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## **THEORETICAL CHASM ON WASTE MANAGEMENT IN BANDUNG REGENCY\***

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### **Abstract**

This study discusses the theoretical constraints in understanding the program of Bandung Regency's Environment Agency related to waste problems, how it is implemented, especially in Kamasan Village, Banjaran District, Bandung Regency and the supporting and inhibiting factors that occur in the village Kamasan, Banjaran District, Bandung Regency. This research refers to Talcott Parsons's theory of Structural Functionalism. Talcott Parsons is famous for four functional imperatives for the "action" system, namely AGIL scheme. Parsons believes that there are four functional imperatives that are needed or become characteristic of the whole system, namely: adaptation, achievement of goals, integration and maintenance of patterns. The method used in this study is a qualitative approach with descriptive methods. The data source in this study uses primary and secondary data sources. Data collection techniques are carried out by observation, in-depth interviews with informants and documentation. Analysis of the data used is data reduction, data display, drawing conclusions and verification. The location chosen as the research object is Village Kamasan, Banjaran District, Bandung Regency. The research results prove that by implementing the Zero Waste program at the community units (RW) level, the society can process the waste into zero and can utilize the waste efficiently.

*Keywords:* Bandung transition city, community development, West Java, zero waste

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## 1. Introduction

The environment is the place of life for all beings on earth, especially humans. But not only humans are in it, but there are also animals and plants which play an important role in the preservation. When someone talks about the environment, what is usually thought is things that are around humans (Norberg-Schulz, 1979). The environment in the narrow sense is nature around human habitation. The environment in its broadest sense is the whole of nature and its contents in this universe. As far as humans know, the earth is a planet that has life. The physical components that make up the environment are the atmosphere, the hydrosphere, the lithosphere, and the earth's crust. The part of the earth that has life is called the biosphere. The biosphere consists of biotics (non-living things) and abiotic (living things). Examples of abiotic components are soil, water, air, temperature, light, water, and wind. The examples of biotic components are humans, animals, and plants (Cavicchioli et al., 2019).

All living creatures are an important part of their living environment. All components in the environment are interconnected so that a network of life is formed. The environment in which there are biotic and abiotic components that support and interact with each other is called an ecosystem (Fanin et al., 2019). Humans are social beings, since they were born, they cannot be separated from the others and have a reciprocal relationship with the surrounding environment. This means that humans cannot live alone and need other people and their nature. Humans always communicate and interact with other humans and even make small groups in society. These small groups will later form a broad unit called society, state, and civilization.

Public awareness of the environment is still low while creating a beautiful, clean, healthy environment is a shared responsibility. If humans do not protect the environment, they will get a negative impact on the surrounding environment and society, as stated in Article 28H paragraph 1 of the 1945 Constitution. *"Every person has the right to live physically and mentally, live, and get a good and healthy environment and has the right to health care."*

In-Law Number 32 the Year 2009 article (1) concerning environmental protection and management, paragraph 6-7 is explained, that the preservation of environmental functions is a series of efforts to maintain the continuity of the carrying capacity and capacity of the environment. And the carrying capacity of the environment is the ability of the environment to support human life, other living things, and the balance between the two (Hancock, 2019). With this law, the community should safeguard and preserve the environment. Because if not, the environment will experience fatal damage and can disrupt the survival of humans.

The position of man is very decisive because humans have the mind that is its privilege. With reason, humans can do and act far more perfectly than other living creatures. Unfortunately, humans often act and do wrong because they are driven by lust, for examples throwing garbage into the river, stockpiling garbage on the streets and markets, or rivers (Stoett, 2019).

While the factors that are interesting to be examined in this research are what are and how the implementation of the Environment Agency program is carried out in Kamasan Village so that they can control and process waste. Departing from the reality of the above conditions, researchers want to examine more about the waste management effectiveness further was done by the Bandung Regency Environment Agency, especially in Kamasan Village.

