There is usually a monthly socialization, but it depends on if there is new news about the waste bank, it will immediately be delivered by Mr. Sugi. He is very diligent in inviting people to take part in waste bank activities." (Interview with on of the residents who is joined in the socialization and training in

Sekar Gendis Waste Bank on December 13th, 2018, at 9.30 AM)

Compared to the Lestari Waste Bank, even though socialization and training are conducted routinely, the manager still lacks of knowledge about the waste bank. This is because socialization and training from both the Environmental Office and Persada are still rarely done at Lestari Waste Bank. This was supported by a statement from one of the residents in Dusun Cecelan:

"There is socialization and training, if the socialization is rare. Most of the socialization is for elementary school as well as training. For the women, they go to training in composting, handmade creation. It is almost rare for the socialization." (Interview with one of the society in Dusun Cecelan on December 13th, 2018, at 1.34 PM)

Cooperation it can be said that have been fulfilled the criteria of adequacy if the cooperation is done sustainable. Cooperation in running a waste bank program is needed so that the program can run well. The

cooperation carried out by Sekar Gendis Waste Bank has been good in the implementation of Sekar Gendis Waste Bank in collaboration with several district, provincial and private agencies. The role of Sekar Gendis Waste Bank as a main waste bank is also a factor in the amount of cooperation that has been carried out, including cooperation with the Communication and Information Office, Agriculture, Food Crops, Plantation and Forestry Office, Mandiri Syari'ah Bank. These collaborations are in the form of facility assistance for waste bank program implementation. Different from Lestari Waste Bank, this waste bank is included as a unit of waste bank located outside the Administrative Region. The collaboration is still less, so far there has only been cooperation with Persada and the Environmental Office.

Observing from the 3 criteria above, the adequacy indicator in this waste bank program is good enough for waste banks near the administrative area, meanwhile for waste banks outside the

administrative area are still difficult. There are 2 factors that influence this, such as the distance and the ability of facilitator.

4. Alignment

The indicator of alignment in purpose is for villages to be able to participate in the implementation of waste banks and be able to benefit the community and the environment. The impact for the community is to get savings through depositing waste in the waste bank and the impact on the environment is reducing waste by burriying or scattering waste around.

In Magelang Regency there are 21 sub-districts where the number of waste banks registered in 2018 is around 516 waste banks (Environmental Office of Magelang Regency, 2018), of the total waste banks and only 30 waste banks receive grants from the Regency Government, apart from several new waste banks starting in 2017. This is also because the sub-district has not started to distribute aid in any form.

The target to be achieved is around 50 businesses/activities each year, but in its implementation there are only 30 waste banks that get the

funds. The Waste Bank Program assistance turned out to bring social jealousy to the villages that did not receive assistance. This also resulted in the community's awareness which was still lacking. Although waste bank buildings in some places are still inadequate, villages that want this assistance can still work together through community self-help to improve facilities that are lacking. This was stated by the Waste Bank through direct interviews as follows:

“About alignment, we don't really know. We do various ways to repair this waste bank. We experience difficulties as an example, members of our waste bank also don't really understand what a waste bank is as much as possible we explain to them according to our abilities. Just like what you look at the condition of our waste bank building, we have just tried to make it feasible to store waste and also creations. There is also a composter, we still make compost with the miniature using large used paint barrels. Behind there, we will build a bigger composter with funds that we get from implementing a waste bank and self-help community.”
(Interview with Treasurer of Lestari Waste Bank on

November 11th, 2018, at 1.20 PM)

Not only the issue of alignment of socialization and training, and facilities but also the even distribution of the number of waste banks in each sub-district is still not optimal yet. Although the distribution depends on the number of villages in the district. However, the number of waste banks in the village is not in accordance with the number of waste banks that get funding sources originating from self-help.

The number of waste banks with a number of waste banks that have a source of funds is quite large. Of the 21 sub-districts in Magelang regency, there are 12 sub-districts which have quite large differences. More than 50% of the total number of waste banks that do not have self-help funding sources. This number is quite large for the waste bank squatting that is not optimal.

5. Responsiveness

Indicator of responsiveness is to assess whether the results of the policy contain values that can satisfy policy objectives. Criteria for responsiveness are important because analysis can satisfy all other criteria. The indicator of responsiveness in the Waste Bank program is the community's response to the program and also the Government's response to the problems experienced by the Waste Bank. This can be seen in increase in the number of waste banks in Magelang Regency from the 2015-2018 period. The number of waste banks can be seen in table below:

The Number of Waste Bank in Magelang Regency in 2015-2018

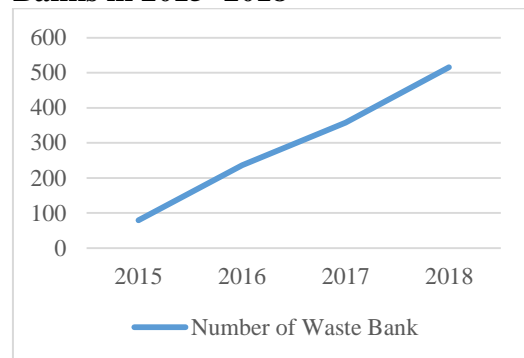
| Year | The Number of Waste Bank |
|------|--------------------------|
| 2015 | 79 |
| 2016 | 157 |
| 2017 | 122 |
| 2018 | 158 |

