



COUNTERMEASURES OF NEGATIVE EXTERNALITY THROUGH THE UTILIZATION OF USED GOODS FOR LIVE PHARMACIES

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ABSTRACT

Kemiskinan merupakan permasalahan yang sering terjadi di Indonesia, tidak terkecuali di Kabupaten Batang, Jawa Tengah. Berdasarkan data pada Badan Pusat Statistik (BPS) Kabupaten Batang jumlah penduduk miskin di Kabupaten Batang pada tahun 2019 sebesar 64,07 ribu jiwa. Dalam mengatasi masalah-masalah yang terjadi, tim pengabdian memberikan beberapa solusi untuk membantu mengurangi permasalahan tersebut. Solusi yang ditawarkan tim pengabdian yaitu Pemanfaatan Sampah Botol Plastik Menjadi Apotek Hidup yang Memiliki Daya Jual. Pemanfaatan sampah botol plastik tersebut dapat mengurangi dampak eksternalitas negative dari banyaknya sampah yang menumpuk dan juga dapat memiliki daya jual sehingga dapat meningkatkan pendapatan masyarakat. Tim memilih satu desa sebagai tempat untuk mengimplementasikan solusi tersebut yaitu desa Lobang. Tahapan dari metode yang dilakukan yaitu: 1. Persiapan, 2. Pelaksanaan, 3. Evaluasi dan pendampingan.

Poverty is a common problem in Indonesia, no exception in Batang Regency, Central Java. Based on data from the Central Statistics Agency (BPS) Batang regency the number of poor people in Batang Regency in 2019 amounted to 64.07 thousand people. In addressing the problems, the service team provided several solutions to help reduce the problem. The solution offered by the service team is Utilization of Plastic Bottle Waste into a Living Pharmacy that Has Selling Power. The utilization of plastic bottle waste can reduce the negative externality impact of the amount of waste that accumulates and can also have selling power so as to increase people's income. The team chose one village as the place to implement the solution, namely Lobang village. Stages of the method are: 1. Preparation, 2. Implementation, 3. Evaluation and assistance.

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INTRODUCTION

Poverty is one of the most common problems in some parts of Indonesia. According to Soerjono Soekanto, poverty is defined as a situation where a person is unable to maintain himself according to the standard of life of the group and is also unable to utilize his mental, or physical energy in the group.

The problem of poverty is caused by the lack of access to education, health, and also access to several other facilities. Poor access to education can increase poverty because low education can lead to a lack of public knowledge, creativity, and also hinder people's mindset.

In addition to poverty, the increasing amount of household waste is also one of the problems that must be addressed, the increasing volume of waste can cause negative externalities. The resulting amount of waste that continues to increase is climate damage, excessive rainfall and erratic weather changes. This can have a negative impact on the community and the surrounding environment.

The problem was also felt in Batang Regency, Central Java. Based on data from the Central Statistics Agency (BPS) of Batang Regency, in 2017-2019 the percentage of poor people in Batang Regency decreased, but the decrease was not very significant. Table 1 shows the percentage of poor people in Batang Regency.

Region	Percentage of Poor People (Percent)		
	2019	2018	2017
Regency of Batang	8,35	8,69	10,80

Table 1. Percentage of Poor People in Batang Regency, 2017-2019 (Source: BPS Batang Regency (processed data))

The poverty that occurred in some areas in Batang Regency occurred due to limited community access and also the lack of people who received higher education. Poverty needs to be addressed to improve people's welfare. Based on the problems that occurred in Batang Regency, the service team gave some ideas and efforts that can be made to help reduce the problem. To implement these ideas, the community service team chose one sample location, one of the villages in Limpung subdistrict, Batang regency, namely Lobang village.

Lobang village is 8 km away from the government center of Limpung sub-district. The geographical condition of this village is different from other villages in Limbung subdistrict, Lobang village is located in the hills in the south. Table 2 shows the number of educational facilities in Lobang village.

