The Effectiveness of Waste Bank Management with Simple Accountancy in The Marga Mulya Bekasi Society

Endah Prawesti Ningrum
Universitas Bhayangkara Jakarta Raya
endah.prawesti.ningrum81@gmail.com

Novita Wahyu Setyawati
Universitas Bhayangkara Jakarta Raya
fara_kitty@yahoo.com

Abstract
Green and Clean 2017 is one of the Jakarta government’s programs to realize the city of Jakarta as a pioneer of a healthy, pollution-free city and a leading country pioneer in new breakthroughs in the field of hygiene. The management of household waste has not been well coordinated so it needs an effort to empower the community about household waste, namely the provision of counseling and technical guidance on the separation of wet and dry waste and the weighing stage until the final process where they can make a profit. Costs and benefits in the process are recorded with simple bank bookkeeping. Gradual and continuous collaboration between waste managers who have a creative, innovative, reliable and honest character with member of Family Welfare Program (Pembinaan Kesejahteraan Keluarga/PKK) in the neighborhood of RT 005 / RW 001 in Bekasi City who actively participate will create a clean, beautiful environment and increase income for people in their environment

Keywords: Waste Bank Management and Simple Accountancy

1. Introduction
The waste bank was born from the Jakarta Green and Clean 2017 program as one of the ways to manage household waste that focuses on empowering communities to manage household waste. A waste bank is a place to store waste that has been selected according to the type of waste. Waste in waste banks is waste that has economic value. The way a waste bank works is generally similar to other banks, there are customers, bookkeeping records, and management. If at the bank we usually know that the deposited customers are money but in the bank, the deposited waste is waste that has economic value. Bank waste managers must be creative and innovative and have an entrepreneurial spirit to increase community income. The household-based waste management system is carried out by providing rewards for the success of sorting and storing some waste (Unilever Green & Clean, 2010). Waste banks as a place for people to save in the form of waste are an alternative method of effective waste management that is safe, healthy and environmentally friendly where waste is distinguished in type and managed to economic value

The concept of a waste bank is not much different from the concept of 3R (Reduce, Reuse, Recycle). If the 3R concept is emphasized, it will reduce the amount of waste produced by using or recycling it. The concept of a waste bank is most emphasized about waste which is considered useless and has no benefits but can provide its own benefits in the form of money. This makes people motivated to sort out the waste they produce. The waste
sorting process reduces the amount of landfill generated from households as the largest waste producer in urban areas. The concept of a waste bank makes people aware that waste has a selling value that can make money so they care to manage it. Waste management from sorting, composting, to making waste as an item that can be reused and economically feasible (Aryenti, 2011).

The concept of waste banks is a waste management solution in Indonesia based on the final approach. This program makes waste begin to be managed from the beginning of the source of a landfill, which is households. Selection is carried out by the community from the beginning to make a pile of waste produced and taken to landfills to be reduced (Medan Green & Clean, 2010). The existence of a waste bank provides economic value for the community, the benefits of so much waste need to be simple bookkeeping training in managing a waste bank. At the beginning of field observations, waste in RT.005 / RW.001, waste has not been managed properly. Wet and dry waste is still mixed together, while dry waste (such as aqua bottles, detergent packages, etc.) is well managed by residents so that it can generate additional household income in cash or in household needs. (soap, toothpaste, detergent, sugar, soap, oil, rice and others).

The beginning of the implementation of this waste bank was rather difficult for management because of the need for good cooperation between RT.005 / RW.001 board members and residents and cooperation with a collector of a junkyard to accommodate the residents’ dry waste which was well coordinated and trusted. Looking at the initial conditions in the field and relating to waste transportation, weighing, recording or bookkeeping, and finance, training is needed on Waste Bank and training on simple bookkeeping. Prior to counseling, our team had previously entered the field to coordinate with each household to start separating wet and dry waste, so that later the counseling could be practiced immediately in technical implementation.

2. Literature Review

Waste Theory

Waste has a lot of understanding of the limits of science. But in principle, waste is a material that is wasted or disposed of from human and natural activities that do not have economic value. The form of waste can be in every phase of the material, namely solid, liquid, and gas.

According to Subarna (2014), the notion of waste is material that has no value or is not valuable to be used normally or specifically in production or use, damaged goods or defects during manufacturing or excess materials or waste.

In Indonesia, around 60-70% of the volume of waste produced is a wet waste with water content between 65-75%. The largest source of waste comes from traditional markets and settlements. Traditional market waste, such as the side dishes and vegetables, throws almost 95% of organic waste. Waste in residential areas is far more diverse. At least 75% of the total waste includes organic waste and the rest is an inorganic waste. The form of waste is divided into solid waste, liquid waste, and gas in the form of gas (fume, smoke). Solid waste can be divided into several types, namely:

- a. Based on the chemicals contained therein, among others:
  1) Inorganic waste (waste containing chemicals) for example metals, broken glass, and plastic.
  2) Organic waste (waste that does not contain chemicals) such as food scraps, wrap residue and others.