(Source: Environmental Office of Magelang Regency, 2018, processed)

The table above shows the number of waste banks in each year, the number of waste banks has increased dramatically in 2016. This is because the public account with

the news of Magelang Regency which received the category of "emergency waste" in 2015. It also brought Magelang District to the Adipura Award in 2017 and up to now waste banks have added 158 pieces which have produced a total of 516 waste banks in 2018. Increasing number of the waste banks can be seen in graph below:

Increasing The Number of Waste Banks in 2015- 2018



(Source: Environmental Office of Magelang Regency, 2018, processed)

The graph above shows a continuous increase number of waste bank from 2015-2018 and this can explain the good response of the community in implementing the waste bank program. The community response must also be proportional to the response of the Environmental Agency to the problems experienced by the waste bank in its implementation. This was supported

by the statement of the two waste banks officers interviewed as follows:

"The government's response is good, when we have difficulties in some ways such as facilities. The service also gives us enthusiasm with the awards given when there is a creation exhibition."
(Interview with Treasurer of Lestari Waste Bank on November 11th, 2018, at 1.35 PM)

This was also stated by the Head of Sekar Gendis Waste Bank:

"The response is good and fast, especially since we are a main waste bank, which is arguably quite a lot of needs. Sometimes without us asking from the Office to offer assistance with facilities, they offer the assistance."
(Interview with Head of Sekar Gendis Waste Bank on November 11th, 2018, at 5.00 PM)

Waste bank program can answer the community's desire for the program. The waste bank program is not just a program to reduce the amount of waste in the area but also can provide benefits to the community.

The responsive indicator of the waste bank program can satisfy

the waste bank community and this program can bring Magelang District to the Adipura award in 2017. This shows a reduction in waste with an increase in the number of waste bank in Magelang Regency.

6. Accuracy

Indicators of accuracy referring to the results achieved from the program which are useful or appropriate to the target group. The accuracy of the program refers to the objectives and the accuracy of targets. The aim of this program is to reduce the volume of waste in Magelang Regency although in its implementation the volume of waste in Magelang Regency has only decreased by 2% of the total volume of waste.

Based on observation in the field the waste bank program is very useful for the environment. It is because based on the target of the waste bank program is the community that always produces waste every day. The target of the waste bank program for each village in 21 sub-districts in Magelang Regency.

The results of the evaluation based on the previous criteria also show that the waste bank program provides value and benefits to the community because with the existence of the program the problem of waste can be minimized. The following is the statement of the waste bank:

"With this program we feel helped by the waste problems here. It's very right on target, because in addition to reducing waste in our village this program also increasing awareness of citizens to protects the environment." (Interview with Head of Lestari Waste Bank on November 11th, 2018, at 1.40 PM)

This was also stated by Sekar Gendis Waste Bank that the environment around the waste bank became cleaner, tidier and more beautiful. Community awareness of environmental cleanliness is increasing. The following is the statement of Head of Sekar Gendis Waste Bank:

"Of course it's accurate, people usually throw waste carelessly. Most often in the sewers around this, not to mention the trash cans are

usually full of neglected waste until it scattered everywhere. Now residents are aware of environmental cleanliness. For example, when there is plastic waste spread on the streets, resident who sees it will throw the waste into the trash can." (Interview with Head of Sekar Gendis Waste Bank on November 11th, 2018, 5.30 PM)

Based on the observations in the field the waste bank program is very useful for the community. It is seen from the program's goal to make the community more active and care for the environment which is directly part of the community's habits. The target of the waste bank program is for all villages in 21 Sub-districts in Magelang Regency, and almost all villages in 21 Sub-districts are managed by the Environmental Office within these 3 years.

In the indicator of accuracy, the waste bank program is very useful for the community and the desired results are in accordance with the objectives of the program. In addition, the program is already

accurate for the village environment in waste management.

Conclusion

1. Evaluation of the waste bank program in Magelang Regency in 2017-2018 has been going well but has not been optimal yet because there are still some obstacles such as equitable distribution of facility, social jealousy, lack of socialization from the Government, and lack of cooperation.

2. In evaluating the waste bank program there are factors that influence the implementation such as inhibiting factors, among others: distance from the administrative area, awareness of people who have not fully cared for the environment, and the distribution of programs that are not optimal because they are sometimes hampered in the Sub-district and not continued to villages.

3. The supporting factors are: the willingness of citizens to run the waste bank program, the appreciation shown by the government to the waste bank community in the form of prizes through creation contests, and

the benefits felt by local residents with the existence of waste banks in their neighborhood. The implementation of the waste bank program is expected to overcome the waste problem which is one of the main problems in Magelang Regency, so that people can live more comfortable and have healthy life.

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