

## **WASTE HANDLING AND MANAGEMENT IN BATUR BANJARNEGARA**

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**Abstract** - Program management and waste handling aims to minimize the negative impact caused by waste. In Batur Village, the community is dominated by farmers who have awareness in handling waste. However, the general public still does not have awareness of waste. The volume of waste generated from the activities of the people of Batur Village is about 20 cubica day. The method used is a mixed method. The data collection technique uses questionnaires, indirect interviews and surveys. good and true trash. Therefore, education on the 3R concept, the correct way of processing waste, sorting waste needs to be done.

**Keywords:** handling, waste management

## 1. INTRODUCTION

Community Service Program Community service activities within the university scope called Real Work Lectures (KKN) are a practice of the Tri Dharma of Higher Education with the aim of producing graduates who are responsive to problems in the community. Batur is located in Batur Village, Batur District, Banjarnegara Regency, Central Java. This hamlet is located at the foot of Mount Petarangan and is approximately 11 km west of the Dieng Plateau. Batur Hamlet is dominated by people who work as farmers so they have their own awareness in handling waste .

Garbage is the residue of human daily activities and natural processes in solid form. Garbage in settlements will affect public health. Community participation in waste management is the willingness of the community to help the success of the waste management development program in accordance with everyone's abilities without sacrificing their own interests. Without community participation, all solid waste management programs will be in vain (Ramon & Afriyanto, 2015).

However, the important problem is that in general the people of Batur Village still do not have good awareness about waste. The increase in population each year will also increase the volume of existing waste. Based on research conducted by Yuliasuti et al (2013) said that the increasing amount of waste generation is due to the increase in population and increased human activities. This waste generation must be managed with the help of community participation. Community participation in waste management is very dependent on understanding, willingness and income. The community can improve the quality of the environment. The same thing is also supported by Tanod et al (2014) that population growth and changes in people's consumption patterns cause an increase in the volume, type and characteristics of the waste produced.

Meanwhile, waste management efforts can be carried out by reuse, reduce, and recycle (3R) is an activity to treat waste by reusing, reducing and recycling (Subekti, 2010). Waste prevention is defined as actions taken before a substance, material or product becomes waste which can be done by reducing the amount of waste, including through product reuse or prolonging the life of the product, before the adverse effects of the resulting waste affect the environment and human health or the content of hazardous substances in materials and products (Corvellec, 2016). Based on the survey results, the volume of waste generated from the activities of the people of Batur Village is about 20 cubic a day. The waste produced has a composition of 50% inorganic waste and 50% organic waste which if managed properly and correctly will have a positive economic impact, for example as compost.

The availability of temporary waste disposal sites (TPS) and final waste disposal sites (TPA) has become a polemic in Batur Village because the volume of waste disposed of at the TPA is very high which has an impact on air pollution, water pollution and blockage of waterways, contamination of productive agricultural land in the vicinity. landfill. In 2021, waste in Batur Village will be in a waste emergency

condition if it is not handled immediately. Therefore, proper and correct waste handling and management in Batur Village needs to be implemented.

## 2. METHOD

This research uses mixed methods. Mixed methods consist of qualitative methods and quantitative methods (Creswell, 2016). This study uses data collection techniques using indirect interview techniques conducted by telephone with the Bukit Petarangan Community and distributing questionnaires to the community. Batur Village.

## 3. RESULTS AND DISCUSSION

### A. Leading Work Program

#### 1) Education and Socialization of Waste Management to the Community

Mapping the people of Batur Village in treating waste in their respective homes using a questionnaire survey distributed from house to house. Based on the results of the questionnaire, the majority of Batur Village residents work as farmers.



Figure 1. Professions of Batur Village residents

Based on the survey, most of the people of Batur Village have not been educated regarding proper and proper waste management even though the impact of waste production in this village is large due to the large number of farming professions.

**Table 1. Knowledge and behavior towards waste**

Masalah	Presentase	
	Ya	Tidak
Masyarakat teredukasi terkait konsep 3R ( <i>Reduce, Reuse, Recycle</i> ) dan mengetahui cara mengelola sampah yang baik dan benar	32,18%	67,82%
Masyarakat merasa perlu dilakukan pemilahan sampah di rumah masing-masing	90,8%	9,2%
Masyarakat memisahkan jenis sampah kering dan sampah basah di rumah masing-masing	60,91%	31,09%
Mendukung adanya dana kebersihan untuk pengangkutan dan pengelolaan sampah di Desa Batur	94,25%	5,75%

Provide understanding material about the negative impact of waste if it is not managed properly by socializing and gathering from house to house. Massively apply clean and healthy living behavior and provide an example of treating waste properly and correctly to all levels of society, from children to the elderly.

## 2) Waste Management in Batur Village

The community is able to sort organic and non-organic waste in separate containers because so far the waste is still mixed between the two in one container. Collected in a temporary shelter in the entrance alley or a place that has been determined collectively in a sack container and transported to the Final Disposal Site (TPA) by the waste management implementation team which is carried out on a scheduled basis in each hamlet/RT. Waste will be further managed at the TPA using special combustion equipment (for non-organic waste) and composting for organic waste. The location of waste management at the landfill level can be provided by the local government (Desa Batur) and the management involves the village government and the local community who have been appointed.

## B. Supporting Work Programs

### 1) Teaching TPA at the Local Mosque

TPA teaching uses a two-way teaching method every evening at maghrib until the time of the congregational Isha' prayer. The thematic KKN Team 105 thematic group 14 conducted friendships with local youth to teach TPA children together every evening until before the congregational Isha prayer. The initial stage begins with murojaah al-Quran together and learning about the material of aqidah, morality and fiqh. The second stage, the students go to each ustadz/dzah to memorize short letters. The third stage or closing session contains random questions about recitation and closes with stories about prophets or pious people in Islam.

## 2) Celebration of the 76th Independence Day of the Republic of Indonesia

The thematic group 105 thematic KKN Team together with the Batur Village community revived the spirit of independence to the next generations so that the spirit of patriotism that had been possessed by the older generation was also passed on to the younger generation. This activity is also an opportunity to socialize and provide education about waste to all levels of society. The series of events in this activity include a coloring competition, morning exercise, survival quizzes, a nail-in-bottle inserting competition, a sarong relay, a burlap racing competition with helmets, a garbage sorting competition, a cracker eating competition, a balloon rocking competition, announcement of winners and distribution of prizes, and closing and prayer.

### C. Additional Work Program

#### 1) Tabligh Akbar at Masjid at-Taqwa

This activity was carried out at the mosque at-Taqwa Batur by inviting Ustadz Dr. Okrisal Eka Putra, Lc., M.Ag on August 31, 2021 starting from the Maghrib prayer until the Isha' prayer and continuing on 1 September 2021 at dawn.

#### 2) Planting Seeds in Bukit Petarangan

This activity was initiated by the Bukit Petarangan Community and invited KKN students. Bukit Petarangan experienced a major fire in 2019 which reduced the number of trees. Therefore, the Bukit Petarangan Community took the initiative to plant 100 trees at the top of Bukit Petarangan.

## 4. CONCLUSION

The waste handling and management program aims to minimize the negative impacts caused by waste and increase the use value of the waste. Waste processing in question is to reduce the volume of waste that must be disposed of at the TPA, especially in Batur Village. compost. The existence of socialization and education provided by the KKN Team batch 105 thematic group 14 can raise public awareness of the importance of participation in waste management and inculcate the habit of sorting organic and inorganic waste.

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