- b. Based on whether or not it can be burned, among others:
  1) Flammable, for example, paper, plastic, cloth, and wood
  2) Not flammable e.g.: cans, iron, and glasses.

- c. Based on whether or not it can be burned, among others:
  1) Easy to root for example paper, plastic, cloth, and wood.
  2) Hard to root for example plastic, cans, glass.

In general, the type of waste is simplified into organic and inorganic waste. Organic waste or wet waste is waste that comes from living things, such as leaves and kitchen waste. This type of waste is very easily decomposed naturally (degradable) so it can rot and can be used as fertilizer, namely compost, which is useful for agriculture as fertilizer plants. Inorganic waste or dry waste is part of the dry waste, waste that cannot rot but can also be used to be recycled as raw materials such as plastic and glass.

Waste Bank Management Theory

Waste management is carried out by most people so far, by burning and throwing waste in vain, and with chaotic transportation systems. If not done early handling of waste can cause global warming as a result of burning waste and do not rule out the possibility of the emergence of the wild landfill (TPA), which can interfere with public health and environmental cleanliness (Suwerda, 2012).

Waste bank management is done by way of the customer registering with the manager, the manager will record the customer’s name and each member will be given official savings. For customers who want to save waste, the way is easy by coming to the waste bank office with waste, the waste to be saved must be sorted according to the type, such as paper, plastic, bottles, cans, iron, aluminum and others put in separate pockets (Medan Green and Clean, 2010).

The waste to be saved must be clean and dry. The waste bank teller will weigh, record, label and put waste in the space provided. Customers who have already saved can withdraw their money in accordance with the agreed terms, for example, 3 or 4 months can take the money. Savings schedule is determined by the manager. Recording in the book of savings will be the benchmark of how much money has been collected by each customer, while the waste bank provides prices based on market prices from the waste collector. In contrast to banks in general, saving in a waste bank does not get interested. For administrative purposes and the wages of management,
workers will cut customer savings in accordance with the price of the temporary agreement, the funds raised will be managed by the treasurer (Unilever Green & Clean, 2010).

**The Role of a Waste Bank**

The role of Bank Waste exists in the theory of exchange. “The exchange theory emphasizes the behavioral sociology to focus on the relationship between an actor’s influence on the environment and the environmental impact on the actor. This relationship is the basis for operant conditioning or learning processes that go through behavior caused by its consequences.” (Ritzer and Douglas, 2007). This theory develops in appreciation and punishment. A waste bank is a local institution whose strength is not so large. Waste cannot punish the community, so the Waste Bank must use a reward system. The process of environmental awareness through saving waste is valued with money or rupiah changing the paradigm of society about waste. Waste that must be removed becomes useful.

**Urban Development and Environmental Problems**

A city is basically a meeting place between countries. Cities in the developing world with different characteristics, because the development of the city is strongly influenced by the geographical situation of the city which affects the function and form of the city, while history and culture will affect the characteristics and social characteristics of the city (Soekanto, 2004).

The city is a residential area that is physically represented by a collection of houses that dominate the spatial layout and have various facilities to support the lives of its citizens independently. Understanding the city as applied in Indonesia including understanding the city in English. In addition, there is also the capital city of the city which is the administrative unit of the state under the province.

**Entrepreneurship**

Entrepreneurs are decision makers who help build a free enterprise economic system. Most of the drivers of change, innovation, and progress in our economy will come from entrepreneurs; people who can take risks and accelerate economic growth.

According to John J.Kao entrepreneurship is an attempt to create value through the introduction of business opportunities, proper risk-taking management, and through communication skills to mobilize someone, human, money and raw materials or other resources needed for others needed to produce a project that must be done well.

Based on the opinions of experts concluded that entrepreneurship is things or efforts related to the creation of activities or business or business activities based on their own will and build a business or business with the will and ability alone.

**Effectiveness**

Effectiveness is one of the achievements of the organization. To get the theory of effectiveness researchers can use concepts in management and organizational theory, especially those related to the theory of effectiveness. Effectiveness cannot be equated with efficiency because both have different meanings, although in various uses the word efficiency is attached to the effectiveness of the word. Efficiency implies a comparison between costs and results, while effectiveness is directly related to achieving goals.

Atmosoeprapto (2008) states effectiveness is doing the right thing, while efficiency doing things right, or effectiveness is the extent to which we achieve goals and efficiency is how we mix all resources carefully.