According to Law Number 18 the Year 2008, waste is the remnant of daily human activities or natural processes that are solid ("Undang-Undang Republik Indonesia Nomor 18 Tahun 2008 Tentang Pengelolaan Sampah," 2008). Waste is a solid material or object that is no longer used by humans or solid objects that have not been used again in human activities and are discarded (Lagerkvist and Dahlén, 2019). Based on this limitation, it is clear that

waste is the result of human activities, which are discarded because it is already useless. So that not all solid objects that are not used and discarded and disposed of are called garbage, for example, natural objects, objects that come out of the earth due to erupting mountains, floods, trees in the forest that fall due to the wind, and so on. Thus, the waste contains the following principles: (1) The existence of something or solid object; (2) There is a direct/indirect relationship with human activities; (3) The object or material is not used anymore. Based on the above meanings, it can be concluded that waste is an object from the rest of daily human activities. Or a natural process that is no longer used and is in the form of solid material which is a common pollutant that causes a decrease in environmental, aesthetic values. If not being well utilized, it will bring various types of diseases, reduce the value of resources, cause pollution, clog waterways, and various other negative consequences.

The main objective of this study is to analyze 1) the theoretical constraints in understanding the Bandung Regency Environmental Service program on waste problems, 2) how the Bandung Regency Environmental Services program is implemented on waste problems especially in Kamasan Village, Banjaran District, Bandung Regency and 3) what are the supporting factors and inhibitors that occur in the village of Kamasan, Banjaran District, Bandung Regency.

This work is divided in three main parts:

- regarding the location where the case study was conducted along with an explanation of the data collection;
- a discussion about the development of community participation in waste management. This discussion is needed so that this study can be placed in the existing knowledge map;
- a discussion of what happened to community participation in the handling of waste at the place of the case study was carried out, namely in Bandung Regency, West Java, Indonesia. This discussion is focused on how socialization until participation is carried out. This is important because there must be community participation if the waste management program wants to be successful.

## **2. Materials and methods**

The method used in this study is a descriptive method, which is to describe what is currently valid. In it, there is an effort to describe, record, analyze, and interpret the conditions that currently occur or exist. The most important data sources in this qualitative research are the words and actions of the actors in waste management activities. While data such as documents and others are added as additional data (Mihias, 2019). The primary data is from the chairperson of the waste management department of the Bandung Regency Environment Agency, guidance, facilities and infrastructure, environmental facilitators, village cadres, village officials, PKK (*Pemberdayaan Kesejahteraan Keluarga*; Family Welfare Empowerment) mothers, RW (neighborhood) heads, and the community. They provide data information as needed. This primary data can be obtained through several research instruments which are packaged in the form of data collection techniques.

In this approach, the researcher becomes an instrument that seeks to understand and interpret the meaning of an event in human behavior interactions in certain situations according to the perspective of the researcher himself (Merriam and Grenier, 2019). The author conducts interviews directly by preparing several questions before the interview is conducted to find out views, opinions, statements, or facts that are seen and experienced by respondents and informants. Interviews were shown to the Environment Agency Administrators, to the Village Officers, Pioneers, cadres, and residents of the surrounding communities of Kamasan Village, Banjaran District, Bandung Regency. This research was

conducted using simulation observations in the intended location. To get factual data about the dynamic state of the object of research.

In analyzing the data obtained, researchers used descriptive qualitative analysis techniques, namely the data obtained are analyzed and presented in the form of words both verbally and in writing. This technique aims to describe and understand and interpret systematically the facts and data obtained from an event. As well as clarifying the description of the results of research obtained both from interviews, observations, and literature studies, the stages in analyzing the first data are interviews, interviews conducted with resource persons to find out the views, information, and reality experienced by respondents and resource persons. There were many speakers involved. Those are Ms. FB as Head of Waste Management at the Environment Agency, and Mr. LL as Head of Section for Development of Infrastructure and Facilities of the Environment Agency. There was also Mr. P as Guidance and Supervision of the Environment Agency, Mr. HP as head of Kamasan Village, Mr. AS as bank chairperson garbage Warung Cilung in Kamasan village, Mr. LL as the secretary of the waste bank Warung Cilung in Kamasan village. Then doing field observations to collect data and observe the conditions in the field and collect data with the help of various materials such as books, magazines, and documents.

### 3. Results and discussion

#### 3.1. Zero Waste Management Program Environmental Agency

Zero Waste contains the meaning of a community environment at RW level, which the community can independently process the waste into zero, meaning that waste is managed in an integrated and effective manner so that it does not come out of its neighborhood. Waste in the environment is made of various uses and functions with concepts from the community and for the community. Zero Waste is a form of environmental saving that is carried out locally and integrated. If it is done massively, it will certainly have an impact on aspects globally. This is because local scale environmental management, such as waste management, can have an on environmental pollution control. Zero Waste applied to every residential area both in rural and urban areas. To provide solutions for waste management. This is based on the understanding that existing waste can be processed by sorting waste from the source. for organic waste through the *Lubang Cerdas Organik* (LCO) and composter media, while inorganic waste is channeled through the establishment of a Waste Bank (Interview with Mr. P, a head of section for supervision and evaluation of the Environment Agency, 13/2/2019).

