
Value-Added Household Waste Management Training for Parents at Sanggar Bimbingan Permai Kulim, Malaysia

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ABSTRACT

Household Waste Management Training with Economic Value is an initiative aimed at enhancing the understanding and skills of parents of students at Sanggar Bimbingan Permai, Kulim, Malaysia, in effectively managing household waste and potentially generating additional income. Household waste, when managed properly, can become a significant source of economic value and contribute to waste reduction efforts and environmental preservation. This activity is conducted online with the goal of providing participants with an understanding of how to identify, sort, recycle, and manage various types of household waste. The training also covers the marketing aspects of recycling products derived from waste. The results of this training are expected to create greater awareness of the importance of sustainable household waste management among the parents of Sanggar Bimbingan Permai students. Furthermore, it is anticipated that this initiative will increase their participation in improved waste management practices within their own households and enhance their marketing skills for recycling products. This will have a positive impact on the local environment and potentially create better local economic opportunities. Therefore, this training is expected to serve as an example to the broader community on how to integrate environmental and economic approaches in household waste management.

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INTRODUCTION

Waste utilization is a key concept in sustainable waste management. Waste, often viewed as a problem, has the potential to become a significant economic resource when managed effectively. In an increasingly environmentally conscious and sustainable era, it is essential to harness available opportunities to reduce environmental pollution, minimize waste, and even generate income from waste management.

In the Kulim region, we have a significant opportunity to change the community's perception of household waste. Instead of viewing it as a problem to be discarded, we can help the community see it as a potential source of income. Through the right approach and comprehensive training, we can promote more sustainable waste

management practices and provide significant economic benefits.

EXPERIMENTAL METHOD

The training was conducted through virtual meetings using the Zoom application, with a training committee present at Sanggar Bimbingan to assist in the proceedings. The committee, comprised of students, guided participants in engaging with the training materials and encouraged interaction throughout the event. Screenshots of the activities are displayed in Figures 1 and 2.

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Fig 1. Screenshot of training material presentation

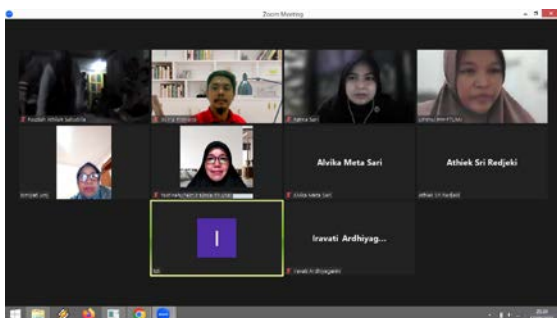


Fig 2. Screenshot of training participants

RESULTS AND DISCUSSION

The training began with an outline presentation that included topics such as valuable waste, non-hazardous waste, collecting and storing waste methods, waste recycler companies, and collective/personal waste bank systems.

In the initial explanation, education was provided on identifying domestic waste as waste generated from housing (households), commercial buildings, offices, and similar facilities. Meanwhile, a portion of domestic waste that still holds value is known as Valuable Waste, in which this type of waste still has a selling value and can usually be used or reprocessed as a raw material..

Household waste that contains materials with economic value when processed or recycled. The most common examples include paper, cardboard, metals, and plastics that can be sold to recycling centers for cash. Utilizing valuable domestic waste not only helps reduce the amount of waste going to landfills but also promotes sustainable recycling practices and has the potential to provide additional income for individuals and families. (Siti, Rahmat, & Lufri, 2017).

Examples of valuable waste include packaging cans from soft drinks, fruits, sardines, corned beef, condensed milk, syrup, oil, and paint. Additionally, they can also originate from sources like mineral water, soft drinks, liquids, syrup medicines, oils, and paints. Some valuable waste also comes from used cardboard packaging for goods, equipment, snacks, medicines, and clothing.

However, not all valuable waste can be managed by individuals because some waste requires permits for handling as they fall under the hazardous waste category (B3), including used oil, plastic oil containers, oil spill boxes, used oil cans, used cardboard barrels, expired medicine cartons, rejected medicine cartons, syrup spill boxes, hospital-used plastic packaging, used paint/acid packaging, spirits cans, insecticide/poison cans.