The effectiveness of organizational activities can be formulated as the level of realization of targets that indicate the extent to which the target has been achieved. According to Sumaryadi (2005), it is said that effectiveness is generally seen as the level of achieving operational and operational goals. Basically, effectiveness is the level of achieving organizational goals or set targets. Effectiveness is how well work is done, the extent to which a person produces output as expected. This can be interpreted, if something work can be done well in accordance with the plan, it can be said to be effective regardless of time, energy and others

**Simple Accounting**

According to the Law, concerning General Provisions on Taxation (KUP), bookkeeping is a periodic recording process to collect data.

and financial information which includes property, liabilities, capital, income, and expenses, as well as the amount of acquisition and delivery of goods or services, which is closed by reporting the financial in the form of a balance sheet, and income statement for the tax year period.

Bookkeeping system becomes a vital tool in the company because, with the bookkeeping system, companies can calculate, control, and regulate financial transactions that occur inside the company.

Implementation bookkeeping system aims to:
1. Improve efficiency and effectiveness.
2. Supports daily company routine operations.
3. Improve the quality of financial statements.
4. Improve quality decision-making.
5. Protect company assets.

The most basic bookkeeping and must be owned by the company is the income statement, balance sheet, and cash flow, known as financial statements. In addition, there are also reports of changes in capital and notes to financial statements, also must be made by the company. According to Darsono and Ashari (2005) making financial statements must refer to generally accepted accounting principles (GAAP), which is a good rule in preparing financial statements.
3. Method of Implementation

This study used a qualitative method using 30 saturated samples of member of Family Welfare Program RT.005 / RW001 in Marga Mulya Village, Bekasi City. The methods used in the management of this waste bank are:

First, deep observation. In this method, the facilitator obtains data (information) about the condition of the location and the community through in-depth observation of the situation, the condition of the events (events) that exist in the settlement location, both physical and social environment.

Second, counseling is helping to explore problems and potential, open alternative solutions and encourage people to make decisions based on responsible considerations.

Third, Learning is the transfer of knowledge/skills about the separation of waste to weighing and then recording periodic bookkeeping.

Fourth, evaluation by distributing questionnaires/questionnaires through 2 phases of the training phase, namely after training and after gradual assistance.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Enough Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Trainer can explain well</td>
<td>8.82%</td>
<td>67.65%</td>
<td>23.53%</td>
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</tr>
<tr>
<td>Trainers able to answer questions well</td>
<td>23.53%</td>
<td>44.12%</td>
<td>32.35%</td>
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<tr>
<td>The Organizers patiently accompanied the participants until after the training</td>
<td>2.94%</td>
<td>17.65%</td>
<td>79.41%</td>
<td></td>
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</tr>
<tr>
<td>I am satisfied with the training facilities provided by the committee</td>
<td>11.76%</td>
<td>26.47%</td>
<td>61.76%</td>
<td></td>
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</tr>
<tr>
<td>I was able to follow the dry waste sorting process and the wet waste</td>
<td>8.82%</td>
<td>52.94%</td>
<td>38.24%</td>
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</tr>
<tr>
<td>I feel happy and comfortable to follow the training of waste bank with simple bank accountancy</td>
<td>8.82%</td>
<td>44.12%</td>
<td>47.06%</td>
<td></td>
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<tr>
<td>This training activity is to train independence and create income opportunities</td>
<td>11.76%</td>
<td>35.29%</td>
<td>52.94%</td>
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</tr>
<tr>
<td>This training activity is able to increase the skill especially in making a simple accountant record</td>
<td>2.94%</td>
<td>38.24%</td>
<td>58.82%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>This training is easy to do continuously</td>
<td>2.94%</td>
<td>23.53%</td>
<td>38.24%</td>
<td>26.47%</td>
<td></td>
</tr>
<tr>
<td>The process of separating the waste bank is so easy that I was able to do my own post-training</td>
<td>2.94%</td>
<td>5.88%</td>
<td>44.12%</td>
<td>41.18%</td>
<td></td>
</tr>
<tr>
<td>After this training, I intend to increase my income from saving in waste</td>
<td>2.94%</td>
<td>35.29%</td>
<td>29.41%</td>
<td>29.41%</td>
<td></td>
</tr>
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</table>

4. Result and Discussion

Implementation of waste bank management through simple bookkeeping followed by 30 participants consisting of 30 participants from member of Family Welfare Program RT.005 / RW001 Village Marga Mulya Kota Bekasi. This activity gets a good response. Here is the Interaction result questionnaire as follows in table 1.

In the table 1 can be seen that in general the response of participants to each question submitted is agreed and strongly agree. Most participants agree that the trainer/trainer has explained the material and answered the question well. Judging from the totality of the committee in assisting the participants and training facilities provided many participants responded very satisfied. The process of sorting dry waste and wet waste can be done easily so that participants are able to follow the implementation well.