Information from the informant above that, politicizing local potential is not merely a tourist attraction and cultural diversity; there are things we need to do to make productive communities by sorting out waste and making the waste as a superior product and creative garden. Not only that, with the denser area of villages in Bandung Regency and the availability of land getting narrower, the Environment Agency cooperates with village cadres to make the room skate to become a waste bank. Of course, this becomes an open space to interact with each other, and there are social and economic functions produced (Interview with P, 13/2/2019).

In addition to having social and economic functions, the waste managed by the waste bank is then sorted into compost. Compost produced for planting media needs is then marketed. There is an economic side to be gained, and the community is certainly sympathetic and directly active in integrated waste management.

The aim of the Zero Waste program is to make people have the ability to manage waste in their environment based on awareness, participation, and active roles of all citizens, which in turn processed by their respective households. So, if the community has been able

to handle waste with the principle of Reduce, Reuse and Recycle the government can save on the cost of transporting waste and if it is successful then the costs used for the waste problem can be utilized for other infrastructure which is more useful as an example for the cost of education and hospital preparation (Interview with P, 13/2/2019).

The environmental agency has a goal as concrete steps to achieve the goal, the first step of the Agency of socializing in each village, is not enough to just socialize the agency to prepare Environmental Facilitators to be distributed to every village in Bandung Regency to help cadres simulate how to process waste. Based on the results of the zero waste guidebook in which it states: "The goal of zero waste is the establishment of a RW scale communal-based waste management system model that involves the active role of RW administrators and their communities, so that they can handle and reduce waste in their environment which is strengthened by local wisdom and community-based innovation, so that it no longer throws garbage out of its environment (Dinas Lingkungan Hidup Bandung, 2018).

The Environment Agency as the main initiator of the zero-waste program has more responsibility. Systematic steps are taken, starting from coordination regarding the dissemination and provision of heavy materials and equipment needed. This pattern of work is very structured, and the community as an object of this program takes part. Of course, the Environmental Agency wants an optimization of an appropriate waste management program. (Interview with L, a head of section for the development of facilities and infrastructure for Environment Agency, 12/2/2019).

### *3.2. Zero Waste Processing Method*

#### *3.2.1. Pokasih (Pojok Edukasi Bersih) (Clean Education Corner)*

The concept offered by the Environment Agency as the main initiator of the Zero Waste program is to change the wild garbage disposal site into a clean waste education corner. The concept of *pokasih* (*pojok edukasi bersih*), namely by making green plants that are equipped with the provision of garbage bins, determining management officers who convey information about efforts to reduce and handle waste starting from the Sorting, Selecting, and Processing the garbage sources. The information delivered directly or indirectly through distributing brochures and leaflets. Even though it is temporary, this educational corner has a positive impact on the surrounding community. There is education offered, so that people have more access to know good waste management, especially caring for a clean environment as a place of interaction with each other. This clean education corner is part of the residents' response, not just management and waste banks. However, the importance of this clean education corner is that there is a green open space for activities in the RWs.

#### *3.2.2. Lubang Cerdas Organik (LCO) (Organic Smart Hole)*

*Lubang Cerdas Organik* (LCO) is a bio pore hole made as a strategic alternative for handling organic waste, which can be made in the home yard as a composting medium. Based on the results of the analysis that the composition of community waste is 45-60% in the form of organic waste. The making of LCO aims to motivate people to sort organic and inorganic waste, starting from garbage sources (households). This bio pore hole is also useful as a water catchment space, as well as a place to hold organic waste into compost.

#### *3.2.3. Waste Bank (Bank Sampah)*

Waste banks are the concept of collecting dry waste (e.g., paper, cardboard, cans, magazines, and other plastic waste) originating from home to maximize citizen participation and take economic blessings from waste. Efforts to optimize the value of waste include: (1) Creating a healthy, clean, green and beautiful environment. (2) Reducing the amount of

waste to the Final Disposal Site. (3) Changing community behavior. (4) Educating the community to care for the environment and to organize. (5) Increase creativity. (6) Providing benefits for waste producers. With the implementation of such a system, it is hoped that the community will be motivated and more enthusiastic in sorting waste from its source. Because the benefits of a waste bank can create a healthy, clean, green and beautiful environment, reduce the amount of waste to landfills and change people's behavior.

