

UTILIZATION OF HOUSEHOLD WASTE THROUGH WASTE BANK AND FINANCIAL MANAGEMENT

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Abstract:

Pulotondo Village is located in Ngunut District, Tulungagung Regency, East Java, with a population of 3,679, most of whom work in the agricultural sector. The problems and issues in this village are the people's habit of throwing household waste carelessly so that it can damage the environment. A dirty and damaged agricultural environment, with substandard irrigation quality, can kill the agricultural sector in the village. This activity aims to train BUMDes to have a significant role in converting household waste into products that have added value for community welfare, primarily through the Waste Bank program and its financial management. The methods used in this study were lectures, discussions and questions and answers with village managers, BUMDes, PKK group and village residents. The results of this training were an increase in the knowledge and skills of village residents in managing waste through the Waste Bank program.

INTRODUCTION

Pulotondo Village is strategically located because it is a vital route to access parts of the Ngunut District area to the Sumber Gempol District area with heavy mobility. This dense mobility also supports a good business climate in Pulotondo Village. Most village communities also dominate agricultural and horticultural activities such as rice, corn, soybeans, etc.

The Pulotondo Village community consists of a male population of 1,856 people and a female population of 1,823 people, consisting of three hamlets, 3 community units (RW) and 9 neighborhood units (RT). In every RT and RW, there are PKK women who have the potential to be a force for the progress and prosperity of the village but can also become a threat if they are not given adequate knowledge and skills. One of the problems and issues that occur in this village is the habit of people who like to throw household waste carelessly. The impact of household waste that is not managed correctly will damage the environment, reduce water quality, decrease public health and can hinder the economy (Rahmah et al., 2021). Moreover, the agricultural sector is the primary livelihood source for Pulotondo Village residents. If the agricultural environment is dirty and damaged, combined with water quality that does not meet the requirements, it will kill the agricultural sector in this village.

The Pulotondo Village Government wants this problem to be resolved with the right strategy and to provide benefits to the entire village community. It is also hoped that the presence of BUMDes, which the Pulotondo Village government has formed, will not be a bystander when this household waste problem occurs but must have a significant role in converting household waste into a promising social service idea and processed products that have added value. Through BUMDes, the government hopes that all villages will have independence in carrying out various



agendas to achieve their economic interests (Mufidah & Sari, 2017). The management of BUMDes, which is professionally managed, can be applied with the principles of cooperation, openness, emaciation, accountability and sustainability in developing joint ventures with the community (Mustanir, 2019)

It is also hoped that the presence of BUMDes, which has been formed by the Pulotondo Village government, will not be a bystander when this household waste problem occurs. It must have a significant role in converting household waste into a promising social service idea and processed products that have added value. The Community Service team for BUMDes must fully support this role.

METHODS

The training was held at the Pulotondo Village Office, Ngunut District, Tulungagung Regency, with 11 activity participants who were a combination of BUMDes, PKK women and village residents. The selection of participants was based on the BUMDes team that will carry out waste management as well as PKK women and village residents as household waste producers so that waste managers and residents can have the same knowledge and skills. The activity will be held on Wednesday, July 3, 2024, from 07.00 to 12.00 WIB.

The methods used in this PPM activity are:

- Lecture.** Information is presented verbally, both formally and informally, through material about processing household waste through waste banks, marketing techniques for processed household waste products and financial management of waste bank services. The resource person will also carry out benchmarking with temporary waste management sites that have been successful in other areas.
- Practice.** The material that will be presented will be taught, and participants will be asked to create a waste bank service business process, starting from collecting household waste to the waste sorting process, producing processed household waste, and then moving on to the marketing process.
- Discussion and Questions and Answers.** The material is presented as questions from the resource person, which the participants must answer, or vice versa. This question-and-answer process is expected to be a means of interaction that is not only two-way

To ensure that activities run well, evaluations are carried out before, during, and after the activity. Evaluation before the activity ensures that the problems to be discussed are in accordance with the partners' needs. Evaluation during the activity ensures that the activity facilities and infrastructure are ready to be used and that the parties involved can participate well. Evaluation at the end of the activity is carried out by distributing questionnaires to participants to assess the success of the activities that have been carried out.