A smart collection and storage method for efficiently managing waste involves customizing bins based on the type of waste being generated. By segregating waste into categories such as recyclables, organic materials, and general trash, you can streamline the disposal process and promote recycling efforts. Additionally, it's crucial to prepare containers with weather-resistant lids to prevent waste from spoiling easily. These lids shield the waste from exposure to the elements, reducing unpleasant odors and potential pest infestations. This thoughtful approach not only keeps the collection area clean and organized but also helps maintain a healthier environment, as well as making the waste management process more efficient and sustainable.

In Figure 3, it can be explained that you should not use a label like that because the contents of the three bins are eventually transported by one garbage truck to one Final Disposal Site. Use a label like Figure 4 because it aligns with the purpose of this type of sale of domestic waste. (anonymous, 2021).



Fig 3. Trash bin with an unclear purpose label



Fig 4. Trash bin label fits the purpose of the type of waste.

Finding the best waste recycler company is a critical step in promoting responsible and sustainable waste management practices. To begin the search, it's essential to conduct thorough research and due diligence. Look for a company with a solid track record and a commitment to environmental stewardship. Reviews and recommendations from other businesses or individuals who have used their services can provide valuable insights.

Additionally, consider the company's recycling capabilities and the range of materials they can process. A leading waste recycler should have well-established recycling facilities and robust processes in place to maximize resource recovery. Moreover, evaluating their adherence to local regulations and environmental standards is crucial. A top-tier recycler will prioritize compliance and sustainability. Lastly, assess their pricing, reliability, and customer service to ensure a well-rounded and effective partnership. By carefully selecting the best waste recycler, you can contribute to a cleaner environment while effectively managing your waste disposal needs (Lew, 2022).

Efficient waste management begins with a well-organized working method. First and foremost, it involves finding a domestic waste collector or collection center within your vicinity. This step ensures that waste disposal is convenient and local, reducing transportation costs and carbon footprints. Another essential aspect is to regularly update the price per kilogram of each type of waste.

This keeps both waste generators and collectors informed about the current market rates for recyclables or other materials, creating

transparency in the transaction. Additionally, inquiring about the method of transportation, whether the waste is picked up by the collector or delivered to the collection center, is crucial for a smooth and reliable waste management process. Clear communication and a streamlined working method contribute to more sustainable and cost-effective waste disposal practices.

An example of valuable waste pricing details pertains to materials or items that possess inherent worth, such as precious metals, electronics, or scrap metals. Unlike typical waste pricing, where disposal costs are incurred, pricing details for valuable waste are centered on the potential revenue or compensation one can receive from selling or recycling these items.

The pricing structure involves assessing the market value of the materials, taking into account factors like current market prices, purity or quality of the materials, and the weight or quantity being sold. Valuable waste pricing details can be dynamic, reflecting market fluctuations. These pricing details incentivize the responsible handling and recycling of valuable waste items, promoting sustainability while enabling individuals and businesses to derive financial benefits from their waste. For examples of domestic waste prices, please refer to Figure 3. (Trash4cash, 2020).



Fig 5. Example of waste pricing

Individuals can manage garbage collection by providing trash cans or storage areas within their own homes, keeping them separate from other

domestic waste and not in public spaces. Alternatively, waste banks can oversee garbage collection by designating storage areas in agreed-upon public spaces, allocating a certain percentage of income for management service fees before distributing the proceeds.

The training activity aims to provide parents with an understanding of how to identify, sort, recycle, and manage various types of household waste. This training also encompasses the marketing aspects of recycling products derived from waste. The expected outcome of this training is to create greater awareness regarding the importance of sustainable household waste management among the parents of Sanggar Bimbingan Permai.

CONCLUSION

Up until now, household waste in the environment of Sanggar Bimbingan and in the homes of its students has not been managed properly, as indicated by the lack of waste sorting based on its value. With this training, the parents at Sanggar Bimbingan Permai Kulim are beginning to understand the methods for managing waste with economic value, from the sorting process to the sales process. Based on the positive responses from the training participants, it is hoped that SBP Kulim Malaysia will be able to initiate household waste management to have a positive impact on the environment.

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