Submission of material regarding Bank Waste management training by making simple accounting can be understood well by Participants.

In the early stages of training, it is important for the dedicated team to ensure that training materials are generally well understood by the participants. Based on participants’ perceptions, the majority agreed that the speaker/trainer had explained the material well (67.65%) and
there were 23.53% who strongly agreed, but some also felt quite agree (8.82%). With a lot of feeling that the material was well received, we hope that the management of the waste bank will be well coordinated and to find out the simple ways of bank bookkeeping is useful for the economic needs of the family.

Training in Bank Waste Management Through Good Bookkeeping Records Can Train Independence and Create Income Opportunities for Participants.

Waste management if done with a sense of responsibility and concern for the environment through creative thinking and innovative actions, the community can create business opportunities and create independence in the business they do. without having to depend on others. The results of the questionnaire showed that most of the participants also thought that this training activity could improve the skills shown 58.8% answered strongly agreed, the remaining 38.24% agreed and only 2.94% felt quite agree.

Participants Become Interested in Increasing Income from Waste Bank Saving

The number of unemployed in Indonesia is increasing. Most of the unemployed are unemployed (undergraduates). This is because of the mindset of those who are still trying to find work (job seekers) rather than creating jobs (job creators). One effort to change that mindset is to foster a spirit of independence in that effort. With this waste bank management training, it is expected to train independence and create new jobs.

The number of entrepreneurs in Indonesia is still very small, which is around 0.18% of the population. In fact, a country is said to be progressing if the country has a minimum entrepreneurship of 2% of its population. Therefore, it is necessary to foster a spirit of independence by providing useful skills needed by the community, especially householders, who have a lot of time and without disturbing other times can be used to develop creativity and create new business opportunities to expand new work as well.

Indicators of achievement that this independent interest arises to member of Family Welfare Program and member of representatives from each RT in Kelurahan Marga Mulya Jelambar, we can find out from the results of the questionnaire responses given to them. The questionnaire consists of two stages, the first stage is carried out after the training activities and the second stage is carried out after the mentoring process is complete. Both data will be compared whether the interest in managing waste banks through a simple record of waste banks goes well and increases.

In the table 2, we can see that there is an increasing

<table>
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<th>Strongly Disagree</th>
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<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>After this training, I intend to manage waste by sorting dry waste and wet waste until the waste bank weighing stage continuously</td>
<td>2.94%</td>
<td>2.94%</td>
<td>35.29%</td>
<td>29.41%</td>
<td>29.41%</td>
</tr>
<tr>
<td>After this training and mentoring activities, I intend to add additional income through savings in Waste Bank</td>
<td>0.00%</td>
<td>2.94%</td>
<td>32.35%</td>
<td>38.24%</td>
<td>26.47%</td>
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Table 1. Questionnaire of Increasing Income Entrepreneur by waste Bank

<table>
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<tbody>
<tr>
<td>The Trainer can be explained well</td>
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<td>I was able to follow the bookkeeping training</td>
<td>8.82%</td>
<td>52.94%</td>
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</table>

Table 3. Questionnaire of The Bookkeeping Training
interest in entrepreneurship, where the majority (38.24%) agree to increase income by saving the results of management in the waste bank, while another 26.47% answered strongly agree, 32.35% agreed and 2.94% disagree.

In the table 3, we can see that there is the bookkeeping training, where the majority agree 52.94% able to follow the bookkeeping training, another answer strongly agrees 38.24% and enough disagree 8.82%.

Based on the above questionnaire, the result if the questionnaire data said that training on waste banks and simple bookkeeping can be followed and understood by the trainees

5. Conclusion, Suggestion, and Limitations

Conclusion

1. The implementation of this activity was carried out well seen by active participation from resource persons/trainers, and partner institutions in this activity to provide benefits to partners in the sustainability of waste management through simple bookkeeping.
2. Realization of knowledge about waste management is achieved by separating dry waste and wet waste and knowing how to do simple bookkeeping that is good and right so that it can generate profits.
3. Development of creative ideas with record-based waste management manually trains the independence of Family Welfare Program member.
4. Opportunities that can bring in money and help improve the family’s economy.

Suggestion

1. Giving gifts to participants who successfully carry out waste management correctly and make accounting records correctly.
2. Training can be given to people with disabilities regarding the management of waste banks with current accounting based on the use of mobile technology such as accounting accounts through the account. Biz to be more updated and more measurable.
3. The need for intensive cooperation between the government, institutions/foundations, and non-governmental organizations to form certain groups that will awaken and provide knowledge about how to grow and empower waste for housewives

References


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