#### 3.2.4. Keranjang Takakura (Takakura Basket)

*Takkakura* 'basket' is designed to treat household waste organic waste, such as food scraps, vegetables, or dried leaves. Materials that must be prepared to make *Takkakura* baskets are also simple, among others: baskets that can be bought at supermarkets or public sale points, two pads of husks, cardboard, cloth, and compost from community organic waste. Based on the results of the above observations for people who have a large yard, it is advisable to make an organic smart hole because LCO is larger and can hold more household waste, but for people who do not have a page can use *takkakura* basket because of how it is used easier.

### 3.3. Program Implementation

This garbage bank of the Featured Citizens Love the Environment was established on August 8, 2018. This waste bank stands based on the problem of garbage that is piled up and uncontrolled in a landfill, and this garbage bank was established because it was inspired by the socialization carried out by the Environment Agency. But the establishment of this garbage bank is not as easy as it seems now. First, this garbage bank received a rejection from Kamasan residents. The reason is that they fear that garbage banks do not work and cause new problems. The waste bank as the main concept of this activity is indeed a barometer of success, and this garbage bank is not saving waste in one place but managing waste by using all-purpose management. There are social and economic values that arise, and these activities have a good impact on the environment. With the existence of a waste bank, the community will be accustomed to regulating a clean lifestyle as stated above, the rejection of part of the social development pros and cons, good planning and evaluation and the support of the adequate Environmental Service will be beneficial.

Along with the passage of the waste bank, encouragement from various parties continues to arrive, both from environmental activists, as well as from research institutions that focus on the study of waste. Integrated waste management certainly has benefits and produces appropriate value, thus there is no more garbage piled up on the side of the road, and in the river that invites a foul odor. Good management will produce a quality product. After the survey was completed, socialization began in the village of Kamasan (Interview with A, 12/3/2019).

The surrounding community began to be able to accept this garbage bank, because the community was given an understanding of the socialization carried out by village cadres assisted by the official, the community together helped the process of forming this waste bank, starting from helping to clean up garbage, painting waste bank areas and nurseries (Interview with A, 12/3/2019). After starting tree planting and structuring the area, the conditions of the landfill were arranged, and there was no garbage piled up again, the purpose of this park-based garbage bank is to make the environment beautiful, clean and beautiful. This garbage bank park can be a supplier of plants and fruits, and as time goes on, nurseries have started to sell (Interview with C, secretary of the waste bank of Warung Cilung Kamasan Village, 09/2/2019).

The response of the community is good in the construction of this garbage bank, the residents take part and are enthusiastic in the construction of the garbage bank. It is from the

cooperation that the community does from starting to take part in the stages of garbage cleaning, socialization, composting, painting and nurseries (Interview with K, Kamasan villagers, 10/3/2019). Based on the results of field observations that the Warung Cilung waste bank already has a complete organizational structure. And more organized in terms of administration. This organizational structure serves to help run the Cilung stall waste bank to be more organized in carrying out daily operations (Interview with C, 09/3/2019).

### *3.4. Implementation phase*

The implementation stage in the waste bank of the superior community of love for the environment is that people sort the garbage in their homes first into organic, organic, and b3 after the waste is categorized as organic-inorganic, and b3 new garbage is taken to the waste bank for sale. This garbage bank park can be one of the ways to improve the economy except that most people cannot see the benefits of waste, in Bandung Regency alone, produces as much as 1440 tons/day of waste. If one family head can maximize one kilo a day of waste processing multiplied in one week, one family head can get approximately 15,000 in a week from garbage (Interview with C, 09/3/2019).

Garbage is actually an economically valuable component, from plastic only if collected it can sell, from waste food scraps can be used as compost not to mention mineral water bottles, packaging of sachet coffee and clear oil packaging can be reprocessed into crafts or goods that higher selling power (Interview with M. Kamasan villagers, 20/1/2019).

The place to make craft-organic waste is usually done at the village hall because there is a special room for Family Welfare Development. The members aside from members of the Family Welfare Development Program, there are people who used to follow him because this training included empowerment for the community so that it is open to the public. Because garbage can also be used as household furniture, which results are not inferior to artificial furniture (Interview with E. PKK chief of Kamasan, 10/3/2019). The production from waste processing is sold at the Village Hall so that if there are people who want to buy it, the community goes to the village hall, this product is also commonly promoted on bazaar purposes to introduce to the public so that this product sells on the market.