No.	Educational Facilities	Amount
1	Kindergarten/Early childhood education	1

2.	Elementary School	2
Amount		3

Table 2. Educational Facilities: BPS Batang Regency (processed data)

Most of the population has a livelihood as farmers. In addition, there are also those who make a living as traders, laborers, private employees, civil servants, and so on. The most produced produce of this village is wood, bananas, jackfruit, emping, cloves, coffee, corn, and others. Most of the produce is traded to Limpung Market.

Lobang Village was chosen to be a sample in applying this idea because poverty and lack of knowledge of the community are still a problem in this village. In addition, Lobang village is also one of the partner villages of Semarang State University.

The dedication team has several ideas that can help overcome the problems that occur in the village of Lobang, the ideas and ideas of the service team is to process plastic waste that can be used as a living pharmacy. The idea was chosen because based on the explanation of the problems that occur, there are still many people who are less aware that plastic waste can be utilized and provide economic benefits, in addition to the utilization of this waste can also reduce the impact of negative externalities for the environment and society.

Devotional activities have the main focus of utilizing plastic waste to be a live pharmacy. This utilization activity has very beneficial benefits for the community, namely: 1. Can reduce negative externalities in the form of garbage that accumulates and can harm the community, 2. Have selling power, so as to increase people's income to overcome poverty, 3. Increase creativity of the community.

Pharmacy life is the utilization of part of the land or land to plant medicinal plants for daily purposes usually planted this plant how many traditional medicinal plants. According to the Ministry of Health, the Indonesian Ministry of Health defines Indonesian medicinal plants as stated in the Decree of the Minister of Health No. 149/SK/Menkes/IV/1978, namely 1) Plants or parts of plants used as traditional medicine or herbal medicine. 2) Plants or plant parts are used as starter material medicinal raw materials. 3) Plants or parts of plants extracted and extracted plants are used as medicine.

PROBLEM

The problems that are still faced by Lobang village until now are the villagers of Lobang are still many who are only graduates of elementary school / equivalent, resulting in a lack of understanding of the villagers of Lobang in the awareness of healthy lifestyles, lack of knowledge of villagers to the

development of tourism village management that can have an impact on the welfare of the lobang village community and the geographical location of Lobang Village in the mountains, which has fertile land but is still not optimized.

The utilization of waste into a live pharmacy was chosen because this management is very easy and does not require too much land, but there are still many people who do not know it. Based on the description, it can be taken the formulation of the problem namely:

1. Making efforts to increase public knowledge of the importance of environmental maintenance from household waste by utilizing secondhand goods such as bottles or cans to make pharmacies live.
2. Assisting in the implementation of the manufacture of live pharmacies from secondhand goods

METHOD

Based on the problems described, the service team has several methods to provide solutions and solutions to problems from partners, namely:

1. Preparation

Preparation in this service program is the coordination of the implementation of activities together with the device Lobang Village. The coordination in question includes the discussion of the date and place of implementation of activities. In addition, coordination related to the licensing processes of activities, places, surveys, selection of resource persons in accordance with the problems faced by partners, as well as the preparation of modules or training materials.

2. Implementation

The implementation of this devotion is the implementation of processing and utilizing used goods into goods that have benefits, namely making used goods as a place of living pharmacies. The manufacture of live pharmacies can take plastic bottle waste or cans to be used as a medium of planting live pharmacies.

3. Evaluation and Mentoring

This aspect is an aspect that must be considered in the process of community service, because the weakness of the program occurs in the aspect of sustainability and sustainability after activities. Evaluation after the program is also very important to know the extent of the success of the service program carried out by the team. The impact of this activity in the form of multiplayer effect, namely the community economy will increase because the training and utilization activities have economic benefits if pursued by the community.