RESULTS AND DISCUSSION

Initial Assessment with Partners. The initial stage of implementing PPM begins with conducting an assessment with partners. The PPM team visited and made friends at the Pulotondo Village Office. Next, the team explained our aims and objectives in coming to this village, namely to carry out community service to solve problems in the village and contribute to village development. The Village Head talked about many problems in Pulotondo Village, starting from the fields of education, economy, environment, welfare and governance of village organizations.



One of the problems that interested the PPM Team was the waste management phenomenon in Pulotondo Village, which needs to be better coordinated so it could become an environmental threat in the coming years. Based on discussions between the PPM Team and the Head of Pulotondo Village, we took the initiative to provide an effective and efficient way to collect household waste through a waste bank and explain the appropriate financial management process for waste bank services. Training in sorting waste to be produced, packaging and marketing processed household waste products are essential things that village residents must master to improve community welfare.

Inspection of the Pulotondo Village Waste Disposal Location. The PPM team inspects the waste disposal location in Pulotondo Village. The problem of household waste is a challenging task for all residents of Pulotondo Village to solve in wise ways. The condition that occurs in this village is that residents need a better household waste disposal system, so household waste is thrown directly into rivers and empty lands. This can damage the ecosystem in the river and pollute the surrounding environment.



Figure 1. Pulotondo Area & Waste Disposal Conditions

Based on observations from environmental impact control experts at the Malang Regency Environmental Service as presenters in this activity, the population of Pulotondo Village is 3679 people and has the potential to produce 1,140 kg of waste per day with details of organic waste of 877 kg per day and 262 kg of inorganic waste per day. Inorganic waste is dangerous because it comes from non-biological materials that cannot decompose naturally or take a long time, such as plastic bags, plastic bottles, plastic packaging, metal cans, batteries, glass bottles, window glass, and electronic equipment. This can be a significant threat to the environment and the health of residents, especially as the flow of the Brantas River will carry away this rubbish.

Selection of Household Waste Management Methods. The PPM team saw that this waste could be distributed well if household waste management was carried out in a structured and consistent manner. Apart from that, there is a significant opportunity to utilize household waste for goods that have economic value. One way to do this is to utilize household waste through waste banks coupled with proper financial management. Proper financial management will support the sustainability of the household waste management program because it can motivate residents to gain prosperity. Waste management methods with a concept like this are called community-based

waste management. Community-based waste management can use the Waste Bank and Waste Processing Site Reduce, Reuse and Recycle (TPS3R) program. TPS3R is a waste disposal site established to manage waste at the community or regional level by prioritizing the 3R concept, namely reducing, reusing and recycling waste.