Another innovation in waste management is *Pokasih*. That is a clean educational corner, *pokasih* is shaped like a park which provides seating and tables for people to talk to each other. The concept of *pokasih* namely by making a green park that is equipped with the provision of garbage bins.

The Composter program conducted in Kamasan Village is collecting the remaining organic household waste such as vegetables and fruits, how to process organic waste into compost is by drying the remaining waste from vegetables and leftover cooking fruits (Interview with Y, Field of Waste Management in Warung Cilung, Kamasan Village, 10/3/2019).

Based on the observations of the Kamasan villagers, they usually deposit their trash every Monday and Thursday, the community carries organic waste that has been collected for a week, after collecting garbage in the sun to dry and then put it into an organic chopping machine for three times so the results are perfectly soft. also given by the Environment Agency to support the running of the waste bank. In addition to the organic enumerators, the Agency also provided three wheel motorcycles (*Cator*) to go around the village to see if there is rubbish scattered on the road or transporting community waste to a temporary dump. (Interview with C, 09/3/2019).

The situation of the village of Kamasan gradually improved every day, which used to be a lot of garbage scattered on the road now begin to change better, public awareness begins to grow to control waste, good cooperation carried out by the community, cadres, and officials become to support the success of the program. Besides the composter, there are

other alternatives for making compost, but with different materials, namely LCO, intelligent organic holes are waste media that can be done on the home page or green open space with a depth of 80-100 cm and a diameter of 10 cm. (Interview with C, 09/3/2019).

The compost fertilizer can be used as a planting medium. When compared to pure compost in terms of cheaper prices because the ingredients are made of objects around us, the fertilizer can be put into pots and can be planted with plants such as carnations, rosemary, lavender, broccoli, and pigtailed other than plants, fruits can be planted like strawberries, guava, mango and many others (Interview with A, chair of the waste bank Warung Cilung Village Kamasan, 12/3/2019).

### 3.5. Monitoring phase

Zero Waste makes people have the ability to manage waste in their environment based on awareness, participation, and the active role of all citizens. To achieve this goal, the community is encouraged to be able to understand zero waste, especially methods of waste management such as waste banks, organic smart holes, composter, *Pokasih* and *Takkakura* baskets to see whether the waste management activities included in the Zero Waste program are carried out. Implementation of the program. Based on the results of field observations, the monitoring and evaluation phase was initially carried out by pioneers who came to each village once a month. See changes that have occurred to report to the Agency. After the report was received by the department and analyzed, the Agency opened a meeting forum for pioneers and cadres in each village to share and share knowledge (Interview with S, environmental companion, 01/3/2019).

After the meeting completed, it was later held at the evaluation stage. In this stage, each cadre of village representatives spoke about the things they needed to support the program because in each village there is a difference in what is needed, some needed a greenhouse, organic enumerators, costs, or *cator* motors to support the running of the Zero Waste program (Interview with C, 09/3/2019).

### 3.6. Supporting factors

#### 3.6.1. Land availability

The availability of sufficient land to manage waste into various kinds of creativity is one of the factors supporting the success of this activity. Thus, the community is more extensive in managing waste, without any obstacles regarding land, the availability of land is certainly utilized as much as possible. Slowly, the existence of these activities will have a good impact and lead to collective awareness in Kamasan Village (Interview with C, 09/3/2019).

The enthusiasm of the community towards garbage banks shortly is beginning to increase. Evidence of the collaboration that embodies the Kamasan Village environment becomes beautiful. Collective and individual awareness arises about their habit of removing the trash. The realization of this was the commitment of the Environment Agency in facilitating equipment for waste bank activities.

#### 3.6.2. Equipment Assistance

The garbage *cator* motorbikes facilitated by the Environment Agency are the vehicles to go around once a week to collect community waste. Of course, this facility greatly helps accelerate the distribution of garbage to temporary landfills. After arriving at the landfill, this garbage is managed together to produce aesthetic value and selling value.



In addition to the assistance of the *cator* motorbike, the Environment Agency also facilitates organic chopping machines, the use of which is to chop dry organic waste and be processed into compost for the purpose of collecting the waste that is properly organized. Organic chopping tools also facilitate the work of waste managers (Interview with A, 12/3/2019).