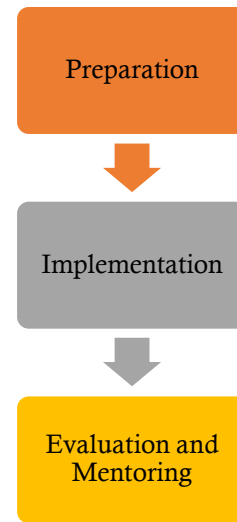


Figure 1. Devotion Method Scheme

The solution offered in this service program is training and mentoring activities to the community. The priority of this training and mentoring activity is 1) Socialization of used goods utilization, 2) Management of the manufacture and management of live pharmacies, 3) Techniques of making live pharmacies.

This community service activity will be held in Lobang village, Limbung district, Batang district in 2020 and in accordance with the period as scheduled activities in table 3.

Type of activity	Month						
	1	2	3	4	5	6	7
Preparation (licensing)	█						
Team coordination meeting	█						
1st stage; - Secondary data		█					
- Coordination with partners		█	█				
- Institutional development (training)				█	█	█	
Stage 2; - Coordination with partners - Training					█	█	
Stage 3; - Coordination with partners.					█	█	
- Evaluation of activities						█	
Writing a draft final report							█
Result seminar							█
Final service report writing							█

In the implementation of this service, the team has taken several steps in socializing and teaching in the service, namely:

1. Socializing to the community related to the program to be carried out.
2. Conducting training in processing plastic bottle waste into a live pharmacy.
3. Conducting training on how to care for a live pharmacy that has been created.
4. Provide training on how to produce a live pharmacy.
5. Conducting marketing training of live pharmacy plants.

Members of the community service team work together in conducting socialization and mentoring to the community. The division of work is tailored to the skills of each team proportionally.

RESULTS AND DISCUSSIONS

Community service activities carried out have successfully fulfilled several indicators such as:

1. The implementation of training programs for the utilization of plastic waste into live pharmacies.
2. Mentoring activities have been carried out.
3. People are able to use plastic waste into live pharmacies

The following is for an illustration of the devotion activities that have been carried out in the village of Lobang.



Figure 2. Counseling to the Community



Figure 3. Service Program Explanation



Figure 4. Speaker counseling material

CONCLUSION

Based on the implementation of the service that has been done, it can be concluded that this community service activity has run smoothly and the community in Lobang village also got new knowledge and knowledge on how to use plastic waste into a living pharmacy. Through this community service activity is expected to increase the awareness of the people of Lobang village towards the utilization of used goods, especially plastic waste and cans. increasing awareness of the people of Lobang village related to the importance of health through the manufacture and utilization of live pharmacies, and improving the skills of the people of Lobang Village in the management of used goods so that the increase in waste can be minimized and it can reduce the impact of negative externalities on the environment.

REFERENCES

- Aida, Nur. 2009. Eksternalitas (Negatif) dan Lingkungan Hidup. Pasuruan. Jurnal STIEG Walisongo.
- Dewoto, H. R. (2007). Pengembangan Obat Tradisional Indonesia Menjadi Fitofarmaka *. Majalah Kedokteran Indonesia.
- Indrariyani, Eva Ardiana ; Septiana, Ika ; Asropah. 2016. Pemanfaatan Barang Bekas Botol Plastik Dalam Pembuatan Vertical Garden. Universitas Negeri Semarang.
- Satriadi, Dimas, dkk. (2017). Sistem Pakar Pada Tanaman Apotek Hidup Untuk Pengobatan Alternatif Menggunakan Metode Certainty Factor. Volume 6 Nomor 2.
- Zainuddin, Achmad. Pengenalan Apotek Hidup dan Media Penanaman Hidroponik Kepada

Ibu-ibu PKK Di Desa Sayang Kecamatan Jatinangor. Jatinangor. Universitas Padjajaran.

Batang, B. P. (n.d.). Persentase Penduduk Miskin, 2017-2019. Retrieved from batangkab.bps.go.id: <https://batangkab.bps.go.id/indicator/23/186/1/persentase-penduduk-miskin-.html>