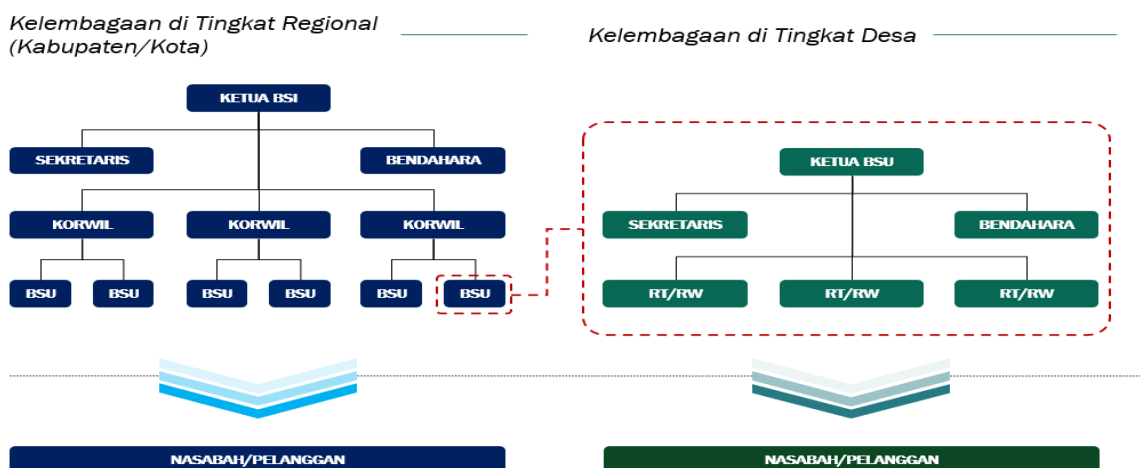


Figure 2. Organizational Governance for Waste Bank Management

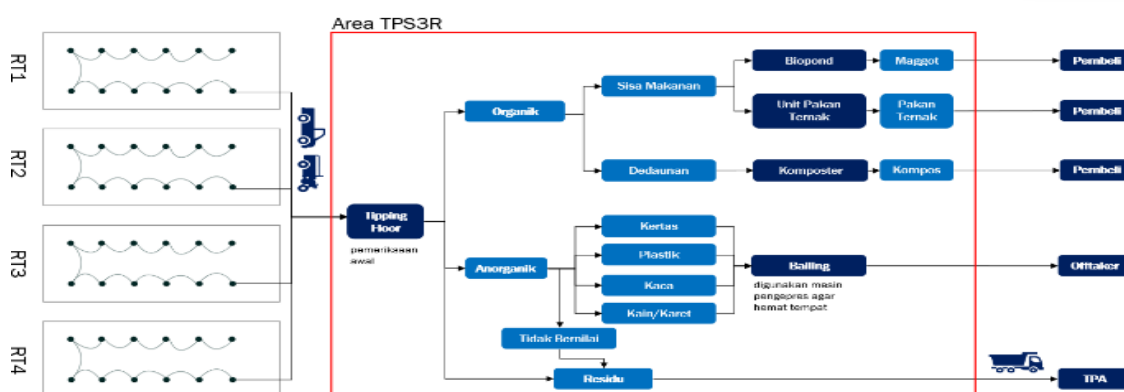


Figure 3. TPS 3R Operational Scheme

Waste Bank Financial Management. Waste Bank Administration is essential to accountable and transparent waste financial management. Waste bank administration is to record the amount and type of waste collected. This data is used to monitor and evaluate program performance and effectiveness. Some necessary notes are:

- Waste Bank Customer Savings Book.** Trash bank customers use savings books. The cover of the trash bank customer's savings book contains information on the location of the trash bank, customer name, and account number. The waste bank savings book contains information on the date of receipt of funds from the waste bank along with the nominal amount.
- Waste Bank Customer Register Book.** The Waste Bank customer register book records the initial registration carried out by Waste Bank customers. The initial procedure is for prospective

customers to go to Waste Bank officers at the village unit level. Next, customer information is recorded, such as registration date, registration number, full name, gender, place of birth, address and telephone number. Through this register book, the management knows the waste bank customer data so that if there is a problem, the management can contact the customer quickly.

- c. **Transaction Book.** This book is used to record details of customers' waste and is recorded by waste bank officers. The information recorded is information about the waste brought, the price of the waste, the weight of the waste after going through the weighing process and the total value paid to the customer Open in Google Tr.

Submission of Material.

- a. This Community Service activity was carried out at the Pulotondo Village Office, Ngunut District, Tulungagung Regency with 11 activity participants who were a combination of BUMDES, PKK women and village residents. The activity will be held on Wednesday, July 3 2024 from 07.00 to 12.00 WIB. The implementation of PPM went smoothly according to initial planning.
- b. The material presented in Community Service activities includes:
 - c. Organic & inorganic waste
 - d. The waste phenomenon in Indonesia
 - e. Waste management according to law
 - f. Waste management through the Waste Bank
 - g. Organizational governance in waste bank management
 - h. Waste Bank Administration
 - i. Types of inorganic waste that can be sold
 - j. Waste bank management through TPS3R
 - k. TPS3R organizational governance
 - l. Transporting waste at TPS3R
 - m. TPS3R operational scheme
 - n. TPS3R financial management



Figure 4. TPS 3R O Participants took part in training at the Pulotondo Village Hall

Activity Evaluation. The material presented in this activity concerns household waste being used through the Waste Bank and its financial management to increase village income. The team

invited participants to play small games to ensure that participants could understand how to sort waste according to its type for the waste bank. Apart from that, discussions, questions, and answers were held to assess whether participants were interested in the training provided. Participants asked several questions, such as how to exchange their waste for money to increase residents' income and motivate village residents to participate in the waste bank program. The PPM team then discussed with the participants how to make this program successful in Pulotondo Village.