### *3.7. Obstacle factor*

Although many factors support the implementation of waste management, there are still a number of factors that hamper the running of the program, some of which are as follows:

#### *3.7.1. Community participation is still low*

Kamasan Village as a village that already has a Waste Bank program has not yet reached its maximum point, even though the Environmental Agency has provided supporting facilities for Waste Bank methods and programs, but there has been no increase in community participation in the maximum level of awareness. Lack of participation is an obstacle to the smooth running of the program. Collective and individual factors that cause low awareness of citizens are due to busy activities outside the home. So that only certain people know waste management. This waste bank is a medium of awareness in the community. Communities that previously did not have individual awareness collectively will build up their collective consciousness. From this activity, the impact is not only on the cleanliness of the environment, but a sense of social solidarity has also begun to develop itself.

Waste is a problem because from the beginning the culture is not created since birth, it is not told how to process waste at home, besides that the people are not wise in managing waste, at least the waste produced can be accounted for each. Aside from the lack of public awareness, there are still other factors seen from the fact that there are still few people who can make handicrafts from recycling waste. (Interview with C, 09/3/2019). "Indeed, the obstacle in processing this waste is that people's participation is still low, the reasons from the people are different, there are those who are lazy, some are diligent, some respond positively, some respond negatively, some are busy, so there are people who are aware which isn't the point yet" (Interview with M, 26/4/2019).

#### *3.7.2. Human Resources Readiness*

Seen from the research above the constraints of the implementation of this program is the limited readiness of human resources to run the system. Which is not all that people can do in making handicrafts from garbage and have not yet moved their hearts to contribute to the implementation of this program. (Interview with C, 09/3/2019).

Seen from the above research, the problem in implementing the program is that the training or empowerment carried out by the government has not been maximized and comprehensive, because making crafts is difficult, requires patience and tenacity for those who make it and sometimes has an impact on the craft production factor itself. (Interview with K, 10/3/2019).

#### *3.7.3. The distribution of craft products is still difficult*

Based on observations in the field, one of the inhibiting factors of the implementation of the waste bank program, Warung Cilung in Kamasan Village, Banjaran District, Bandung Regency, is the difficulty in distributing handicrafts as a result of organic waste management. Items from handicrafts are difficult to market because there is no place to sell crafts. Thus,

the people need help from the government to distribute the craft. (Interview with A, 12/3/2019).

Based on the results of the research above the obstacles that occur in the implementation of the program, one of which is the distribution of goods. As a villager in Kamasan who is still confused and does not know how to make good distribution of goods that have been made by residents piled up and has not been sold, the government should be able to find a solution to this problem. (Interview with M, 26/4/2019).

#### 4. Conclusions

Zero Waste implies a community environment at the RW level, which the community can independently process waste into zero, meaning that waste is managed in an integrated and effective manner so that it does not come out of the RW. Zero Waste aims to make people have the ability to manage waste in their environment. This philosophy is based on awareness, participation, and the active role of all citizens. Activities carried out by the Environment Agency are to hold a Socialization on processing waste in which there are several methods of processing waste including; *Pokasih*, LCO, composter, garbage bank, and *takkakura* basket.

The implementation of the program is carried out in the village of Kamasan, Banjaran district, Bandung Regency through three stages, namely the planning, implementation, and monitoring stages. Planning is formed based on the problem of garbage that is piled up and uncontrolled in a landfill. Planning also involves all adult residents in the RW. The implementation phase in the waste bank of the leading citizen of love for the environment is that the community sorts the garbage in their house first into organic, organic, and b3. After the waste is categorized, then the waste can be processed, namely that organic waste through the composter media and LCO while inorganic waste through the waste bank media, the results of which can be sold or made into handicrafts. At the monitoring and evaluation stage, it is initially carried out by environmental assistants who came to each village once a month. Seeing the changes that have taken place, to report to the Office the extent of the implementation that occurred in each village. After the report was received by the department and analyzed, the Office opened a meeting forum for Environmental Facilitators and cadres in each village to find out what were the obstacles in implementing the program and sharing and sharing knowledge.

Based on the results of observations and observations in the field, there are supporting factors and inhibiting factors in overcoming waste, and this effort is carried out in an integrated manner so that the waste managers do the maximum. To maximize this, there are several supporting factors such as the availability of sufficient land to manage waste and the assistance of equipment (*Cator* Motors and Enumerator) from the Environment Agency. Although many factors support the implementation of waste management, there are still a number of factors that obstruct the running of the program, some of which are the low participation of the community, the limited availability of resources to run the system, and the difficulty in distributing handicrafts.

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