Upgrading of TPST 3R Mulyoagung Bersatu Performance Based on Health Protocol in The New Normal Era

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ABSTRACT

Global warming that occurs, one of which can not be separated from the garbage that is thrown away by people carelessly and they are not fully aware of the dangers of the waste. Even though the waste has been disposed of in its place, then transported by the cleaning staff to the Final Disposal Site and without any follow-up handling it will also be dangerous. Examples of organic waste that mixes with the environment such as in the soil, then decomposes will cause methane gas which can thicken the layer of the greenhouse effect. Then what about nonorganic waste, such as plastic, rubber, yarn, to metal, which also have a very polluting impact on the environment. Therefore, it is necessary to follow up the handling of waste, especially household waste (SRT) in the community. The service team this time used a bottom up system to solve partner problems. In addition to using the system, the canvas business is also used as a solution to solve this problem. The results of the service show that with the implementation of the health protocol, the economic activities carried out by partners gradually improve and can run with strict and regular protocols.

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1. Introduction

Handling household waste that has been managed properly and has received attention from the government, namely the 3R (Reduce - Reuse - Recycle) TPST (Integrated Waste Management Site) Mulyoagung Bersatu in Dau, Malang district, East Java. The Director General of Human Settlements at the Ministry of Public Works and Public Housing on his website (www.pu.go.id, 2014) states that the 3R Mulyoagung Bersatu TPST only leaves 16% (reduce) of waste from the total waste collected before being taken to the Final Disposal Site (TPA).) while making observations at the site.



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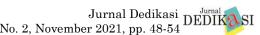
Furthermore, the entire waste is processed into 45% of goods that are ready to be reused, 39% (recycled) into compost, which is free for residents to use for plants in their homes. So that the basic waste management applied is community-based. The basis of society is from citizens to and to citizens. So, the obligation of citizens to pay a retribution for waste is realized by the TPST obligation which does not only transport and collect waste, but also manages it effectively and efficiently.

2. Methods

The method that will be applied in this community service program plan is participatory mentoring and coaching for Mulyoagung Bersatu 3R TPST employees and the Bottom-Up model flow (Problem conditions in the field - Handling solutions). So that the plan is presented in the following table of service implementation:

Table 1. Planned Input, Process and Outputs

No	Input	Process	Output
1	Health protocol facility needs: personal protective equipment	 a. Identify the need for appropriate personal protective equipment b. Procurement of personal protective equipment 	a. Personal protective equipment facilities are available and adequate for employees
2	Health protocol facility needs: nutritional supplements	a. Identify the need for appropriate supplementsb. b. Provision of nutritional supplement facilities	a. Nutritional supplement facilities are available and adequate for employees
3	Assistance and coaching based on health protocol procedures	 a. Assistance and development of health protocol procedures b. Monitoring the use of personal protective equipment and nutritional supplements 	 a. Ability to apply health protocol procedures according to TPST and standardized b. Monitoring the implementation of health protocol procedures at TPST independently



- Provision of health 4 protocol guidelines
- a. Preparation of guidelines for health protocol guidelines
- b. b. Provision of health protocol guidelines in printed form
- a. Health protocol manual

Source: Compiled by Researcher

3. Results and Discussion

The realization of service activities to develop the Mulyoagung Bersatu Integrated Waste Management Site (TPST), namely improving waste management operations with health protocol standards. This activity focuses on improving the hygiene and health facilities for the workforce at the TPST, which consists of 91 employees who come from local villagers. The results of service activities that have been carried out include, among others:

- 1. Addition of post-operational waste management facilities.
- 2. Provision of post-operational waste management facilities.
- 3. Development of TPST health protocols.

Figure 1





Figure 1. Activities of The Socialization Process and The Manufacture of Fertilizer

During the current pandemic, the demand for standard health protocols is a priority for TPST employees who interact with each other on a daily basis, both between employees and traveling to people's homes to pick up trash. This is based on the Decree of the Minister of Health of the Republic of Indonesia Number HK.01.07/MENKES/382/2020 concerning Health Protocols for the Community in Public Places and Facilities in the Context of Prevention and Control of Corona Virus Disease 2019 (COVID-19) (Kemenkes RI, 2020). In addition, during the pandemic, the increase in waste both from residents' household waste and residents' non-domestic waste has increased by up to 25 tons per day (dialogue during site observation, 2020). This increase makes employees work extra to manage waste. Thus, the need for facilities other than cleanliness, which is related

to health protocol standards, is very necessary. The flow of the implementation of the service program is as follows.

Figure 2. Implementation Flow of Community Service Program

STAGE 1. CONDITIONS OF PARTNER PROGRAM

Partner Problems

During the pandemic, Waste has increased by 2-3 times and waste management facilities, especially for the direct handling process by employees, are not sufficient, and their health level becomes vulnerable due to the extra energy spent in processing operations and participating in helping in the waste sorting section.

Partner Hope

Addition of cleaning facilities, especially for operations that are in direct contact with waste, such as the hands and feet, provision of immunity for employees who work extra to handle the abundant waste due to the pandemic, as well as personal hygiene after work is completed and they go home.



Solution

- Added cleaning facilities for direct waste management
- Procurement of immunity drugs (vitamins) for employees who work extra
- Procurement of a place to clean yourself, hand soap, personal protective equipment such as post-work health masks.
- Operational guidance with health protocol standards.



STAGE 2. IMPLEMENTATION OF SERVICE PROGRAM

Direct Waste Management Facility

TPST Employee Health **Facilities**

TPST Employee Cleaning Facilities

Operational TPST Mulyoagung Bersatu

Program

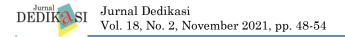
- Procurement of waste management facilities
- Provision of employee cleaning facilities
- Provision of employee health facilities
- TPST operational development with health protocol standards

TPST

Mulyo agung Bersatu

STAGE 3. EVALUATION OF SERVICE RESULTS

No	Category	Engagement Partner Program	Output
1	Waste management	Utilization of received waste management equipment facilities and assistance for guidance from the TPST staff and person in charge.	management equipment facilities for personal protection of employees who come into direct contact with waste, and
2	Employee cleanliness	Require TPST employees to clean themselves with accepted cleaning facilities and be accompanied by TPST servants and persons in charge to become a routine.	
3	Employee health	Improving the immunity of TPST employees by receiving vitamin and protein supplement facilities and consuming them regularly in accordance with the recommendations on how to use them.	Procurement of health supplement facilities for employees to increase



4 TPST operations with health protocol standards

Socialization of improving Assistance the health and safety of employees to know and **TPST** employees, before, during, and after working with health protocol standards for the common good.

for both implement standard health protocols in the workplace.

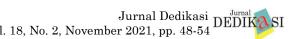
Source: Compiled by Researcher

4. Conclusion

The implementation of the service program on operational improvement related to the health and safety of TPST Mulyoagung Bersatu employees aims to guarantee and protect them during the current pandemic with every activity that is in accordance with national health protocol standards. This standard is socialized and facilitated for their main needs. Health protocol standards are not only targeted at work, but also before and after they work. Considering the increasing amount of waste from household and waste from non-household. Thus the service program originating at the request and expectations of service partners such as from TPST Mulyoagung Bersatu can not only be realized but also become a sustainable program. In addition, the implementation of this service program is able to become a pilot for operational improvement related to the health and safety of TPST Mulyoagung Bersatu employees for other TPSTs towards an integrated TPST.

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