Evaluation after the activity Evaluation at the end of the activity is carried out by distributing questionnaires to training participants. The evaluation results show that the training provided benefits village residents, especially in increasing their knowledge and skills to encourage them to be more innovative in improving the village economy, and the delivery of material is easy to understand and very effective. The evaluation results after the activity are the activities by Muanifah & Cahyani (2021) that show that waste bank management can grow business opportunities and improve community recycling skills.

CONCLUSION

Based on the results of implementing PPM activities carried out in Pulotondo Village, Ngunut District, Tulungagung Regency, several things can be concluded as follows:

- a. BUMDes, as a Village-Owned Enterprise, requires business development to increase village income and the welfare of its residents. On the other hand, Pulotondo Village needs a solution to environmental pollution caused by household/production waste being thrown carelessly into empty land and rivers. Proper waste management is needed to change this bad habit into income for village residents.
- b. The PPM implementation was carried out directly at the Pulotondo Village Office, Ngunut District, Tulungagung Regency, with enthusiastic participants who were good and smooth thanks to the collaboration between the Pulotondo Village and the Malang State Polytechnic PPM team.
- c. The material presented by the PPM team is training for BUMDes administrators, PKK women, and village residents to manage waste banks through waste bank and TPS3R mechanisms and properly manage their finances.

REFERENCES

- Irawati, D., & Martanti, D. E. (2017). BUMDes Terhadap Pelaporan Aset Desa (Studi Fenomenologi Pada BUMDes Desa Karangbendo, Kec. Ponggok, Kab. Blitar). *Snaper Ebis 2017*, 2017, 27-28.
- Iskandar, J., Engkus, Fadja, T. S., Nabilah, A., Novianti. (2021). Jurnal Dialektika: Jurnal Ilmu Sosial. Strategi Pengembangan Badan Usaha Milik Desa (Bumdes) Dalam Meningkatkan Kesejahteraan Masyarakat Desa, 19(2), 1-11. <https://doi.org/10.54783/dialektika.v19i2.1>
- Muanifah, S. & Cahyani, Y. (2021). Pengelolaan Bank Sampah Dalam Menumbuhkan Usaha Bank Sampah. *Scientific Journal of Reflection: Economic, Accounting, Management & Bussiness*. 4(1), 150-159. <https://doi.org/10.37481/sjr.v4i1.258>
- Mufidah, I., & Sari, M. M. K. (2017). Partisipasi Masyarakat Jambangan RW03 Dalam Mewujudkan Surabaya Kota Layak Anak Melalui Program Inisiasi Kampung Arek Suroboyo. *Kajian Moral dan Kewarganegaraan*, 05(02), 130-144.
- Mustanir, A. (2019). Pemberdayaan Badan Usaha Milik Desa Melalui Kelompok Ekonomi Kewirausahaan Secara Partisipatif. *Unggul, Islami, Profesional*. February, 2-44. <https://doi.org/10.31219/osf.io/pwb2g>





- Pemerintah Indonesia. (2021). Peraturan Pemerintah Nomor 11 Tahun 2021 Tentang Badan usaha Milik Desa. Tambahan Lembaran 074934. Sekretaria Negara. Jakarta
- Rahmah, A. N., Novita, S., & Dania, H. A. (2021). Kajian Dampak Sampah Rumah Tangga Terhadap Lingkungan dan Perekonomian Bagi Masyarakat Kecamatan Sukarame Kota Bandar Lampung Berdasarkan Perspektif Islam. *Holistic Journal of Management Research*, 6(2), 42-59. <https://doi.org/10.33019/hjmr.v6i2.2734>
- Suwandi, I., Arifianti, R., & Rizal, M. (2019). Pelaksanaan Prinsip Good Corporate Governance (GCG) pada PT Asuransi Jasa Indonesia. *Jurnal Manajemen Pelayanan Publik*, 2(1), 45. <https://doi.org/10.24198/jmpp.v2i1.21559>